

# ■ Calendar

**2010-2011**

## Winter 2011

### REGISTRATION DATES

On-line applications accepted for  
 Winter 2010 semester .....October 1 - December 16  
 In person applications .....February 3, 2010  
 Continuing student internet registration  
 (by appointment) .....October 25, 2010  
 New student internet registration  
 (by appointment).....November 15, 2010

### GENERAL CALENDAR DATES

Day and Evening Classes Begin.....January 3, 2010  
 Saturday Classes Begin .....January 8, 2010  
 Last Day of Instruction .....February 5, 2010  
 Final Examinations .....Last day of instruction

### HOLIDAYS - NO CLASSES

Winter Break, College Closed....December 23 - January 1, 2011

## Fall 2010

### REGISTRATION DATES

On-line applications accepted for  
 Fall 2010 semester .....October 1- August 26  
 In person applications .....August 30  
 Continuing student internet registration  
 (by appointment) .....May 6  
 New student internet registration  
 (by appointment) .....June 1

### GENERAL CALENDAR DATES

Day and Evening Classes Begin.....August 30  
 Saturday Classes Begin.....September 4  
 Last Day of Instruction .....December 12  
 Final Examinations .....December 13 - 19

### HOLIDAYS - NO CLASSES

Labor Day, college closed.....September 6  
 Veteran's Day, college closed .....November 11  
 Thanksgiving, college closed.....November 25 - 26  
 Winter Break, college closed .....December 23 - January 1

## Spring 2011

### REGISTRATION DATES

On-line applications accepted for  
 Spring 2011 semester.....October 1 - February 3  
 In person applications .....February 7  
 Continuing student internet registration  
 (by appointment) .....November 22  
 New student internet registration  
 (by appointment) .....December 13

### GENERAL CALENDAR DATES

Day and Evening Classes Begin.....February 7  
 Saturday Classes Begin .....February 19  
 Last Day of Instruction .....May 29  
 Final Examinations .....May 31- June 6

### HOLIDAYS - NO CLASSES

Martin Luther King Jr. Day, college closed.....January 17  
 Presidents Birthdays, college closed.....February 11 - 14  
 Spring Break .....April 18 - April 25  
 Cesar Chavez Day, college closed .....March 31  
 Memorial Day, college closed .....May 30

# PIERCE COLLEGE

*One Of Nine Los Angeles Community Colleges*



**General**

2010-2011

**Catalog**

**Volume 62**

**Pierce College**  
6201 Winnetka Avenue  
Woodland Hills, California 91371  
**(818) 347-0551**

Pierce College Website:  
[www.piercecollege.edu](http://www.piercecollege.edu)

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Pierce College is a tax-supported educational institution which offers post-high school opportunities for men and women and is administered by the Los Angeles Community College District.

### **Accreditation**

Pierce College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949 (405) 506-0234, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

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### On the Cover:

Star Setareh Safari, 20, is a San Fernando Valley native who lived in Iran for five years to study her culture. She began her education as a nursing major at Pierce and has continued as a pharmacy major. She now works as a pharmacy technician and a Farsi translator.

### Photograph by

Yvonne K. Kleiman

### Publication Coordinator

Paula Hoover

**Los Angeles Community College District**

770 Wilshire Boulevard  
Los Angeles, California 90017  
(213) 891-2000

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*A Message From  
The President*

**W**elcome to the 2010-11 school year at Pierce College.

It is gratifying to see the results of a decade of visioning and planning spring to life on campus in our new buildings, outfitted with the latest technologies for learning.

Even the Mall, our central walk, has enjoyed a total makeover of beautiful pavers underfoot, lamp posts overhead, plentiful sitting areas and benches, new landscaping and more for our students to enjoy as they pursue their educational goals.

And as our student population has grown, we are continuing to hire new faculty, with 25 new instructors joining our ranks last fall and a dozen more starting this fall.

From the extraordinary new 109,000 square-foot Center for the Sciences to the one-stop Student Services Building housing all services in a single location, we've built with your needs and your future in mind.

And we're not done. Thanks to the support of the Los Angeles voters for bond Measure J, we have funding to build new facilities for green technologies, digital arts, auto tech, library/learning crossroads and horticulture. These projects, already well into the planning stages, will begin to show up over the next few years.

Pierce College just keeps getting better and better. I hope you will take advantage of all the opportunities waiting here for you.

*Sincerely,*

*Dr. Joy McCaslin  
Interim President*

**Prohibited Discrimination and Harassment**

All programs, activities, services and employment of the Los Angeles Community College District shall be operated in a manner which is free of discrimination and harassment on the basis of race, color, national origin, ancestry, religion, creed, sex, pregnancy, marital status, medical condition (cancer related), sexual orientation, age, disability, or veterans status (Board Rule 15001, et seq.).

**Americans with Disabilities Act (ADA)**

Pierce College is committed to providing reasonable accommodations to students, faculty and staff with disabilities in compliance with the American with Disabilities Act of 1990 (ADA) and corresponding state law. Under the ADA, anyone who has a physical or mental impairment substantially limiting one or more major life activities, has a record of such impairment, or is regarded as having such impairment, is considered a person with a disability. In accordance with the provisions of the ADA and Section 504 of the Rehabilitation Act of 1973, disabilities may include, but are not necessarily limited to, visual impairments, mobility and orthopedic impairments, hearing impairments,

chronic medical conditions, learning disabilities, and psychological disorders. In terms of employment, the law defines a "qualified individual with a disability" as a person who can perform the essential functions of the job with or without reasonable accommodation. Reasonable accommodation is determined on an individual basis depending on an employee's job duties, functional limitations and whether the proposed accommodation will result in undue hardship to the college.

The Office of College Compliance has been designated to coordinate the College's compliance with the ADA and with Section 504 of the Rehabilitation Act of 1973. The office handles inquiries about compliance and investigates complaints relating to accommodations and services requests. Additional information may be obtained by contacting the College Compliance Officer at (818) 710-2508 and [www.compliance@piercollege.edu](mailto:www.compliance@piercollege.edu) or visiting the OCC website at [www.piercollege.edu/offices/compliance](http://www.piercollege.edu/offices/compliance).

**Equal Opportunity Policy Compliance Procedure**

In order to insure Equal Opportunity Policy Compliance at Pierce College, please direct inquiries

to the College Compliance Officer Sylvia Silva at (818) 710-2508. In addition, inquiries may be directed to Gene Little, LACCD Director of Diversity Programs, at (213) 891-2315.

**Regla de No Discriminación**

Todos los programas y actividades del Los Angeles Community College District se implementan de manera que sea libre de discriminación a base de raza, color, nacionalidad, antepasados, religión, credo, sexo, embarazo, estado civil, condición médica, (relación al cancer), orientación sexual, edad, incapacidad o si sea o no sea veterano (Referencia: Regla 1202 de la Junta).

**Política de Acuerdo con los Procedimientos de Igualdad de Oportunidades**

Para poder asegurar igualdad de oportunidades en Pierce College, por favor dirija sus preguntas a Sylvia Silva, teléfono (818) 710-2508. Además, puede también dirigir sus preguntas a Gene Little en la oficina del distrito, teléfono (213) 891-2315.

Welcome



# Welcome to Pierce College

## College Information

### History of the College

Pierce College has been a landmark in the West San Fernando Valley for over 60 years. In December 1943, 392 acres of land set in rolling hills was purchased to establish the Clarence W. Pierce School of Agriculture, named after the Los Angeles City Board of Education member instrumental in forming the new college over the objections of many who thought the West Valley too rural to support a learning institution.

The first classes at Pierce, which were designed to provide technical and practical agricultural training, began in the fall of 1947 under bare light bulbs in makeshift classrooms created from Quonset huts salvaged from World War II. The College's first students, 212 male World War II veterans (77 full-time and 135 part-time), enrolled in 46 courses and weathered the sun, the winds, power failures, floods, and mud. The College colors, selected by the students of Pierce College in 1947, are scarlet and white.

Community pressures and demands soon caused the College to broaden its educational scope and also to admit women in February 1951. In the summer of 1956, by official action of the Board of Education, the College name was changed to Pierce College. Under this new name, the College continues as one of nine colleges in the Los Angeles Community College District.

Today the College serves a highly literate population, preparing students to take their place or to retrain in industries at the forefront of technological advances. While the College remains unique in the greater Los Angeles area because of its farm and its instructional program in agriculture, natural resources management, animal health technology, and related fields, it may be best characterized by its broad range of instructional programs. Students may choose to pursue a program in liberal arts and sciences and then transfer to a four-year college or university, or they may select from a variety of occupational fields including computer technology, journalism, nursing, office administration, and welding.

Complementing the instructional programs are community services workshops for adults and children on topics of popular interest.

### College Campus

Pierce College is located on 427 acres in the western San Fernando Valley. Large sections of tillable and range land have been preserved as an enclave within a suburban environment.

Besides classrooms and laboratories, the College maintains many special facilities to supplement its educational and extracurricular programs. Athletic facilities include a stadium, baseball field, soccer field, tennis courts, swimming pool, and an equestrian arena. The College is also proud of its Center for Sciences, library, Learning Center, writing and math labs, Career Center, Campus Center, College Services Building, and Performing Arts Building. Most college facilities are accessible to students with physical handicaps.

### Regular Program

For the academic year 2010-2011 the fall semester will run from September 2 to December 19, 2010. The spring semester will follow from February 7 to June 6, 2011.

The regular program consists of two semesters, 16 weeks in length. Classes are scheduled from 7 a.m. to 10:10 p.m. There are a limited number of Saturday and Sunday offerings. All college classes are open to regularly enrolled students.

Courses are designed to meet community needs for specialized vocational and general education courses, as well as courses which transfer to four-year colleges and universities. These classes are taught by college faculty and experienced instructors from all the instructional disciplines.

### Summer Session and Winter Intersession

Summer Sessions and a Winter Intersession may be offered subject to approval by the Board of Trustees.

### Accrediting Agencies

Pierce College and its various academic programs are accredited by the following agencies.

- Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges  
10 Commercial Boulevard, Suite 204, Novato, CA 94949  
(415) 506-0234
- American Veterinary Medical Association  
1931 North Meacham Road, Suite 100, Schaumburg, IL 60173  
(847) 925-8070 [www.avma.org](http://www.avma.org)
- Bureau of Automotive Repair (BAR)  
10240 Systems Parkway, Sacramento, CA 95827  
(916) 255-4200, (818) 596-4400
- California Board of Registered Nursing (BRN)  
400 R Street, Suite 4030, Sacramento, CA 95814  
(916) 322-3350 [www.rn.ca.gov](http://www.rn.ca.gov)
- California Association of Alcohol and Drug Educators (CAADE)  
P.O. Box 7152 Oxnard, CA 93031-7152  
(805) 485-5247 [www.caade.org](http://www.caade.org) [drmarks@adelphia.net](mailto:drmarks@adelphia.net)
- National Automotive Technician Educational Foundation (NATEF) and National Institute for Automotive Service Excellence (NIASE)  
13505 Dulles Technology Dr., Ste 2, Herndon, VA 20171-3421
- National League for Nursing Accrediting Commission, Inc.  
61 Broadway - 33rd Floor, New York, NY 10006  
(800) 669-1656 [www.nlnac.org](http://www.nlnac.org)
- Western State Conference of the Commission on Athletics  
2017 "O" Street, Sacramento, CA 95814

## Mission

Pierce College is a learning institution that offers excellent opportunities for student access and success in a diverse college community. The college dedicates all of its resources to ensure that students achieve their educational, career, and personal goals. Our comprehensive curriculum and support services enable students to earn associate degrees and certificates, prepare for transfer, gain career and technical education proficiency, develop basic skills, and prepare for lifelong learning. We also serve our community through economic and workforce development.

Pierce College values:

- Student success and engagement
- An environment conducive to learning
- Access and opportunity
- Service to our communities
- Commitment to excellence
- Enrichment through diversity
- Freedom to think, dialogue, and collaborate

## Educational Philosophy

Pierce College affirms the principle that individuals should have opportunities to develop to their full potential. Therefore, we recognize our responsibility:

- to provide educational opportunity to all persons in the community regardless of race, color, national origin, ancestry, religion, creed, sex, pregnancy, marital status, sexual orientation, age, handicap or veterans status,
- to provide rigorous, high quality educational experiences so that students can truly benefit from and use their education,
- to provide effective counseling and other support services that contribute to instructional effectiveness and student success,
- to provide multicultural, international, and intercultural collegiate experiences that foster individual and group understanding,
- to effectively manage educational and financial resources,
- to distribute and decentralize decision making to its most effective level, and
- to provide an attractive, safe, comfortable, and clean campus.

### Limited English Proficiency

Occupational education classes are open to all students. Although the lack of proficiency in English is no barrier to enrollment in occupational education courses, it is suggested that students deficient in English utilize the services of the College that are provided for persons who are limited in English proficiency.

## Functions of the Community Colleges

To accomplish the educational philosophy and mission of the Los Angeles Community Colleges, Pierce College offers the following types of educational programs.

**TRANSFER.** A college transfer program which enables the student who completes transfer requirements to continue into upper division work at accredited four-year colleges and universities through careful and continuous articulation with accredited collegiate institutions and high schools.

**OCCUPATIONAL.** An occupational education program planned to offer the student basic business, technical, and professional curricula to develop skills which can lead to employment, job advancement, certification, or an associate degree.

**GENERAL EDUCATION.** A program of general education comprised of associate degree programs and other planned experiences which develop knowledge, skills, and attitudes necessary for the student to be effective as a person, a member of society, a worker, and a citizen, thereby enhancing the quality of life for the individual and for the society at large.

**TRANSITIONAL EDUCATION.** A program of remedial and basic skills education for students needing preparation for community college level courses and programs; and English as a Second Language instruction for immigrants, foreign students and other students with limited English proficiency.

**COUNSELING AND GUIDANCE.** A counseling and guidance program incorporating academic, career, and personal counseling and assistance in matters of admissions, financial aid, job placement and student activities; to assist the student in the establishment of educational goals and in the selection and pursuit of a life work compatible with his or her interests, aptitudes, and abilities.

**CONTINUING EDUCATION.** A program of continuing education comprised of graded and ungraded classes to provide opportunities for personal and occupational competence that supplement formal full-time college attendance.

**COMMUNITY SERVICES.** A program of community services offered to meet the needs of the community for vocational and recreational courses, community and cultural events, and civic functions, completely financed by fees charged those in attendance.

**JOINT PROGRAMS.** Joint programs with business, industry, labor, education, government and other institutions which are of mutual benefit to sponsoring institutions, enhance the educational opportunities of program participants, and advance the mission and functions of the College.

## Strategic Goals and Strategies

Pierce's mission statement identifies us as a learning institution committed to serving students and the community. In order to achieve our mission, eight broad goals for institutional development have been developed to guide the college's planning and decision making processes. These goals and their objectives for implementation are intended to be the basis for action plans and funding and other resource requests necessary for implementation and improvement.

**Goal 1:** Pierce College will offer excellent, responsive instructional programs to facilitate and improve student learning.

**Goal 2:** Pierce College will increase opportunities for student access, readiness, retention, and success.

**Goal 3:** Pierce College will enhance the learning environment to be culturally and pedagogically diverse.

**Goal 4:** Pierce College will expand the effective use of technology in all areas of the college.

**Goal 5:** Pierce College will enhance its relationships with the community at large.

**Goal 6:** Pierce College will establish and maintain fiscal stability.

**Goal 7:** Pierce College will implement a campus facilities master plan that fully integrates programs, services and budget in support of student learning.

**Goal 8:** Pierce College will continually refine both its governance and decision processes and its interaction with the district to increase effectiveness and inclusion.

*\* Complete copies of the Strategic Plan are available in the President's Office.*

### Advisory Committees

Advisory Committees lend assistance to the College in the development of occupational programs that will prepare students for useful and productive lives. The committee members make known the occupational needs as they pertain to employable skills in the specific occupation and in the geographic area of the College, and report on changing technology as it might affect the College programs.

Advisory Committees are extremely important in the development of a two-way system of understanding and communication and for the partnerships that are necessary between the College and the community.

## Equal Employment Opportunity

The policy of the Los Angeles Community College District is to implement affirmatively equal opportunity to all qualified employees and applicants for employment without regard to race, color, national origin, ancestry, religion, creed, sex, pregnancy, age, disability, marital status, medical condition (cancer related), sexual orientation, or veteran status. Positive action will be taken to ensure that this policy is followed in all personnel practices, including recruitment, hiring, placement, upgrading, transfer, demotion, treatment during employment, rate of pay or other forms of compensation, selection for training, layoff, or termination. (Board Rule 101301).

Inquiries regarding equal employment opportunity at Pierce College should be directed to the College Compliance Officer, Sylvia Silva at (818) 710-2508.

## Prohibited Discrimination and Harassment

### The Policy

It is the policy of the Los Angeles Community College District to provide an educational, employment and business environment free from Prohibited Discrimination. Employees, students, or other persons acting on behalf of the District who engage in Prohibited Discrimination as defined in this policy or by state or federal law shall be subject to discipline, up to and including discharge, expulsion or termination of contract.

### Academic Freedom

The Board of Trustees reaffirms its commitment to academic freedom, but recognizes that academic freedom does not allow Prohibited Discrimination. The discussion of ideas, taboos, behavior or language which is an intrinsic part of the course content shall in no event constitute Prohibited Discrimination, though such ideas may cause some students discomfort. It is recognized that academic freedom insures the faculty's right to teach and the student's right to learn.

### Definition of Prohibited Discrimination

Prohibited Discrimination is defined as discrimination or harassment in violation of state or federal law on the basis of actual or perceived ethnic group identification, race, color, national origin, ancestry, religion, creed, sex (including gender-based sexual harassment), pregnancy, marital status, cancerrelated medical condition of an employee, sexual orientation, age, physical or mental disability, or veteran status.

## Definition of Sexual Harassment

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal, visual or physical conduct of a sexual nature, made by someone from or in the workplace or in the educational setting.

## Retaliation

Retaliation against anyone who makes a complaint, refers a matter for investigation or complaint, participates in investigation of a complaint, represents or serves as an advocate for an alleged victim or alleged offender, or otherwise furthers the principles of this policy.

## False Allegations

Anyone who files a complaint in which he/she knowingly makes false allegations of fact shall also have violated this policy and shall be subject to disciplinary action.

## Confidentiality

All persons involved in investigation of complaints shall have a duty to maintain the confidentiality of the matters discussed, except as may be required or permitted by law, which include the rules and regulations of the District.

A complete record of each complaint and investigation shall be kept by the Director of Diversity Programs.

The Written Decision or any Settlement Agreement regarding the results of the investigation shall be placed in the personnel file of each employee involved as an alleged offender, alleged victim or complainant.

## General Provisions

The Director of Diversity Programs is responsible for receiving complaints and coordinating investigations from within the District, from other governmental agencies, and from outside sources.

Each College President shall designate a CO for the campus, not a faculty member, and the Director of Diversity Programs shall designate the CO for the District Office.

Each College President, in consultation with the ASO President, shall designate an employee who shall serve as Advocate for Students (AFS).

All Supervisors shall be responsible for maintaining a work environment consistent with this policy. Any supervisor who becomes aware of a situation which could be reasonably perceived to be a violation of this policy must report it to the CO for his or her work site. All employees are responsible for maintaining an educational environment consistent with this policy. Any employee who becomes aware of a situation which could reasonably be perceived as a violation of this policy should refer it to the CO for his or her work site.

A summary of the policy shall be published in each college catalogue and class schedule. A copy shall be given to new employees. The entire policy shall be posted prominently.

Complaints may be filed by persons other than the person who is the recipient of unwanted conduct. Complaints may also be filed with the State Chancellor's Office.

The CO shall receive the complaint, and notify the complainant, alleged offender, the College President or District administrator, and the Director of Diversity Programs, within 5 business days of a potential violation of this policy.

During the process of the investigation, the complainant/victim and the alleged offender have the right to be represented.

## Investigation

The CO shall promptly investigate all potential violations of this policy of which he or she becomes aware. The CO shall notify both the College President or, at the District

Office, the Deputy Chancellor, and the Director of Diversity Programs that an investigation is being conducted. Such an investigation may be initiated on the basis of a Complaint, a referral from a Supervisor or employee, or any other information indicating a potential violation of this policy from any other source.

In the absence of a complaint form and/or a formal complaint, the CO shall conduct a preliminary investigation, which shall be completed within 30 days after the CO becomes aware of a potential violation.

If, as a result of the preliminary investigation, there is a prima facie case of Prohibited Discrimination, the CO shall sign a formal complaint. A "prima facie" case means that there is evidence which, if unexplained or uncontradicted, would be sufficient to make a finding that discrimination had occurred. The formal investigation and Written Report shall be completed by a CO from another worksite.

If there is not a prima facie case of Prohibited Discrimination, the CO shall advise the complainant and alleged offender in writing, with a copy to the College President or Deputy Chancellor, which may be appealed in accordance with these rules.

## Informal Procedure

The CO shall undertake efforts to informally resolve and investigate the charges. This process is limited to 30 days. If a resolution is reached, the CO shall draft a Settlement Agreement to be signed by the alleged victim/complainant and the alleged offender. The CO shall monitor the situation to insure that the resolution is properly implemented and maintain records.

## Complaint Procedure

A written Complaint must be filed on the prescribed Los Angeles Community College Complaint form. The CO will have 60 days to investigate the complaint.

Employment based Complaints shall be filed within 180 days. For a Complaint not arising from or related to employment, the Complaint shall be filed no later than one year from the date when the complainant knew or reasonably should have known of the facts underlying the Complaint.

## CO's Report

Within 60 days after becoming aware of a potential violation of this policy, the CO shall complete the investigation and make a Written Report to the College President, or Deputy Chancellor.

The College President, or Deputy Chancellor, shall independently assess whether the "preponderance of the evidence" establishes a violation and shall determine what action is to be taken, if any. Prior to making the decision, the alleged offender and alleged victim shall have the opportunity to make an oral statement, within 15 days from the receipt of the CO report.

Within 90 days from the start of the investigation a Written Decision shall be mailed to the complainant/victim and the alleged offender.

## Disciplinary Action

If appropriate, the College President, Deputy Chancellor, or the Chancellor shall initiate the applicable disciplinary process within 10 business days of receiving the Written Decision.

Disciplinary action shall include, without limitation, verbal warning, probation, suspension, expulsion, letters of reprimand, Notices of Unsatisfactory Service, suspensions, demotions or dismissals.

## Appeals

If the complainant/victim is not satisfied with the Written Decision, he/she may appeal to the District's Board of Trustees by submitting a written appeal to the Chancellor's Office within 15 days.

The Chancellor shall present the written appeal, the Written Decision and the investigative report to the Board of Trustees in closed session. If the 45 days elapse without further action, the Written Decision shall be the final decision of the District. In non-employment cases the complainant has the right to file an appeal with the State Chancellor's Office within 30 days after the Board decision is issued, or the 45 days have elapsed, whichever comes first.

## Additional Remedies

The complainant or alleged victim may pursue independently civil law remedies, including but not limited to injunctions, restraining orders, or other orders. An individual who believes that he/she is the victim of Prohibited Discrimination may also file a complaint with the Department of Fair Employment & Housing at (800) 884-1684, the Equal Employment Opportunity Commission at (213) 894-1000, for employment based complaints; and the Department of Education, Office for Civil Rights at (415) 556-4275, for non-employment complaints whether or not the complainant chooses to utilize the District's internal procedure.

Necessary forms to file a complaint of discrimination and/or harassment may be obtained from the Compliance Officer at the site, and from the Office of the Vice President of Student Services. Anyone who believes that he or she is a victim of discrimination and/or harassment may also call (213) 891-2315.

The entire policy and procedures shall be prominently posted with other official District announcements.

## Sexual Assault

The Los Angeles Community College District is committed to providing a safe environment for its students, faculty, and staff. The Los Angeles Community College District Board of Trustees condemns any act of sexual assault committed on any of its facilities. In the event of sexual assault committed on grounds or in facilities maintained and/or used by the District, any victim of a sexual assault who is one of the District's students, faculty, staff, or visitors shall promptly receive appropriate treatment and full and accurate information. Individuals who commit sexual assault while on properties within the control of the District shall be subject to appropriate criminal prosecution and/or District disciplinary procedures.

Confidentiality is fundamental to all aspects of cases dealing with sexual assault. The names of sexual assault victims shall not be revealed by persons responsible for implementing and enforcing the provisions of this Chapter, except with the consent of the victim.

Victims of sexual assault may obtain a list of referrals to community agencies from the College Police office.



# Admission & Registration Information

## Admission Eligibility

You are eligible to attend Pierce College if you meet any of the following criteria:

1. You have graduated from high school or have successfully passed the California High School Proficiency Examination.
2. You are over 18 years of age and are no longer attending high school and are capable of profiting from the instruction offered.
3. You are under 18 years of age and not a high school student, with special permission as a full-time student.
4. CONCURRENT ENROLLMENT AT PIERCE COLLEGE AND HIGH SCHOOL

As a high school student you may enroll concurrently at Pierce College. In addition to the application for admission, you must submit a separate Supplemental Application for Students in Grades K-12 form, approved by your high school counselor and your parents. Students in less than 9th grade require special processing. Call (818) 719-6448 for details. Concurrent students are given the last priority for registration.

Information regarding other eligibility criteria and/or admission procedures is available in the Office of Admissions and Records.

### International Student Admissions

All F-1 visa students seeking admission to Pierce College must apply through the International Students Admissions Office. Applications may be obtained by:

- phone —(818) 710-2511
- email—intlstu@piercecollege.edu
- FAX—(818) 347-8704
- website—www.piercecollege.edu  
click on “Students” scroll down and click on “International Students”

### Application Dates:

Fall Semester	January 12, 2010 through May 14, 2010
Spring Semester	May 3, 2010 through October 15, 2010

Students are advised to apply 6-9 months in advance of the semester they wish to begin. Students will be considered for the semester following application processing.

The applicant must provide:

1. International students application form
2. Processing fee (cashier's check or money order made out to “Pierce College”) - no cash, credit cards or personal checks can be accepted
3. Confidential financial affidavit and bank verification letter
4. Official transcripts of all high schools and colleges/universities attended in all countries, including U.S.A. Transcripts must include graduation dates.
5. Proof of English proficiency can be shown by the following: TOEFL, IELTS, STEP Eiken, or CSUN IEP Level 9

6. Students applying from within the U.S.A. must provide a copy of their passport information page, current visa, and I-94
7. Transfer students must have our Student Status Verification Form completed by their current school and provide a copy of your current I-20AB
8. Three passport size photographs

All applicants are evaluated on their potential to be successful at this college. When the student is admitted, an I-20 is issued to the student by this office. This document can be used by the student to obtain an F-1 visa from a United States embassy outside of the United States. Students who are already in this country will use the new I-20 to change their visa status or complete their transfer process from another educational institution.

Information about immigration regulations governing an “adjustment of-status” to an F-1 visa from another visa may be obtained in the International Students Admissions Office.

## Procedures for Admission and Registration

### Admission

**Apply online or on Pierce Home Page.**

The Admissions and Records Office is located in the Student Services Building. Office hours: Monday through Thursday, 8:00 am - 7:30 pm and Friday, 9:00 am - 4:00 pm.

Every student will be assigned a student ID number when they apply. Providing your Social Security number is optional. It is only required for students applying for financial aid and/or who will be eligible for student tax credits.

**Complete all required information on the online application.** All information requested on the application must be provided. The applicant must declare under penalty of perjury that all information on the application is correct. All information is subject to verification; falsification or withholding of information shall constitute grounds for dismissal.

# Residence Requirements

## California Residence Requirement

To attend any of the Los Angeles Community Colleges as a resident of California, a student is required to have been a California resident for more than one year immediately preceding the Residence Determination Date. The "Residence Determination Date" is that day immediately preceding the opening day of instruction of the semester, winter, or summer session. Residence is defined as a union of act and intent.

## Non-Resident

A non-resident student is one who has not had residence in the State of California for more than one year immediately preceding the Residence Determination Date. Physical presence alone is not sufficient to establish California residency nor is intent when not coupled with continuous physical presence in the State. Certain non-U.S. citizens are permitted to establish residency and certain others are not. Check with the Admissions Office regarding your particular status.

Residency classification is made when the application is accepted. Students may petition for a change of classification during the semester in question.

A student classified as a non-resident will be required to pay non-resident tuition fees as established by the District Board of Trustees.

## Non Resident Fee Waiver (AB540)

Students who are classified as non-residents may be eligible for a waiver of non-resident tuition if they meet the following criteria:

- Attended a California high school for at least 3 years.
- Graduated from a California high school
- Do not have a non-immigrant visa status with U.S. Citizenship and Immigration Services. (USCIS)
- Students in the Foster Youth may qualify for In State residency with Assembly Bill 669.

A waiver form is available on-line under forms of Admissions and Records.

## Residence Reclassification

Students who have been classified as non-residents must petition to be reclassified as residents before the start of any semester if they feel their status has changed. Non-resident students applying for reclassification as residents must also show financial independence for the past three years. The Residence Reclassification form is available in the Admissions Office or online at [www.piercecollege.edu](http://www.piercecollege.edu) under Frequently Asked Questions/Forms.

## Residence Appeal

A student may appeal the residence classification determined by the College. The appeal must be made within 30 calendar days of receipt of notification of the residence classification from the Admissions Office. The appeal must be submitted in writing to the College Admissions Officer who will forward it to the District Residency Appeal Officer.

# Matriculation

## Matriculation - What is it?

Matriculation is a process designed to assist students in achieving their educational goal at Pierce College. It is an agreement between the College and the student. Pierce College agrees to provide an organized process of admission, orientation, assessment, counseling, and student progress follow-up. The student agrees to declare a specific educational goal, attend class, and complete all assigned coursework.

## What is the purpose of Matriculation?

The purpose of Matriculation is to ensure that students complete their college courses, persist to the next academic term and achieve their educational objective. Matriculation provides students with easy access to the College's programs and services. These services can promote higher grades, completion of more classes, and increased persistence from semester to semester.

## Who is eligible for Matriculation?

All first-time students who have declared a goal of earning a certificate, AA, or transferring are subject to matriculation.

## Matriculation at Pierce College

Matriculation is a campus-wide program. Success is measured by the attainment of the student's stated educational goal or objective. The following are the components of Matriculation:

**Assessment** All students who go through the matriculation process complete the assessment process. This assessment takes 3 1/2 hours to complete and covers reading comprehension, grammar, essay writing, and math. Practice tests are available to help students prepare for the exam. The assessments help place students in classes where they are most likely to succeed. Placement recommendations are advisory and intended to assist students.

**On-line Orientation** Completion of our on-line orientation is recommended for all new students. You can access the orientation via the Pierce College homepage at [www.piercecollege.edu](http://www.piercecollege.edu). You will find information on the programs we offer, transfer requirements, academic planners, and student services here on campus. Please use this as a resource throughout your time here at Pierce.

**Counseling** The Counseling Department can help you with your educational plan, major, transfer and career exploration, and personal counseling. Please plan to visit the Counseling Office at least once each semester.

**Follow-up** After enrolling for the first semester, students will continue to receive follow-up services through the Counseling Department, Transfer and Career Center, and Early Alert program. These services will include help with planning programs for each semester, preparing to transfer, and earning an Associate degree. In addition, the Early Alert program helps identify students who begin encountering academic difficulty early in the semester.

**Matriculation Exemptions** At the time of application, all students are classified as exempt or non-exempt from various matriculation components. The exemption policy is listed below:

**Assessment Exemption Criteria:**

- (1) Students who have already earned an A.A./A.S. degree or higher.
- (2) Students who are attending Pierce with a goal of personal interest and who have completed fewer than 16 units of college credit.

**Note:** Students who have completed assessments or prerequisite courses at other colleges should present this documentation for verification to the Assessment Center Director. (Verification must be presented before an exemption can be granted).

**Orientation Exemption Criteria:**

- (1) Students who have already earned an A.A./A.S. degree or higher.
- (2) Students who are concurrently enrolled at a four-year college or university and who have completed fewer than 16 units of college credit.
- (3) Students who are concurrently enrolled in the 12th grade or below and who have completed fewer than 16 units of college credit.
- (4) Students who are attending Pierce with a goal of personal interest and who have completed fewer than 16 units of college credit.

**Counseling/Advisement Exemption Criteria:**

- (1) Students who have already earned an A.A./A.S. degree or higher.
- (2) Students who are attending Pierce with a goal of personal interest and who have completed fewer than 16 units of college credit.

**Matriculation Challenges**

Students wishing to challenge any matriculation component should request a waiver form from the Assessment Center in the Student Services Building. Please fill out the form, then return it to the Assessment Center. Please retain a copy of the waiver.

Students with complaints or challenges to any matriculation provisions may appeal to the Matriculation Coordinator in the Assessment Center or call (818) 719-6499 for more information.

**Alternative Matriculation Services**

Pierce College provides the following alternative matriculation services:

1. Pierce has translated the application questions into various languages. At the present time, information is available in Farsi, Japanese, Vietnamese, and Spanish at the Information Desk.
2. For a physical, visual, or communication limitation that might require special assistance for any matriculation component, please come to the Special Services Department for more information on how the college can provide accommodations for you.

**English Placement Process**

**The results of the English placement process or English Enrollment Authorization Form must be on file in order to enroll in English 21, 28, English 82, 84-87, or English 101 and above. Authorizations for students registering by telephone will be checked automatically on-line.**

All students planning to enroll in an English course for the first time are expected to complete the English placement process at the Pierce College Assessment Center (Student Services Building). Placement results or prerequisite courses taken at other colleges may be presented to the Assessment Center to be substituted for the Pierce English placement process.

Placement recommendations made through the English placement process are intended to assist students with enrolling in classes where they are most likely to succeed. Upon completing the process, students are informed of their placement and given their authorization to enroll. Students seeking authorization to enroll in a course other than that recommended by the assessment test must meet with an English Department advisor. Review is essential because the test cannot be taken again for one year. Contact the Assessment Center for hours.

Students need to provide evidence of prerequisite completion either through coursework in the Los Angeles Community College District, by completing the Pierce English placement process, or through transcripts from other colleges presented at the Assessment Center.

**Mathematics Placement Process**

All students who have not completed a college mathematics course must complete the mathematics placement process at the Pierce College Assessment Center (Student Services Building).

Upon completing the test, students are advised of their recommended placement and given an authorization to enroll in that course. Students who wish to challenge the recommendation of the assessment test should consult a Mathematics Department advisor. Contact the Assessment Center for hours.

**Note: Results of the English and Mathematics placement process cannot be used to satisfy the English and Math competency requirements for graduation.**

# Admission & Registration Information

## Enrollment Process: How to Register for Classes

### New Students

#### 1. Complete Application

To receive the earliest possible registration appointment, apply online at [www.piercecollege.edu](http://www.piercecollege.edu). International students must complete their admissions process through the International Students Office. Returning students can also apply online. Concurrent high school students must also bring a completed Supplemental Application for Admission of Students in Grades K-12 form to the Admissions Office.

#### 2. Financial Aid

To receive the best possible aid package continuing and new students should have filed their Free Application for Federal Financial Aid (FAFSA) between January 1, 2010 and March 2, 2010 to be considered for Priority Funding for the academic year 2010-2011. Students are still encouraged to apply after March 2nd but funds will be limited. For faster processing apply on line at [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

#### 3. Assessment

Complete the English or English as a second language (ESL) and mathematics placement process. This process helps place you in classes where you are most likely to succeed. You should complete the assessment process as early as possible. All sample tests can be downloaded from the internet, including English, Math and Chemistry exams, at [www.piercecollege.edu/students/assess/](http://www.piercecollege.edu/students/assess/). Test scores and/or course work from other colleges might be used in place of the Pierce Assessment if accepted by the Assessment Center. Questions? Contact the Assessment Center at (818) 719-6499.

#### 4. On-line Orientation

We have developed an on-line orientation for you. It can be accessed via the Pierce College homepage at [www.piercecollege.edu](http://www.piercecollege.edu).

#### 5. Registration

Enroll in classes on line at [www.piercecollege.edu](http://www.piercecollege.edu). You will be enrolled in the classes of your choice or placed on a waiting list if the class is full and waiting list space is available. Write down and save your confirmation numbers. You can print your semester schedule if you enroll on line.

#### 6. Payment

Payment is due when you register. You may pay with cash, check, or credit card. You may pay online or by phone by using a credit card. A hold will be placed on your record if you do not pay when you register. A Registration/Fee Receipt and a Pierce College picture ID card will be issued to you when you pay. If you pay online or by phone or mail, you may pick up your picture ID in Copy Tech in the College Services Building.

### Continuing Students

You are a continuing student if you were active in classes during either the previous Fall or Spring semesters.

#### 1. Registration Materials

Continuing students will receive an email with their priority internet registration appointments for registration during the month before finals. Appointments are also on the address label of the Schedule of Classes mailed to your home. Instructions are in the center of the Schedule of Classes. Your priority registration appointment is also available on the Pierce web site student information system.

#### 2. Financial Aid

To receive the best possible aid package continuing and new students should have filed their Free Application for Federal Financial Aid (FAFSA) between January 1, 2010 and March 2, 2010 to be considered for Priority Funding for the academic year 2010-2011. Students are still encouraged to apply after March 2nd but funds will be limited. For faster processing apply on line at [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

#### 3. Assessment/Prerequisites

You may need to meet certain course prerequisites prior to registration. Check individual course requirements. All sample tests can be downloaded from the internet, including English, Math and Chemistry exams, at [www.piercecollege.edu/students/assess/](http://www.piercecollege.edu/students/assess/). Bring proof of prerequisite courses completed at other colleges to the Assessment Center in the Student Services Building. Questions? Call (818) 719-6499.

#### 4. Counseling

Make an appointment well in advance of registration. Ask about degree and major requirements. Visit the Transfer Center.

#### 5. Registration

Use your priority registration appointment to register by internet. Write down and save your confirmation numbers.

#### 6. Payment

Payment is due when you register. You may pay with cash, check or credit card. You may pay on-line or by phone. A hold will be placed on your record if you do not pay when you register. A Registration/Fee Receipt will be issued to you when you pay. If you pay online or by phone or mail, your Registration/Fee receipt will be mailed to you.

# Registration Policies

## Open Enrollment

Unless specifically exempted by law, every course for which State aid is claimed is fully open to any person who has been admitted to the College and who meets the appropriate academic prerequisites.

## Registration

Registration is the process whereby the student is entered onto the College roll for the semester and is enrolled in specific classes. All students will be issued a Registration/Fee Receipt as the last step in the registration process.

## Appointments to Register

Upon acceptance of a student's application and completion of matriculation requirements, new students will be issued an appointment to register. Students are urged to file their applications as early as possible.

Students may register at their appointment time or anytime after through the Thursday prior to the start of the semester.

## Adding and Dropping Classes

### Adding Classes

Only students who have been admitted to the college and are in approved active status may add or attend classes.

Admitted students who wish to add a class once the semester begins must obtain an add card from the instructor. It is the student's responsibility to have the add processed before the last day to add, which is listed in the college semester calendar.

### Dropping Classes

Students wishing to drop one or more classes must do so through the registration system, at the Pierce web site.

It is the student's responsibility to officially drop from class by the Pierce web site. Students must drop by the end of the second week of semester-length classes to avoid fees. Any drops or exclusions that occur between 30% of the time the class is scheduled and 75% of the time the class is scheduled will result in a "W" on the student's record which will be included in the determination of progress probation. Drops are not permitted beyond 75% of class meeting time.

A grade (A, B, C, D, F, P, INC, or NP) will be assigned to students who are enrolled past the last day to drop even if they stop attending class, except in cases of extenuating circumstances. After the last day to drop students may withdraw from class upon petition demonstrating extenuating circumstances and after consultation with the appropriate faculty.

## Cancellation of Classes

The College reserves the right to discontinue any class with insufficient enrollment.

## Course Prerequisites

It is the student's obligation to know and meet course prerequisites. These are stated in the catalog description of each course.

## Credit for Prerequisites

Students may not concurrently enroll in and receive credit for an advanced course and its prerequisite(s). Students may not enroll in and receive credit for the prerequisite(s) to an advanced course if they have previously completed the advanced course.

Violation of this regulation will result in exclusion from class and/or denial of course credit.

## Pierce College Matriculation Policy On Prerequisites, Corequisites, Recommended Preparation, And Limitations On Enrollment

The faculty has identified knowledge and skills that are necessary for success in certain classes. At registration, students need to determine if any courses require previous knowledge. The catalog and schedule of classes use four terms to show if such knowledge is required:

**PREREQUISITE:** means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program (i.e., a course that must be passed with a grade of "C" or better, or a requirement that must be met before enrolling in a given course). Students will not be permitted to enroll in such courses and programs without the appropriate prerequisite.

**COREQUISITE:** is a condition of enrollment consisting of a course that a student is required to take simultaneously in order to enroll in another course (i.e., a course that must be taken at the same time as another course.)

**RECOMMENDED PREPARATION:** means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program (i.e., preparation that is helpful, but not required, before enrolling in a given course).

**LIMITATIONS ON ENROLLMENT:** A prerequisite necessary to protect a student's health and safety and the health and safety of others. (see prerequisite). Limitations on enrollment may also apply to certain courses (e.g., performance, honors, and special programs) if comparable courses are provided.

## Prerequisite Challenge Procedures

A student may challenge a prerequisite or corequisite by filing a prerequisite challenge form. The reasons for seeking a challenge may include one or more of the following:

1. A prerequisite is not reasonably available;
2. The student believes the prerequisite is not valid or necessary for the success in the course for which it is required;
3. The student believes the prerequisite is discriminatory or being applied in a discriminatory manner, or

- The student has the documented knowledge or ability to succeed in the course without meeting the prerequisite.
- The student believes it to be unfounded that he or she might cause a health or safety hazard.

**The steps for filing a challenge are outlined below:**

- Obtain and complete a challenge form, accompanied by all necessary documentation, from the Assessment Office (Student Services Building), or download at: [www.piercecollege.edu/offices/assessment\\_center](http://www.piercecollege.edu/offices/assessment_center)
- Return the completed form with documentation to the Assessment Office. A prerequisite challenge **requires** written documentation (e.g. proof of alternative course work, explanation of background or abilities which adequately prepare the student for the course, etc.) before it can be processed.
- You will be notified by the Assessment Center regarding the decision.

*Students with questions regarding filing a prerequisite challenge may contact the Assessment Office in the Student Services Building at (818) 719-6499 for information or appeal procedures to the challenge process outlined above.*

### Unit Maximum

The maximum study load is 18 units during a regular semester. The normal class load for students in the fall or spring semester is from 12 to 18 units a semester for full-time students. A college program of 15 units is equal to at least a 50-hour work week for most students. Students who desire to take 19 or more units may file a Petition for Excess Units in the Dean of Admission's Office during the week before the semester begins or the first two weeks of the semester.

Those students who will be employed while attending college should consider reducing their programs accordingly. It is suggested that those students who are employed full-time should enroll in no more than one or two classes or 9 units maximum.

### Restricted Programs

Students may be required to enroll in a restricted program if their grades or test results indicate that this is in their best interest. The College may limit either the number of units in which a student may enroll or may specify certain subjects as a condition of enrollment. Students who violate such requirements will be subject to dismissal.

### Enrollment Conflicts

Concurrent enrollment in more than one section of the same course during a semester is not permitted.

Concurrent enrollment in courses which are cross-referenced to each other is not permitted (i.e., courses designated "same as" in the District Directory of Educational Programs and Courses). Violation of this regulation will result in exclusion from class and denial of course credit in both courses.

Enrolling in classes scheduled or conducted during overlapping times is not permitted. In addition to exclusion from both classes and denial of credits, violators will be subject to disciplinary action (See Standards of Student Conduct).

### Auditing Classes

Students may be permitted to audit a class under the following conditions:

- Payment of a fee of \$15 per unit. Fees may not be refunded or transferred. Students enrolled in classes to receive credit for ten or more semester units shall not be charged a fee to audit three or fewer semester units per semester.
- Students auditing a course shall not be permitted to change their enrollment in that course to receive credit for the course.
- Priority in class enrollment shall be given to students desiring to take the course for credit.
- Permission to enroll in a class on an audit basis is at the instructor's discretion.
- Participation in class activities by student auditors will be solely at the discretion of the instructor, who may provide a written statement of the extent of participation allowed beyond observation.
- Concurrently enrolled high school students must pay any audit fees.
- Financial aid does not cover auditing.
- Audit enrollments must be processed in the Admissions Office by the last day to add.

## Student Fees

### Enrollment Fee

Enrollment fees are set by the California State Legislature and are subject to change.

Section 72250 and Section 72252 of the State Education Code requires Community Colleges to charge enrollment fees of each student enrolling in college. Effective Fall, 2009 the fee prescribed by these sections is twenty-six dollars (\$26) per unit per semester with no maximum per semester. If you take ten units, the cost will be \$260. If you take fifteen units, the cost will be \$390 and so forth.

Concurrently enrolled K-12 students are not charged the enrollment fee.

If at the time of enrollment you are receiving benefits under the Temporary Assistance for Needy Families (TANF), the Supplemental Security Income/State Supplementary Program, or the General Assistance Program, the enrollment fee will be waived. For information regarding the procedure for requesting a waiver, contact the Financial Aid Office prior to the date of your enrollment.

Financial aid may be available to students who meet the qualification requirements. Students with questions concerning financial aid eligibility should contact the College Financial Aid Office. Applications should be submitted as soon as possible at [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

## Enrollment Fee Assistance

The college offers enrollment fee assistance to California resident students who are unable to pay the enrollment fee. Students should complete the Board of Governors' **Enrollment Fee Waiver** application (available inside the Schedule of Classes, as well as at the Information Desk in the Student Services Building and at the College Financial Aid Office) and submit it to the college Financial Aid Office to process.

The **Enrollment Fee Waiver** is available to students who receive Temporary Assistance for Needy Families (TANF) (formerly AFDC), General Relief (GR), or Supplemental Security Income (SSI), dependents of deceased or disabled veterans of the U.S. Military, and students whose household size and family income fall within the following limits:

Income Number in Household (including yourself)	Total 2009 Family (Adjusted Gross Income and/or Untaxed Income)
1	\$16,245 or less
2	\$21,855 or less
3	\$27,465 or less
4	\$33,075 or less
5	\$38,685 or less
6	\$44,245 or less
7	\$49,905 or less
8	\$55,515 or less
+	Add \$5,610 for each additional member

Students with financial need established by the College Financial Aid Office may also be eligible for deferment of enrollment fees.

## Enrollment Fee Refund Policy

For full term courses: the student will receive a full refund up to the end of the second week of classes. After that date, there will be no refunds unless a class is cancelled or rescheduled by the College administration. After the second week of the semester, fees will not transfer when the student adds and drops, whether or not the student has paid. Students who enroll and do not drop classes by the end of the second week of the semester will remain liable for all fees.

For short term courses: the student will receive a full refund up to the end of a period of time equal to 10% of total class time. There will be no refunds after that, unless the student must drop a class because it is canceled or rescheduled by the administration. All fee refunds are processed in person.

## Fee And Refund Schedule - Fall And Spring Semesters (Effective Fall Semester, 2010)

TYPE OF FEE	AMOUNT	REFUND DEADLINE
<b>Enrollment Fee</b> <i>Subject to change by the California Legislature</i>	\$26 per unit	End of the second week of the semester (Deadline for short term classes will be different for each class)
<b>Non-resident Tuition</b> <i>(All non-resident students must pay the \$26 per unit enrollment fee in addition to non-resident tuition. Non resident tuition is due upon registration.</i>		
Students from another State:	\$186 per unit	End of the second week of the semester
Students from another country:	\$204 per unit	(Deadline for short term classes will be different for each class)
International Student (F1 VISA)		
Application Fee:	\$35	
SEVIS:	\$25	
International Student Medical Fee (IMED):	Estimated at \$657 for 6 months	Full refund before first day of instruction. Prorated by vendor thereafter.
<b>Health Services Fee</b>	\$11.00	End of the second week of the semester
<b>Audit Fee</b>	\$15 per unit (Students who have enrolled in 10 units or more may audit up to 3 units without charge)	NOT REFUNDABLE OR TRANSFERABLE
<b>Student Representation Fee</b>	\$1	End of the second week of semester when student withdraws from all classes
<b>Parking Fee</b>	\$20	End of the second week of the semester
<b>Associated Students Organization Membership Fee</b>	\$7	End of the second week of the semester - \$7
<b>Other Fees</b>		
Emergency Processing of Transcript or Verification of Enrollment		\$10
Verification of Enrollment*		\$3
Record of Work in Progress*		\$3
Transcript*		\$3
* The first two are free		

### CHECK ACCEPTANCE POLICY

Check Types Accepted - The Electronic Check Service only accepts: Personal checks  
Check Types That Are Ineligible - In Accordance with the NACHA rules, the Electronic Check Service does not accept:

- Checks not pre-printed
- Business/Corporate checks
- Third - party checks
- Government checks
- Insurance checks
- Payroll checks
- U.S. Treasury checks
- Federal Reserve checks

For questions please call: Business Office (818) 719-6432

*Please note that a \$10 returned check charge is assessed for a check returned to the Business Office unpaid by the bank for any reason. A stop payment order on a check does not constitute an official withdrawal nor does it release the student's financial obligation for the fees. A student with an unpaid financial obligation will not be able to register for subsequent semesters.*

**All fee refunds must be claimed in person at the Business Office.**

### Health Services Fees

The Los Angeles Community College District charges an \$11.00 mandatory health fee for the Fall and Spring semesters and \$8.00 for the Summer and intersession, payable to one campus only, to cover the costs of health centers at each college. Due to recent state legislative changes, beginning in the Fall 2006 semester, the student health fee will no longer be waived for Board of Governor Grant recipients. Payment of the health fee can be made at the Business Office each semester. This fee enables students to take advantage of the on-campus health center located on the second floor of the Student Services Building. Please call (818)710-4270.

### Student Representation Fee

A \$1 Student Representation Fee per semester is due at the time of registration. The fee was established to provide for the support of student representatives involved in governmental affairs.

### Non-Resident Tuition Fee

The 2010-11 tuition fee for non-resident students is \$186 per semester unit for students who are non-residents from another state; \$204 per semester unit for students who are non-residents from a foreign country. Tuition must be paid at the time of registration. This fee is subject to change each academic year.

Please note: Non-resident students are also required to pay the community college enrollment fee. Non-resident tuition is due upon registration. *Students must drop classes by the refund deadline in order to avoid being charged the enrollment fee and the non-resident tuition fee. In addition, after the refund deadline, fees will not transfer when students add and drop classes, whether or not fees have been paid.*

### Non-Resident Tuition Refund Criteria and Schedule

Non-resident students who formally drop part or all of their enrollment may request a refund of previously paid non-resident tuition in accordance with the schedule below. Such requests must be made in writing on a form provided by the District.

The date used for non-resident refund purposes is the date on which such requests are filed and time stamped, regardless of when separation may have occurred. All non-resident refunds will be made by mail.

#### Non-resident refunds will be computed as follows:

CLASS TYPE	DATE REQUEST IS TIME STAMPED	REFUND
<b>Regular Length</b> (Fall, Spring, Summer)	Through second week of instruction	Full Tuition
	After second week of instruction	No Refund
<b>Short Term</b> (Less than regular length)	Through 10 percent of class length	Full Tuition
	After 10 percent of class length	No Refund

### Parking Fee

A parking permit is required at all times when using campus parking facilities during regular school hours, 7 a.m. - 10 p.m., Monday through Thursday; 7 a.m. - 3 p.m., Friday; Saturday, 7 a.m. - 3 p.m. Campus gates are closed 11 p.m.- 4 a.m.

The Board of Trustees of the Los Angeles Community College District has authorized parking fees for all on-campus parking at district colleges.

A student's Pierce College parking decal is valid at each Los Angeles Community College District campus at which the student is currently enrolled in classes.

To encourage membership in the Pierce College Associated Students Organization, the College Administration has entered into an agreement with the ASO whereby individuals who both pay the District parking fee and join the Associated Student Organization will receive as a benefit of membership preferred parking privileges on campus. Students displaying a Preferred Student Parking Decal may park, if space is available, in all student parking lots, including the preferred lots (1, 3, 5, 6, 7, 8 and 9), as well as legally allowable street parking space. The non-preferred parking lots (permit required) are 2 and 4.

#### Fall and Spring Semester Parking Permit Fees

<b>Non-Preferred/Restricted District Permit</b>	<b>\$20.00</b>
<b>A.S.O. Membership Fee</b>	<b>\$7.00</b>
<b>Preferred/Non-Restricted Permit TOTAL FEE</b>	<b>\$27.00</b>
<b>Charge to replace lost or stolen permit</b>	<b>\$27.00</b>

#### Summer and Winter Session Parking Permit Fees

<b>Non-Preferred/Restricted District Permit</b>	<b>\$7.00</b>
<b>A.S.O. Membership Fee</b>	<b>\$3.00</b>
<b>Preferred/Non-Restricted Permit TOTAL FEE</b>	<b>\$10.00</b>
<b>Charge to replace lost or stolen permit</b>	<b>\$10.00</b>

Parking fees may be paid prior to the completion of registration. Students who do not elect to purchase the permit at that time may do so at any time during the semester at the campus Business Office located next to the Student Store.

Each student who pays the parking fees will be issued a decal. These decals shall be hung from the rear view mirror.

It is the student's responsibility to make sure they know the current parking rules and regulations; if not sure, contact the Safety and Police Office. It is also the student's responsibility to make sure the current decal is visible to College Police Officers. The college is not responsible for lost permits under any circumstances.

Note: The issuance of a parking decal does not guarantee the student a parking space, only the opportunity to park in an appropriate lot if spaces are available. Any vehicle parked in the areas without the proper permit appropriately displayed will be cited.

**SEE CLASS SCHEDULE FOR FURTHER INFORMATION.**

# Scholastic Policies

## Associated Student Membership Fee

Experience has demonstrated that student activities are essential features in the program of the College. These activities and programs are financed by money received from memberships in the Associated Students Organization. The charge is \$7 per semester.

The funds thus collected will be spent for the general welfare of the students in accordance with policies, rules, and regulations defined by the Board of Trustees. Membership in the Associated Students Organization is encouraged for all students, but is not mandatory.

Upon complete withdrawal from the college, the student may receive a refund of the Associated Student membership fee as follows:

Fall and Spring Semesters	
Amount Paid	End of 2nd Week
\$7.00	\$7.00

Summer and Winter Session	
Amount Paid	1st Week
\$3.00	\$3.00

Board of Trustees rules govern the collection, deposit and expenditures of these funds. All records are audited annually by representatives of the Board of Trustees.

## Instructional Materials

Students may be required to provide instructional and other materials for a credit or non-credit course. Such materials shall be of continuing value to a student outside of the classroom setting and shall not be solely or exclusively available from the District.

Additional fees may be required for printing documents in the Open Access Labs. These Labs may include, The Learning Center, English Writing Lab, Computer Science Lab, Business Department & Office Administration Labs, and 20-20 Lab. Please pay all fees at the Student Store.

# Grades & Grading Policies

## Grading Symbols and Definitions

Only the symbols in the grading scale given in this section shall be used to grade all courses offered in fulfillment of the requirements for an associate or baccalaureate degree, a certificate, diploma, or license.

Grades shall be averaged on the basis of the point equivalencies to determine a student's grade-point-average, using the following evaluative symbols:

SYMBOL	DEFINITION	GRADE POINT
<b>A</b>	Excellent	<b>4</b>
<b>B</b>	Good	<b>3</b>
<b>C</b>	Satisfactory	<b>2</b>
<b>D</b>	Passing, less than satisfactory	<b>1</b>
<b>F</b>	Failing	<b>0</b>
<b>P</b>	Pass (formerly Credit) (at least equal to a "C" grade or better – units awarded are not counted in GPA)	
<b>NP</b>	No Pass (formerly No-Credit) (equal to a "D" or "F" grade –units are not counted in GPA)	
<b>NCX</b>	Failed Credit-by-Exam (equal to a "D" or "F" grade. Units are not counted in GPA).	

*(P and NP grades may be given only in courses authorized by the District Pass/No-Pass (formerly Credit/No Credit) Option and Credit by Examination Policies.)*

The following non-evaluative symbols may be entered on a student's record:

**Symbol**    **Definition**

**INC**    **Incomplete**

Incomplete academic work for unforeseeable emergency and justifiable reasons at the end of the term may result in an "INC" symbol being entered in the student's record. The condition for removal of the "INC" shall be stated by the instructor in a written record.

This record shall contain the conditions for removal of the "INC" and a default grade to be assigned if missing work is not completed within one year from the end of the course. This record shall be given to the student, with a copy on file in the College Admissions Office until the "INC" is made up or the one-year time limit has passed.

A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the one-year time limit for completing the work has passed.

The "INC" symbol shall not be used in calculating units attempted nor for grade points. THE "INC" MAY BE MADE UP NO LATER THAN ONE YEAR FOLLOWING THE END OF THE TERM IN WHICH IT WAS ASSIGNED. The student may petition for a time extension due to unusual circumstances.

Note: Courses in which the student has received an Incomplete ("INC") may not be repeated unless the "INC" is removed and has been replaced by a grade of "D" or "F". This does not apply to courses which are repeatable for additional credit.

**IP**    **In Progress**

The "IP" symbol shall be used only in those courses which extend beyond the normal end of an academic term. "IP" indicates that work is "in progress," but that assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit

shall be assigned and appear on the student's record for the term in which the required work of the course is completed. The "IP" shall not be used in calculating grade-point-averages. If a student enrolled in an "open-entry, open-exit" course is assigned "IP" at the end of an attendance period and does not complete the course during the subsequent attendance period, the appropriate faculty will assign an evaluative symbol (grade) as specified above to be recorded on the student's permanent record for the course.

### **RD Report Delayed**

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

### **W Withdrawal**

Students may withdraw from a class or classes through the last day to drop or 75% of the time the class is scheduled to meet. To withdraw, complete a Drop Card in the Admissions and Records Office or use the STEP telephone system or the Pierce website.

No notation ("W" or other) shall be made on the record of a student who withdraws before the last day to drop without a "W", or 30% of the time the class is scheduled.

Withdrawal between the last day to drop without a "W" or 30% of the time the class is scheduled to meet, and the last day to drop or 75% of the time the class is scheduled to meet, will result in a grade of "W". A student who remains in class beyond the last day to drop or 75% of the time the class is scheduled shall be given a grade other than a "W", except in cases of extenuating circumstances.

After the last day to drop or 75% of the time the class is scheduled, the student may withdraw from class upon petition demonstrating extenuating circumstances and after consultation with the appropriate faculty. Students should obtain a petition in the Admissions Office. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. Withdrawal after the last day to drop or 75% of the time the class is scheduled, which has been authorized in extenuating circumstances shall be recorded as "W".

The "W" shall not be used in calculating units attempted nor for the student's grade-point-average.

"W's" will be used as factors in progress probation and dismissal.

### **MW Military Withdrawal**

"Military withdrawal" occurs when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. Upon petition from the student and verification of such orders, a "MW" may be assigned at any time after 30% of the time the class is scheduled to meet. No notation ("W" or other) shall be made on the records of a student who withdraws during the first 30% of the time the class is scheduled. Enrollment fees will be refunded with military withdrawals. Military withdrawals shall not be counted in progress probation and dismissal calculations.

### **Pass/No Pass**

*(Formally Credit/No Credit)*

The College President may designate courses in the College Catalog wherein all students are evaluated on a "Pass/No Pass" basis or wherein each student may elect, no later than the end of the first 30% of the term, whether the basis of evaluation is to be "credit/no-credit" or a letter grade. These courses will be noted in the College Schedule as being eligible for the Pass/No Pass Option.

1. **USAGE FOR SINGLE PERFORMANCE standard.** The credit/no-credit grading system shall be used in any course in which there is a single satisfactory standard of performance for which unit credit is assigned. A grade of Pass (P) shall be assigned for meeting that standard, and a grade of No-Pass (NP) shall be assigned for failure to do so.
2. **ACCEPTANCE OF CREDITS.** All units earned on a "Pass/No Pass" basis in accredited California institutions of higher education or equivalent out-of-state institutions shall be counted in satisfaction of community college curriculum requirements.
3. **RECORDING OF GRADE.** A student who is approved to be evaluated on the "Pass/No Pass" basis shall receive both course credit and unit credit upon satisfactory completion of the course. Satisfactory completion for credit is equivalent to the grade of "C" or better. A student who does not perform satisfactorily will be assigned a "No-Pass" (NP) grade.
4. **GRADE POINT CALCULATION.** Units earned on a "Pass/No Pass" basis shall not be used to calculate grade-point-averages. However, units attempted for which "No Pass" (NP) is recorded shall be considered in probationary and dismissal procedures.
5. **STANDARDS OF EVALUATION.** The student who is enrolled in a course on a "Pass/No Pass" basis will be held responsible for all assignments and examinations required in the course and must meet the standards of evaluation which are identical for all students.
6. **CONVERSION TO LETTER GRADE.** A student who has received credit for a course taken on a "Pass/No Pass" basis may not convert this credit to a letter grade.
7. **COURSE REPETITION.** A student who has received a grade of "No Pass" (NP) may repeat the course by meeting the requirements set forth by the District Course Repetition to Improve Substandard Grades Policy.
8. **CAMPUS PROCEDURE**
  - Certain courses, noted in the Schedule of Classes, are evaluated on a Pass/No Pass basis only. Letter grades may not be assigned for these courses.
  - In addition to courses mentioned above, a student has the option of selecting one course per semester to be graded on a Pass/No Pass basis. This option is available only for courses listed in the Schedule of Classes under "Courses Offered on a Pass/No Pass Basis."
  - Selection of courses to be taken on a Pass/No Pass basis must be made during the time indicated in the schedule. Late requests will not be accepted.
  - Once a course has been selected to be graded on a Pass/No Pass basis, a student cannot receive a letter grade for the course. The decision to take a course on this basis is irrevocable.
  - The general practice at most four-year colleges is not to accept "Pass/No Pass" grades for courses required for the major or preparation for the major. A student planning to transfer to UCLA is required to have at least 42 units in regular letter grades.

## Grades and Grade Changes

The instructor of the course shall determine the grade to be awarded to each student in accordance with the preceding Grading Symbols and Definitions Policy. The determination of the student's grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetency. The removal or change of an incorrect grade from a student's record shall be done only upon authorization by the instructor of the course.

In the case of fraud, bad faith, or incompetency, the final determination concerning removal or change of grade will be made by the College President.

Grades are not mailed to students. It is important to check your grades at the end of every semester. Grades are available to students on-line at [www.piercecollege.com](http://www.piercecollege.com).

### Campus Procedure

Students should file a petition for grade change in the Graduation Office to have an instructor reevaluation of a course grade, provided the grade in question was originally issued within the last year. Effective September 2002, grade changes will not be considered for grades issued more than 1 year ago.

### Transcripts

Upon written request of the student, a copy of the student's academic record shall be forwarded to the student or his or her designated addressee promptly by U.S. mail or other responsible forwarding agency.

A student or former student shall be entitled to two free copies of the transcript of his or her record or two free verifications of student records. Additional copies shall be made available to the student, or to an addressee designated by the student, at a cost of \$3. Students may request special processing to expedite their request for an additional fee of \$7 per transcript or verification. This option is subject to the College's ability to provide this service. Requests for transcripts or verifications may be obtained in the Office of Admissions. Transcripts from another institution are not available for copying.

The student's transcript and/or verification of enrollment may be withheld if 1) any library books or other library materials are charged to the student and are unreturned, 2) there are any unpaid fees or charges due to the College, or 3) any other unreturned college property. The transcript may be withheld until these obligations of the student to the College are discharged.

### Academic Renewal

The following policy applies only to classes taken at Pierce College. Students may submit a petition to the Office of Admissions and Records to have grades of "D" or "F", removed from their grade-point-average under the following conditions:

1. Students must have achieved a grade-point-average of 2.5 in their most recent 15 semester units, or 2.0 in their most recent 30 semester units completed at any accredited college or university, and
2. At least two calendar years must have elapsed from the time the course work to be removed was completed.

If the above conditions are met, academic renewal shall be granted, consisting of:

1. Eliminating from consideration in the cumulative grade-point-average up to 18 semester units of course work, and
2. Annotating the student academic record indicating courses not

included in the grade-point-average calculation due to Academic Renewal.

3. Granting of Academic Renewal does not mean the course can be repeated beyond the maximum repeatability listed for the course.

**Academic renewal actions are irreversible.**

### Course Repetition to Improve Substandard Grades

Students who receive a substandard grade of D, F or No Pass, in a non-repeatable course may repeat the class once, or twice, if necessary, to remove substandard grades repeated within the LACCD. Students may petition to repeat a course a third time if special circumstances exist.

Upon completion of a course repetition the most recent grade earned will be computed in the cumulative grade-point-average, the substandard grade will be removed from the grade-point-average calculation and the student's academic record so annotated.

No specific course or categories of courses shall be exempt from course repetition.

This policy is adopted for use in the Los Angeles Community College District only. Other institutions may differ and students planning to transfer to another college should contact that institution regarding its policy.

### Course Repetition: Special Circumstances

Repetition of courses for which substandard work has not been recorded shall be permitted only upon advance petition of the student and with written permission of the College President or designee based on a finding that circumstances exist which justify such repetition. In such repetition under special circumstances, the student's permanent academic record shall be annotated in such a manner that all work remains legible. Grades awarded for repetition under special circumstances shall not be counted in calculating a student's grade-point-average.

### Course Repetition and Activity Repetition

Certain courses in the Catalog may be repeated for additional unit credit. These courses, marked "RPT" in the Course Section of the Catalog, allow the student an expanded educational experience each time the student enrolls in the course. Enrollment in these courses is limited in any similar activity to a maximum of three repeats for a total of four (4) enrollments, regardless of the repeatability of individual courses. The activity limitation also applies to courses which are not repeatable in themselves but for which similar activities exist. For example, there are several similar course titles in Art, Music, Theater, and Physical Education which are considered to be the same activity. A student may enroll four times in courses which are considered to be the same activity, such as twice in Theater 279, Musical Theater (RPT 3), and twice in Theater 280, Musical Theater Workshop (RPT 3). Any combination may be used as long as 4 enrollments in one activity is not exceeded.

This activity enrollment limitation began with the Fall 1983 term. Excess enrollment will result in administrative drop. Consult a counselor for the latest restricted activity enrollment list.

**Note:** Whenever the student's record is reviewed for the purpose of determining his or her unit credits, all of the student's record is reviewed, not just the course work since the beginning of Fall 1983.

## Academic Honors

This policy is adopted for use in the Los Angeles Community College District only. Other institutions may differ and students planning to transfer to another college should contact that institution regarding its policy.

### Awards

Graduating students of outstanding personality, scholarship, and leadership are recognized through the yearly presentation of awards within the several departments of the College. Recipients of these awards are determined through department procedures.

### President's Honor List

Students who have appeared on the Full-time or Part-time Dean's Honor List for three or more consecutive semesters will be placed on the President's Honor List. A notation of this award will appear on the student's transcript.

### Dean's Honor List

Each semester a list is published containing the names of students who have completed 12 or more units of graded classes (Pass/No Pass and incompletes are not included) during the preceding semester with a grade-point average of 3.5 or better. Part-time students may also receive recognition through the Part-time Dean's List, which honors students who have completed a minimum of 12 graded units at Pierce and 6 to 11 units of graded course work with a GPA of 3.5 or better in the current semester. For more details about the Part-time Dean's List, contact the Admissions and Records Office. A notation of this award will appear on the student's transcript.

### President's Award

A perpetual trophy and scholarship have been donated by the Associated Student Organization to the College President so that one or two outstanding graduating students can be recognized. The student must have maintained a 3.0 GPA for all college work, successfully participated in co-curricular activities, demonstrated leadership, served both the College and the community, and exhibited desirable personal qualifications.

## Academic Standards & Credit Policies

### Attendance

Only students who have been admitted to the College and are in approved active status may attend classes.

Students are expected to be in class on time and to remain for the entire class period. Medical appointments, work, job interviews, childcare responsibilities, etc. should be arranged so as not to occur during class time. Please do not make requests for exceptions.

Any student who has unexcused absences equaling one week's worth of class time prior to census date may be excluded. Students may drop the class in the Admissions Office, on-line, or by phone on or before the last day to drop. Students should never rely on the instructor to exclude them. Do not call the college offices to report absences; call the course instructor.

By the last day to add the class, students are responsible to inform the instructor of any anticipated absences due to observance of major religious holidays so that alternative arrangements may be made. Failure to do so may result in an inability to make other arrangements or a lower grade.

Students who are registered in a class and miss the first meeting may lose their right to a place in the class, but the instructor may consider special circumstances. Instructors will generally only exclude students through the census date for non-attendance. It is the student's responsibility to drop classes in time to avoid fees and/or grades of "W".

See section "Adding and Dropping" under Registration Policies.

### Campus Procedure

Students who because of mitigating circumstances are unable to attend the first class meeting should leave a voice mail message for the faculty member.

### Withdrawal

Students intending to withdraw should avail themselves of the opportunity to first discuss the contemplated withdrawal with a counselor. Whether withdrawing from one class or all classes in which the student is enrolled, it is essential that standard withdrawal procedures be observed by filling out the proper forms in the Admissions and Records Office.

### Lecture and Laboratory Credit

In computing the number of units granted for any course, Pierce College follows the general practice of granting one unit of credit for each lecture hour per week on the semester basis.

The College requires two or more hours of attendance per week for each unit of credit for non-lecture periods (laboratory, field work, physical education) which require a minimum of outside preparation.

### Final Examinations

Final examinations are to be given in all subjects according to the schedule printed in the Schedule of Classes. No student will be excused from taking a final examination.

All faculty shall retain the final exams of every student for a minimum of one year after the end of the semester for which the final exam was given in order to permit students to examine their graded final exams.

**LACCD Board Rule 6704**

A College President may designate department approved courses listed in the college catalog wherein any student who satisfies the following requirements may be granted credit by examination:

- A. Be currently registered and be in good standing (i.e., the student is not on academic or progress probation).
- B. Have completed 12 units within the Los Angeles Community College District. Colleges may develop policies to exempt students from this requirement. Such policies shall be developed in accordance with the provisions of Chapter XVIII of the Board Rules – Academic Senate and the Board of Trustees Shared Governance Policy.
- C. Is not currently enrolled in, or have completed a more advanced course in this discipline.

Title 5, C.C.R., Section 55050

**Limitation on Petitioning for Examination**

The maximum units for which a student may petition for credit by examination at the college shall be 15 units.

Title 5, C.C.R., 55050

**Maximum Units Allowable**

The maximum number of credit by examination units that may be applied toward graduation requirements shall be limited to 15 units. No other grading notations can be used in awarding credit by exam.

Title 5, C.C.R., 55050

**Acceptance Towards Residence**

Units for which credit is given pursuant to the provisions of this section shall not be counted in determining the 12 semester hours of credit in residence.

Title 5, C.C.R., 55050

**Recording of Grades**

The student's academic record shall be clearly annotated to reflect that credit was earned by examination. Grading shall be according to the regular grading system approved by the Board of Trustees, except that students shall be offered a "pass-no pass" option if that option is ordinarily available for the course.

Title 5, C.C.R., Section 55050

**Limitations on Examinations**

A student who does not pass the exam for a course may not repeat the exam.

**Courses Offered on a Credit-By-Exam Basis**

<b>American Sign Language</b>	all courses
<b>Animal Science</b>	501, 510
<b>Architecture</b>	5
<b>Auto Service Technology</b>	1, 2, 3, 4, 5, 6, 7, 25
<b>Computer Science</b>	501, 508, 533, 536, 539, 540, 572, 575, 587
<b>Electronics</b>	4A, 4B, 6A, 6B
<b>English</b>	101
<b>Industrial Technology</b>	130, 145, 146, 230, 330
<b>Journalism</b>	101, 216
<b>*Music</b>	(201, 202, 203) (211, 212, 213, 214) (221, 222) (301, 302, 303)
<b>Nursing</b>	400, 402, 403, 404, 405, 406, 407, 408, 414, 415, 441, 442
<b>Photography</b>	10, 20
<b>Physical Science</b>	1
<b>Physics</b>	12
<b>Plant Science</b>	711, 714, 820
<b>Special Education</b>	all courses
<b>Theater Arts</b>	100

\* Numbers in parentheses indicate that only one course in the series may be taken credit-by-exam

**Transfer Credit Policy**

Transfer credit for lower division courses taken at regionally accredited institutions of higher education in the United States is accepted toward Associate Degrees or Certificates. Students must provide official transcripts.

Students should make an appointment with a counselor for transcript evaluation.

**Foreign Transcript Credit Policy**

Students who have completed college level courses at schools outside the United States may petition for an unlimited number of lower division units of credit toward an Associate Degree or Certificate under the following conditions:

1. Students must submit a detailed evaluation from an approved evaluation service. Students are responsible for the cost of this service.
2. The foreign university or college must have been approved by that country's Ministry of Education at the time the student attended.
3. No courses taken outside the United States may be used to satisfy the Associate Degree's Reading and Written Expression or Oral Communication requirement.
4. No course may be used to satisfy the Associate Degree's American Institutions requirement.
5. In cases where equivalent course credit is not granted, elective credit may be awarded.

Students should make an appointment with a counselor for a transcript evaluation.

# Courses Offered on a Pass/No Pass Basis

## (Formerly Credit/No Credit)

The college offers courses which students may elect to take on a Pass/No Pass basis.

1. Students have the option of selecting Pass/No Pass only for those courses listed below.
2. Selection of courses to be taken on a Pass/No Pass basis must be made during the time indicated in the schedule of classes for the semester in which the course is taken. Late requests will not be accepted. Pass/No Pass pass grading petitions for short-term classes will be accepted during the first two weeks of the class.

3. Only one course per semester may be selected to be graded on a Pass/No Pass basis, (this does not include those courses in which all students are evaluated on a Pass/No Pass basis).
4. A Pass grade is granted for performance which is equivalent to the letter grade of "C" or better.
5. Once a course has been selected to be graded on a Pass/No Pass basis, a student cannot receive a letter grade for the course. The decision to take a course on this basis is irrevocable.
6. The general practice at most four-year colleges is not to accept Pass/No Pass grades for courses required in the major or preparation for the major. A student planning to transfer to UCLA is required to have at least 42 units in regular letter grades.
7. Students taking the Pass/No Pass option are held to the same academic standards as students receiving letter grades.

Accounting - 1, 2, 15, 17

American Sign Language - all courses

Animal Science - all courses

Anthropology - 104, 105, 106, 109, 111, 113, 119, 121, 132, 141

Architecture - 5

Art - 101, 102, 103, 105, 111, 137, 138, 139, 201, 300, 301, 501, 519, 604, 700, 708A, 708B

Astronomy - 1, 2, 3

Automotive Service Technology - 1, 20, 21, 25

Biology - 3, 10

Business - 1, 5

Cinema - 3, 18

Computer Applications and Office Technologies - all Courses

Computer Science - 501, 508, 514, 533, 534, 535, 537, 538, 547, 548, 550, 553, 554, 555, 556, 572, 575, 578, 581, 587, 588

Dance - all courses

Dance Specialities- all courses

Dance Studies- all courses

Dance Techniques - all courses

Economics - all courses

English - 20, 127, 203, 204, 205, 206, 207, 208, 209, 211, 212, 213, 214, 215, 216, 239, 240, 250, 251, 252, 270

Environmental Science - 31

Equine Science - all courses

Finance - 1, 2, 8

French - all courses

Geography - 14, 20A, B, C, D, E, F, 21, 22, 31, 32, 33, 34, 35, 36, 37

GIS - all courses

History - all courses

Humanities - 6, 61

Industrial Technology

Drafting - 110, 115, 210, 215

Machine Shop/CNC - 130, 140, 444, 448

Welding - 161, 261, 361, 461

Italian - all courses

Japanese - all courses

Journalism - no courses

Law - 3

Linguistics - 1, 2, 3

Management - 2, 6, 13, 31, 33

Marketing - 1, 11, 21, 31

Meteorology - 3

Music - 101, 111, 112, 152, 321, 411, 601, 611, 621, 650

Personal Development - 40

Philosophy - all courses

Physical Education - 91, 440

Physics - 12

Plant Science - all courses

Political Science - all courses

Psychology - all courses

Public Relations - 1

Real Estate - 1, 3

Recreation - all courses

Sociology - all courses

Spanish - all courses

Speech Communication - 111, 113

Statistics - 1, 7

Supervision - 1

Theater Arts - all courses

**Note: The following courses are graded as Pass/No Pass only. The student does not have the option of receiving a letter grade:**

American Sign Language - 101, 185, 285, 385

Anthropology - 150A, B, and C

Biology - 11A, B, and C; 12A, B, C; 18A, B

Business - 10

CAOT - 64

French - 8, 185, 285, 385

Geology - 22A, B, C and D

Italian - 8, 185, 285, 385

Japanese - 8, 185, 285, 385

Learning Skills - all courses

Nursing - 185, 285, 385, 401, 442, 450, 455, 463,

Personal Development - 4, 8, and 15

Spanish - 8, 24, 101

Pierce - 2010-2011

# Advanced Placement Information

## Important Information:

- Pierce course credit is applicable to Pierce College Associate Degree major and/or certificate requirements only.** Every college and university has its own policy for awarding credit for passed AP exams. Caution: Transfer students must check with the college or university they plan to transfer to for the institution's Advanced Placement policy.

The California State University Advanced Placement Policy can be found on their website:  
[www.calstate.edu/app/general\\_education.shtml](http://www.calstate.edu/app/general_education.shtml)

Private institutions also have their own AP policies that must be researched. Consult a Pierce Counselor for help.

- CSU GE Breadth Certification Plan and IGETC Applicability:** This information represents how students who plan to transfer to a UC or CSU campus, and who are following either the CSU GE Breadth Certification Plan or the IGETC, may count passed AP exams toward fulfillment of subject areas on each of these plans. There is no relation between the credit awarded on these general education plans and the course credit that each UC and CSU campus may award. Further, there is no relation between the credit awarded on these general education plans

and the course credit awarded by Pierce College (see below). Students must check with the individual campuses to determine if any course credit will be awarded. Caution: It is rare that colleges and universities will allow a passed AP exam to fulfill a course requirement that is needed for the major. Consult a Pierce Counselor for help.

**CSU GE AP Policy:** Complete details of the official CSU AP Policy can be found on CSU Chancellor's website:  
[www.calstate.edu/app/general\\_education.shtml](http://www.calstate.edu/app/general_education.shtml)

**IGETC AP Policy:** Complete details of the official IGETC AP Policy can be found in the IGETC Standards:  
[www.cacctcv.org/igetc.htm](http://www.cacctcv.org/igetc.htm)

## Credit for Advanced Placement Exams

AP Subject Area	AP Score	Total Semester Units Awarded Toward LACCD Associate Degrees: E-reg 110	Semester Units Applied Toward LACCD Associate Degree GE Requirements: E-reg 110	LACCD Associate Degree GE Area Fulfilled Board Rule: Chapter VI: 6201.14* E-reg 110	LACCD Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12; E-reg 110	LACCD Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14; E-reg 110	IGETC Applicability (3 semester/4 quarter) Source: IGETC Standards v 1.0	UC total units awarded Source: University of California AP Test Credit policy	CSU GE Breadth Area and American Institutions Applicability* Source: CSU Coded Memo AA-2008-52	CSU minimum semester credits awarded Source: CSU Coded Memo AA-2008-52
Art Studio Drawing Portfolio	3, 4, 5	6	3	Section C: Humanities			NA	8 qtr/5.3 sem units	NA	3 sem units
Art Studio 2D Design	3, 4, 5	6	3	Section C: Humanities			NA	8 qtr/5.3 sem units	NA	3 sem units
Art Studio 3D Design	3, 4, 5	6	3	Section C: Humanities			NA	8 qtr/5.3 sem units	NA	3 sem units
Art History	3, 4, 5	6	3	Section C: Humanities			3A or 3B 3 sem/4 qtr units	8 qtr/5.3 sem units	C1 or C2 3 semester units	6 sem units
Biological Sciences	3, 4, 5	8	3	Section A: Natural Science			5B with lab 4 sem/5 qtr units	8 qtr/5.3 sem units	B2 and B3 4 semester units	6 sem units
Chemistry	3, 4, 5	8	3	Section A: Natural Science			5A with lab 4 sem/5 qtr units	8 qtr/5.3 sem units	B1 and B3 4 semester units	6 sem units
Chinese Language & Culture	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Computer Science Exam A	3, 4, 5	3	3	Section D: Language & Rationality: Area 2. Communication and Analytical Thinking			NA	2 qtr/1.3 sem units	NA^	3 sem units
Computer Science Exam AB	3, 4, 5	6	3	Section D: Language & Rationality: Area 2. Communication and Analytical Thinking			NA	4 qtr/2.7 sem units	NA^ (removal fall 2009f)	6 sem units

AP Subject Area	AP Score	Total Semester Units Awarded Toward LACCD Associate Degrees: E-reg 110	Semester Units Applied Toward LACCD Associate Degree GE Requirements: E-reg 110	LACCD Associate Degree GE Area Fulfilled Board Rule: Chapter VI: 6201.14" E-reg 110	LACCD Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12; E-reg 110	LACCD Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14; E-reg 110	IGETC Applicability (3 semester/4 quarter) Source: IGETC Standards v 1.0	UC total units awarded Source: University of California AP Test Credit policy	CSU GE Breadth Area and American Institutions Applicability* Source: CSU Coded Memo AA-2008-52	CSU minimum semester credits awarded Source: CSU Coded Memo AA-2008-52
Economics – Macroeconomics	3, 4, 5	3	3	Section B2: Social and Behavioral Sciences			4 3 sem/4 qtr units	4 qtr/2.7 sem units	D2 3 semester units	3 sem units
Economics - Microeconomics	3, 4, 5	3	3	Section B2: Social and Behavioral Sciences			4 3 sem/4 qtr units	4 qtr/2.7 sem units	D2 3 semester units	3 sem units
English Language & Composition	3, 4, 5	6	6	Section D: Language & Rationality: Area 1. English Composition	Reading and Written Expression Competency Satisfied		1A@ 3 sem/4 qtr units	8 qtr/5.3 sem units	A2 3 semester units	6 sem units
English Literature & Composition	3, 4, 5	6	6	Section D: Language & Rationality: Area 1. English Composition	Reading and Written Expression Competency Satisfied		1A or 3B@ 3 sem/4 qtr units	8 qtr/5.3 sem units	A2 and C2 6 semester units	6 sem units
Environmental Science	3, 4, 5	4	3	Section A: Natural Science			5A with lab™ 3 sem/4 qtr units	4 qtr/2.7 sem units	B1 and B3 (B2 removal fall 2009+) 4 semester units	4 sem units
French Language	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
French Literature	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units (removal fall 2009+)	6 sem units
German Language	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Government & Politics: U.S.	3, 4, 5	3	3	Section B1: American Institutions		American Institutions Satisfied	4 3 sem/4 qtr units	4 qtr/2.7 sem units	D8 and US-2 3 semester units	3 sem units
Government & Politics: Comparative	3, 4, 5	3	3	Section B2: Social and Behavioral Sciences			4 3 sem/4 qtr units	4 qtr/2.7 sem units	D8 3 semester units	3 sem units
History: European	3, 4, 5	6	6	Section B2: Social and Behavioral Sciences Section C: Humanities			3B or 4 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 or D6 3 semester units	6 sem units
History: U.S.	3, 4, 5	6	6	Section B1: Social and Behavioral Sciences&		American Institutions Satisfied	3B or 4 3 sem/4 qtr units	8 qtr/5.3 sem units	(C2 or D6) and US-1 3 semester units	6 sem units
History: World	3, 4, 5	6	6	Section B2: Social and Behavioral Sciences			3B or 4 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 or D6 3 semester units	6 sem units
Human Geography	3, 4, 5	3	3	Section B2: Social and Behavioral Sciences			4 3 sem/4 qtr units	4 qtr/2.7 sem units	D5 3 semester units	3 sem units

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## Scholastic Policies

## Credit for Advanced Placement Exams

## Advanced Placement Information - continued

AP Subject Area	AP Score	Total Semester Units Awarded Toward LACCD Associate Degrees: E-reg 110	Semester Units Applied Toward LACCD Associate Degree GE Requirements: E-reg 110	LACCD Associate Degree GE Area Fulfilled Board Rule: Chapter VI: 6201.14 E-reg 110	LACCD Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12 E-reg 110	LACCD Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14 E-reg 110	IGETC Applicability (3 semester/4 quarter) Source: IGETC Standards v 1.0	UC total units awarded University of California AP Test Credit policy	CSU GE Breadth Area and American Institutions Applicability* Source: CSU Coded Memo AA-2008-52	CSU minimum semester credits awarded Source: CSU Coded Memo AA-2008-52
Italian Language & Culture	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Japanese Language & Culture	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Latin Literature	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	4 qtr/2.7 sem units	C2 3 semester units (removal fall 2009†)	6 sem units
Latin: Vergil	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	4 qtr/2.7 sem units	C2 3 semester units	3 sem units
Mathematics – Calculus AB	3, 4, 5	6	6	Section D: Language & Rationality: Area 2, Communication and Analytical Thinking	Mathematics Competency Satisfied		2A 3 sem/4 qtr units	4 qtr/2.7 sem units	B4 <sup>^</sup> 3 semester units	3 sem units
Mathematics – Calculus BC	3, 4, 5	6	6	Section D: Language & Rationality: Area 2, Communication and Analytical Thinking	Mathematics Competency Satisfied		2A 3 sem/4 qtr units	8 qtr/5.3 sem units	B4 <sup>^</sup> 3 semester units	6 sem units
Music Theory	3, 4, 5	6	3	Section C: Humanities			NA	8 qtr/5.3 sem units	C1 3 semester units (removal fall 2009†)	6 sem units
Physics B	3, 4, 5	6	3	Section A: Natural Science			5A with lab™ 4 sem/5 qtr units	8 qtr/5.3 sem units	B1 and B3% 4 semester units	6 sem units
Physics C Mechanics	3, 4, 5	4	3	Section A: Natural Science			5A with lab™ 3 sem/4 qtr units	4 qtr/2.7 sem units	B1 and B3% 4 semester units	4 sem units
Physics C Electricity & Magnetism	3, 4, 5	4	3	Section A: Natural Science			5A with lab™ 3 sem/4 qtr units	4 qtr/2.7 sem units	B1 and B3% 4 semester units	4 sem units
Psychology	3, 4, 5	3	3	Section B2: Social and Behavioral Sciences			4 3 sem/4 qtr units	4 qtr/2.7 sem units	D9 3 semester units	3 sem units
Spanish Language	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Spanish Literature	3, 4, 5	6	3	Section C: Humanities			3B and 6A 3 sem/4 qtr units	8 qtr/5.3 sem units	C2 3 semester units	6 sem units
Statistics	3, 4, 5	3	3	Section D: Language & Rationality: Area 2, Communication and Analytical Thinking	Mathematics Competency Satisfied		2A 3 sem/4 qtr units	4 qtr/2.7 sem units	B4 3 semester units	3 sem units

## Advanced Placement Information

### IGETC AP Policy Notes (see chart):

Ⓒ Current Pierce College policy will not allow students who scored a 3 on either of the English Advanced Placement exams to progress to IGETC Area 1B: Critical Thinking and English Composition. Students who scored a 3 on either of the English Advanced Placement policies have the following options for completing the IGETC Area 1B requirement:

1. Take a course to meet IGETC 1B at any of the other eight campuses in the Los Angeles Community College District. All eight campuses will allow students who scored 3 or higher on either of the English AP exams to enroll in an IGETC 1B course. West Los Angeles has online courses available that satisfy IGETC 1B. Warning: Be sure to follow the IGETC plan at each college you attend.

OR

2. On a case-by-case basis, students who scored a 3 can meet with the Pierce English Department Chair or their designee, and complete a written assignment. The English faculty member will determine whether the completed assignment demonstrates the knowledge and skills necessary to succeed in a course(s) requiring English 101 as a prerequisite. At the faculty members discretion, they can clear the student to enroll in a course that meets IGETC 1B.

OR

3. Students who scored a 3 may choose to enroll in English 101 at Pierce. However, the UC and CSU campuses may not grant unit or course credit for English 101. The IGETC Standards v1.0 states: "Students who have earned credit from an AP exam should not take a comparable college course

because transfer credit will not be granted for both." Students cannot choose which they want credit for, the AP exam or the course. The university will give credit for what was first passed. In this case, it will be the AP exam.

TM For AP exams in Environmental Science; Physics C: Mechanics; and Physics C: Electricity/Magnetism; 3 semester or 4 quarter units are applied for IGETC certification; therefore, students who complete these exams will be required to complete at least 4 semester or 5 quarter units to satisfy the minimum required units for IGETC Area 5.

### CSU AP Policy Notes (see chart):

\* Areas of CSU GE Breadth (A1 through E) are defined in CSU Executive Order 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections 1A and 1B of CSU Executive Order 405, and at [www.assist.org](http://www.assist.org)

† These units count toward CSU eligibility for admission. The units may not all apply toward CSU certification of the corresponding GE-Breadth area. See CSU Executive Orders 1033 and 1036 for details.

‡ Students seeking certification in CSU GE Breadth prior to transfer must have passed the AP test before this date.

^ CSU policy: If a student passes more than one AP exam in calculus or computer science, only one examination may be applied to the baccalaureate.

% CSU policy: If a student passes more than one AP exam in physics, only six units of credit may be applied to the CSU baccalaureate, and only four units of credit may be applied to a certification in GE Breadth.

### Pierce College Course Credit applicable to Associate Degree major and/or certificate requirements only:

This course credit is not applicable to Pierce College Associate Degree general education requirements or units awarded. For this information, reference the AP chart on the previous pages. Additionally, Pierce course credit is in no way related to the AP policy of the CSU GE Breadth Certification Plan or the IGETC. For these polices, consult the AP chart on the previous pages.

AP EXAMINATION	SCORE	PIERCE COURSE CREDIT
AP Art History	3, 4, 5	Art 101 and Art 102
AP Art Studio: Drawing	3, 4, 5	Art 201 and Art 202
AP Art Studio: Two-dimensional design	3, 4, 5	Art 501
AP Biology	3, 4, 5	Biology 3
AP Calculus AB	3, 4, 5	Math 261
AP Calculus BC	3, 4, 5	Math 261 and Math 262
AP Computer Science A	3, 4, 5	Co Sci 506 or Co Sci 575
AP Computer Science AB	3, 4, 5	Co Sci 536
AP English Language and Composition	3 4, 5	English 28 English 101
AP English Literature and Composition	3 4, 5	English 28 English 101
AP French Language	3, 4, 5	French 1
AP Government and Politics: United States	3, 4, 5	Political Science 1

AP EXAMINATION	SCORE	PIERCE COURSE CREDIT
AP History: European	3, 4, 5	History 2
AP History: United States	3, 4, 5	History 11 and History 12
AP History: World	3, 4, 5	History 86 and History 87
AP Human Geography	3, 4, 5	Geography 2
AP Macroeconomics	3, 4, 5	Economics 2
AP Microeconomics	3, 4, 5	Economics 1
AP Music Theory	3, 4, 5	Music 101
AP Physics B	3, 4, 5	Physics 6 and Physics 7
AP Physics C: Mechanics	3, 4, 5	Physics 101
AP Physics C: Electricity and Magnetism	3, 4, 5	Physics 102
AP Psychology	3, 4, 5	Psychology 1
AP Spanish Language	3, 4, 5	Spanish 1
AP Statistics	3, 4, 5	Math 227

## Credit for Courses Completed at Non-Accredited Institutions

Students transferring from non-accredited institutions may, after successful completion of 30 units with a "C" or better grade-point-average, apply for up to 15 units of credit in courses which parallel the offerings of the College.

The following exceptions may be made to this regulation:

### 1. Credit for Graduates of Diploma Schools of Nursing.

The following amount of credit is authorized for graduates of Diploma Schools of Nursing who enter the Los Angeles Community Colleges:

- 2.1. Thirty (30) semester units of credit will be given to graduates of Diploma Schools of Nursing under the following conditions:
  - 2.1.1. The student presents a valid, current California certificate as a licensed registered nurse to the designated administrative officer;
  - 2.1.2. The student has completed at least 12 units of credit at the College to which application is made.
- 2.2. The work of graduates of Diploma Schools of Nursing outside California will be recognized if the student has a valid, current California license. Credit will be given even though the license was obtained on the basis of reciprocity with another state rather than by examination.
- 2.3. Candidates for the Associate of Arts or Associate of Science Degree are exempt from Health Education as a general education requirement. No other general education requirements will be waived.
- 2.4. Additional courses in Nursing may be taken for credit only upon approval of the Nursing Department.
- 2.5. The transcript is not to reflect the major field nor should the diploma, where given, indicate Nursing as a major.

### 2. Credit for Military Service Training

Students who are currently serving in or have served in the military service, may, after successful completion of at least one course with the Los Angeles Community Colleges, request an evaluation of credit earned through military service training schools and/or military occupational specialties.

### 3. Credit for Law Enforcement Academy Training

Credit for basic recruit academy training instructional programs in Administration of Justice or other criminal justice occupations shall be granted as follows:

- 2.1. Credit will be given for training from institutions which meet the standards of training of the California Peace Officers Standards and Training Commission.
- 2.2. A single block of credit will be given and identified as academy credit.
- 2.3. One (1) unit of credit may be granted for each 50 hours of training, not to exceed (18) semester units or their equivalent.

Credits granted by an institution of higher education for basic recruit academy training, under the above provisions, shall not be identified as equivalent to any required course in the major.

# Academic Probation & Dismissal

## Academic Standards for Probation

The following standards for academic and progress probation shall be applied as required by regulations adopted by the Board of Governors of the California Community Colleges. Probation shall be determined based on student course work dating from Fall, 1981; course work completed prior to Fall of 1981 is excluded from probation calculations.

### Probation

A student shall be placed on probation if any one of the following conditions prevail:

- 2.1. **ACADEMIC PROBATION.** The student has attempted a minimum of 12 semester units of work and has a grade-point-average less than a "C" (2.0).
- 2.2. **PROGRESS PROBATION.** The student has enrolled in a total of at least 12 semester units and the percentage of all units in which a student has enrolled and for which entries of "W" (Withdrawal), "INC" (Incomplete), and "No Pass" (NP), formerly No Credit are recorded reaches or exceeds fifty percent.
- 2.3. **TRANSFER STUDENT.** The student has met the conditions of academic or progress probation at another college within the Los Angeles Community College District.

### Units Attempted

"Units Attempted," for purposes of determining probation status only, means all units of credit in the current community college of attendance for which the student is enrolled.

### Removal from Probation

A student shall be removed from probation upon meeting the criteria specified in this section.

**Academic Probation** – A student on academic probation for a grade point deficiency shall be removed from probation when the student's cumulative grade-point-average is 2.0 or higher.

**Progress Probation** – A student on progress probation because of an excess of units for which entries of No Pass (NP), formerly No Credit, Incomplete (INC), and/or Withdrawal (W) are recorded shall be removed from probation when the cumulative percentage of units in this category drops below fifty percent (50%).

## Academic Standards for Dismissal

A student shall be subject to dismissal and subsequently be dismissed under the conditions set forth within this section. Dismissal shall be determined based on student course work dating from Fall, 1981; course work completed prior to Fall of 1981 is excluded from dismissal calculations.

### Academic Probation

A student who is on academic probation shall be subject to dismissal if the student has earned a cumulative grade-point-average of less than 2.0 in all units attempted in each of 3 consecutive semesters.

A student who is on academic probation and earns a semester grade-point-average of 2.0 or better shall not be dismissed as long as this minimum semester grade-point-average is maintained.

### Progress Probation

A student who is on progress probation shall be subject to dismissal if the cumulative percentage of units in which the student has been enrolled for which entries of No Pass (NP), formerly No Credit, Incomplete (INC), and/or Withdrawal (W) are recorded in at least 3 consecutive semesters reaches or exceeds fifty percent (50%).

A student who is on progress probation shall not be dismissed after a semester in which the percentage of units in which the student has been enrolled for which entries of "W", "INC" and "No Pass (NP), formerly No Credit", are recorded is less than fifty percent (50%).

### Appeal of Dismissal

A student who is subject to dismissal may appeal to the Dean of Admissions and Records. Dismissal may be postponed and the student continued on probation if the student shows significant improvement in academic achievement but has not been able to achieve to a level that would meet the requirements for removal from probation.

### Dismissal

A student who is subject to dismissal, and who has not been continued on probation through the appeal process, shall be notified by the College President, or designee, of dismissal which will become effective the semester following notification.

Dismissal from any one college in the District shall disqualify a student from admission to any other college in the District.

### Readmission After Dismissal

A student who has been dismissed may request reinstatement after two semesters have elapsed. The student shall submit a written petition requesting readmission to the College in compliance with College procedures. Readmission may be granted, denied, or postponed subject to fulfillment of conditions prescribed by the College.

## Student Records and Directory Information

The Los Angeles Community College District, in compliance with Federal and State law, has established policies and procedures governing student records and the control of personally identifiable information. The Los Angeles Community College District recognizes that student records are a confidential matter between the individual student and the College. At the same time the District has a responsibility to fulfill public information needs (i.e., information about students participating in athletics, announcement of scholarships and awards, etc.). To meet this responsibility the District may release Directory Information unless the student states in writing that he or she does not want it released. The responsibility for carrying out these provisions is charged to the College Records Officer, designated by the chief administrative officer on each campus. The Records Officer may be contacted via the Office of Admissions. Copies of Federal and State laws and District policies and procedures are maintained by the Records Officer and are available for inspection and inquiry.

All student records maintained by the various offices and departments of the College, other than those specifically exempted by law, are open to inspection by the student concerned. The accuracy and appropriateness of the records may be challenged in writing to the Records Officer. A student has the right to receive a copy of his or her record, at a cost not to exceed the cost of reproduction. (Requests for transcripts should be made directly to the Office of Admissions).

No student records, other than Directory Information, will be released without the written consent of the student concerned except as authorized by law. A log of persons and organizations requesting or receiving student record information is maintained by the Records Officer. The log is open to inspection only to the student and the community college official or his or her designee responsible for the maintenance of student records.

Directory Information includes the student's name, city of residence, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. Directory Information about any student currently attending the College may be released or withheld at the discretion of the Records Officer.

In addition, branches of the U.S. military are entitled to receive the following student information: student directory information as defined above, student address, telephone number, date of birth, and major field of study. This information will not be released if you so indicate on your Application for Admission.

The College Foundation is entitled, with your permission, to receive the following student information: student's name, address and telephone number. The College Foundation is not entitled to release your student information to third parties. This information will not be released if you so indicate on your Application for Admission.

Other colleges and universities may also receive mailing information if you agree to release it on your Application for Admission.

No Directory Information will be released regarding any student who has notified the Records Officer in writing that such information shall not be released.

All inquiries regarding student records, Directory Information, and policies for records access, release, and challenge should be directed to the Records Officer via the Office of Admissions.

Students have the right to file a complaint with the United States Department of Education concerning alleged violations of Federal laws governing student records.

# Student Conduct

## Standards of Student Conduct

A student enrolling in one of the Los Angeles Community Colleges may rightfully expect that the faculty and administrators of the colleges will maintain an environment in which there is freedom to learn. This requires that there be appropriate conditions and opportunities in the classroom and on the campus. As members of the college community, students should be encouraged to develop the capacity for critical judgment, to engage in the sustained and independent search for truth, and to exercise their rights to free inquiry and free speech in a responsible, non-violent manner. In furtherance of students' interest in free inquiry and the search for truth, it is also important that students be able to hear the views of non-students and engage in the free exchange of ideas with non-students.

All persons shall respect and obey civil and criminal law, and shall be subject to legal penalties for violation of laws of the city, county, state and nation. All persons shall respect and obey the rules, regulations, and policies of the Los Angeles Community College District.

Conduct in all of the Los Angeles Community Colleges must conform to District and college rules and regulations. Violations of such rules and regulations, may result in disciplinary action depending on the individual's status as student, faculty, staff or visitor.

Violations of such rules and regulations include but are not limited to the following:

### Board Rule 9803.10

**Willful Disobedience.** Willful disobedience to directions of college officials acting in the performance of their duties.

### Board Rule 9803.11

**Violation of College Rules and Regulations.** Violation of college rules and regulations including those concerning student organizations, the use of college facilities, or the time, place, and manner of public expression or distribution of materials.

### Board Rule 9803.12

**Dishonesty.** Dishonesty, such as cheating, or knowingly furnishing false information to the colleges.

### Board Rule 9803.13

**Unauthorized entry.** Unauthorized entry to or use of the college facilities.

### Board Rule 9803.14

**College Documents.** Forgery, alteration, or misuse of college documents, records, or identification.

### Board Rule 9803.15

**Disruption of Classes or college activities.** Obstruction or disruption of classes, administration, disciplinary procedures, or authorized college activities.

### Board Rule 9803.16

**Theft of or Damage of Property.** Theft of or damage to property belonging to the college, a member of the college community, or a campus visitor.

### Board Rule 9803.17

**Interference with peace of college.** The malicious or willful disturbance of the peace or quiet of any of the Los Angeles Community Colleges by loud or unusual noise, or any threat, challenge to fight, fight, or violation of any rules of conduct as set forth in this Article. Any person whose conduct violates this section shall be considered to have interfered with the peaceful conduct of the activities of the college where such acts are committed.

### Board Rule 9803.18

**Assault or battery.** Assault or battery, abuse, or any threat of force or violence directed toward any member of the college community or campus visitor engaged in authorized activities.

### Board Rule 9803.19

**Alcohol and Drugs.** Any possession of controlled substances which would constitute a violation of Health and Safety Code section 11350 or Business and Professions Code section 4230, any use of controlled substances the possession of which are prohibited by the same, or any possession or use of alcoholic beverages while on any property owned or used by the District or colleges of the District or while participating in any District or college-sponsored function or field trip.

"Controlled substances", as used in this section, include but are not limited to the following drugs and narcotics:

- a) opiates, opium and opium derivatives
- b) mescaline
- c) hallucinogenic substances
- d) peyote
- e) marijuana
- f) stimulants and depressants
- g) cocaine

### Board Rule 9803.20

**Lethal Weapon.** Possession, while on a college campus or at a college-sponsored function, of any object that might be used as a lethal weapon is forbidden to all persons except sworn peace officers, police officers and other governmental employees charged with policing responsibilities.

### Board Rule 9803.21

**Discriminatory Behavior.** Behavior while on a college campus or at a college-sponsored function, inconsistent with the District's non-discrimination policy, which requires that all programs and activities of the Los Angeles Community College District be operated in a manner which is free of discrimination on the basis of race, color, national origin, ancestry, religion, creed, sex (including gender-based sexual harassment), pregnancy, marital status, sexual orientation, age, handicap or veterans status.

### Board Rule 9803.22

**Unlawful Assembly.** Any assemblage of two or more persons to 1) do an unlawful act, or 2) do a lawful act in a violent, boisterous or tumultuous manner.

### Board Rule 9803.23

**Conspiring to Perform Illegal Acts.** Any agreement between two or more persons to perform illegal acts.

**Board Rule 9803.24**

**Threatening Behavior.** A direct or implied expression of intent to inflict physical or mental/emotional harm and/or actions, such as stalking, which a reasonable person would perceive as a threat to personal safety or property. Threats may include verbal statements, written statements, telephone threats or physical threats.

**Board Rule 9803.25**

**Disorderly Conduct.** Conduct which may be considered disorderly includes; lewd or indecent attire or behavior that disrupts classes or college activities; breach of the peace of the college; aiding, or inciting another person to breach the peace of college premises or functions.

**Board Rule 9803.26**

**Theft or Abuse of Computer Resources.** Theft or abuse of computer resources including but not limited to:

- a. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
- b. Unauthorized transfer of a file.
- c. Unauthorized use of another individual's identification and password.
- d. Use of computing facilities to interfere with the work of a student, faculty member, or college official, or to alter college or district records.
- e. Use of unlicensed software.
- f. Unauthorized copying of software.
- g. Use of computing facilities to access, send or engage in messages which are obscene, threatening, defamatory, present a clear and present danger, violate a lawful regulation and/or substantially disrupt the orderly operation of a college campus.
- h. Use of computing facilities to interfere with the regular operation of the college or district computing system.

**Board Rule 9803.27**

**Performance of an Illegal Act.** Conduct while present on a college campus or at a location operated and/or controlled by the District or at a District-sponsored event, which is prohibited by local, State, or federal law.

**Board Rule 9804**

**Interference with Classes.** Every person who, by physical force, willfully obstructs, or attempts to obstruct, any student or teacher seeking to attend or instruct classes at any of the campuses or facilities owned, controlled or administered by the Board of Trustees of the Los Angeles Community College District, is punishable by a fine not exceeding five hundred dollars (\$500) or imprisonment in a county jail not exceeding one year, or by both such fine and imprisonment. As used in this section, "physical force" includes, but is not limited to, use of one's person, individually or in concert with others, to impede access to or movement within or otherwise to obstruct the students or teachers of the classes to which the premises are devoted.

**Board Rule 9805**

**Interference with Performance of Duties by Employees.** Every person who attempts to cause, or causes, any officer or employee of any of the Los Angeles Community Colleges or any public officer or employee to do or refrain from doing, any act in the performance of his/her duties, by means of a threat to inflict any injury upon any person or property, is guilty of a public offense.

**Board Rule 9805.10**

**Assault or Abuse of Instructor.** Every parent, guardian, or other person who assaults or abuses any instructor employed by the District in the presence or hearing of a community college student or in the presence of other community college personnel or students and at a place which is on District premises or public sidewalks, streets, or other public ways adjacent to school premises, or at some other place where the instructor is required to be in connection with assigned college activities is guilty of a misdemeanor.

**Board Rule 9806**

**Unsafe Conduct.** Conduct which poses a threat of harm to the individual and/or to others. This includes, but is not limited to, the following types of conduct:

- a. Unsafe conduct in connection with a health services program (e.g., nursing, dental hygiene, etc.);
- b. Failure to follow safety directions of District and/or College staff;
- c. Willful disregard of safety rules as adopted by the District and/or College; and/or
- d. Negligent behavior which creates an unsafe environment.

**Board Rule 9803.27**

**Performance of an Illegal Act.** Conduct while present on a college campus or at a location operated and/or controlled by the District or at a District-sponsored event, which is prohibited by local, State, or federal law.

**Smoking Policy**

Smoking is not permitted in any classroom or other enclosed facility. Smoking is permitted in designated areas only.

**Drug-Free Campus****Standards of conduct**

The Los Angeles Community College District is committed to a drug-free and alcohol-free campuses. Students and employees are prohibited from unlawfully possessing, using or distributing illicit drugs and alcohol on District premises, in District vehicles, or as part of any activity of the District or colleges of the District.

**LACCD Board Rule 9803.19 states:** Alcohol and Drugs. Any possession of controlled substances which would constitute a violation of Health and Safety Code section 11350 or Business and Professions Code section 4230, any use of controlled substances the possession of which are prohibited by the same, or any possession or use of alcoholic beverages while on any property owned or used by the District or colleges of the District or while participating in any District or college-sponsored function or field trip. "Controlled substances," as used in this section, include but are not limited to the following drugs and narcotics:

- a) opiates, opium and opium derivatives
- b) mescaline
- c) hallucinogenic substances
- d) peyote
- e) marijuana
- f) stimulants and depressants
- g) cocaine

## Legal and disciplinary sanctions

Federal and state laws regarding alcohol and illicit drugs allow for fines and/or imprisonment. Other legal problems include the loss of one's driver's license and limitations of career choices. A summary of federal penalties for drug related offenses is available at: <http://www.usdoj.gov/dea/agency/penalties.pdf>

In addition to criminal prosecution, violators are also subject to disciplinary action by the college. Student discipline actions may include the following: warning, reprimand, disciplinary probation, suspension, and/or expulsion.

## Health risks

Health risks associated with the abuse of controlled substances include malnutrition, damage to various organs, hangovers, blackouts, general fatigue, impaired learning, dependency, disability and death. Both drugs and alcohol may be damaging to the development of an unborn fetus. Personal problems include diminished self-esteem, depression, alienation from reality, and suicide. Social problems include alienation from and abuse of family members, chronic conflict with authority, and loss of friends, academic standing, and/or co- and extra-curricular opportunities. A summary chart of various drugs and their effects is available at: [www.usdoj.gov/dea/pubs/abuse/chart.htm](http://www.usdoj.gov/dea/pubs/abuse/chart.htm)

## Counseling, Treatment and Rehabilitation

The following counseling, treatment, and rehabilitation resources are available for the treatment of alcohol and drug dependence and abuse.

- Los Angeles Community College District Employee Assistance Program (EAP) [www.laccd.edu/health/eap](http://www.laccd.edu/health/eap); (800) 342-8111
- National Council on Alcoholism and Drug Dependence [www.ncadd.org](http://www.ncadd.org); (800) NCA-CALL
- California Department of Alcohol and Drug Programs [www.adp.ca.gov](http://www.adp.ca.gov); (800) 879-2772
- Los Angeles County Alcohol and Drug Program Administration [www.lapublichealth.org/adpa](http://www.lapublichealth.org/adpa); (800) 564-6600
- Alcoholics Anonymous [www.alcoholics-anonymous.org](http://www.alcoholics-anonymous.org) (213) 387-8316; (818) 988-3001
- Cocaine Anonymous [www.ca.org](http://www.ca.org); (213) 839-1141
- Marijuana Anonymous [www.marijuana-anonymous.org](http://www.marijuana-anonymous.org); (800) 766-6779
- Narcotics Anonymous [www.na.org](http://www.na.org); (800) 863-2962
- Families Anonymous [www.familiesanonymous.org](http://www.familiesanonymous.org); (800) 736-9805

## Student Discipline Procedures

Community college districts are required by law to adopt standards of student conduct along with applicable penalties for violation (Education Code Sections 66017, 66300, 76030 and 76031). The Los Angeles Community College District has complied with this requirement by adopting Board Rule 9803, Standards of Student Conduct and 91101, Student Discipline Procedures. The purpose of Board Rule 91101 is to provide uniform procedures to assure due process when a student is charged with a violation of the Standards of Student Conduct. All proceedings held in accordance with these procedures shall relate specifically to an alleged violation of the established Standards of Student Conduct.

These provisions do not apply to grievance procedures, student organization councils and courts, or residence determination and other academic and legal requirements for admission and retention.

Disciplinary measures may be taken by the College independently of any charges filed through civil or criminal authorities, or both.

Copies of the Student Discipline Procedures are available in the Student Services Office.

## Student Grievance Procedures

The Student Grievance Procedure is to provide a prompt and equitable means for resolving student grievances. The grievance procedure may be initiated by a student or group of students who reasonably believe that he/she/they have been subject to unjust action or denied rights that adversely affect his/her/their status, rights, or privileges as a student. The grievance procedure is detailed in District Administrative Regulation E-55 which is available in the Student Services Office and the Office of College Compliance (OCC) to any student or applicant to the college.

This grievance procedure does NOT apply to the challenge process for prerequisites, corequisites, advisories and limitations on enrollment; alleged violations of sexual harassment; actions dealing with student discipline; alleged discrimination on the basis of ethnic group identification, religion, age, sex, color, sexual orientation, physical or mental disability; or an appeal for residency decision; or to eligibility, disqualification or reinstatement of financial aid; issues related to freedom of the press, employee discipline, challenges of district policies, or financial claims against the district.

In addition, section 76224 of the California Education Code provides: "When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final."

The following steps should be taken to begin the grievance procedure:

### Step I Informal Process

All parties involved in a potential grievance are encouraged to seek an informal remedy. In the majority of the cases, a meeting with the person with whom the student has a grievance or with that person's immediate supervisor or chair can resolve the issue(s). The student may also seek the assistance of the College administrator/dean of the area. Depending on the particular circumstances, students may seek the assistance of faculty members appointed by the Pierce Academic Senate who act as ombudspersons for these matters. When a specific grade is being contested, the student should also fill out a petition for a grade change with the Graduation Office located in the Admissions Office in the Student Services Building. In most cases, the request for a grade change must be denied before a formal grievance can be filed.

### Step II Formal Resolution

Students unable to resolve their grievances through the informal process may file a *Statement of Grievance* with the College Compliance Officer who is the official College Ombudsperson. At the end of 30 instructional days following the filing of the *Statement of Grievance*, the student has the right to request a formal Grievance Hearing. The *Grievance Hearing Request* must be made within 120 calendar days of the alleged incident.

Students pursuing a formal grievance have the right to be represented by a Student Advocate who will assist students in the hearing process.

Additional information and assistance with these procedures may be obtained from the Student Services Office or the Office of College Compliance (OCC). The OCC may be contacted at (818) 710-2508 or at [compliance@piercecollege.edu](mailto:compliance@piercecollege.edu)

## Student Academic Integrity Policy Statement

The faculty and administration of Pierce College are committed to the belief that honesty and integrity are integral components of the academic process. The College expects students to be honest and ethical at all times in their pursuit of academic goals. Students who violate the code of academic conduct by which the College maintains its academic integrity will be dealt with in a manner reflecting the seriousness of these violations.

- I. Violations of academic honesty and integrity occur when a student participates in any act in which he/she uses deception or fraud while performing an academic activity. Violations include, but are not limited to, the following:
  - Using study aids such as calculators, tape recorders or notes, when not authorized by the instructor.
  - Cheating on examinations, assignments or experiments (allowing another student to copy one's answers or copying the answers of other students; exchanging information by any means, including verbal exchanges, sign language, hand signals, secret codes, passed notes, creation of a distraction for the purpose of cheating; changing answers on a previously scored test, assignment or experiment; inventing information and/or data.)
  - Allowing another student to assume one's identity in order to fulfill an assignment or take a test.
- Submitting for a grade the words, ideas, and/or written work (including laboratory notes and drawings) of another person without giving due credit to that person. This includes purchased papers or papers written by other students.
- Falsifying or attempting to falsify attendance records and/or grade rosters.
- Conspiring with other students to commit any of the above behaviors.

  - II. Consequences for any offense against academic honesty and integrity may include:
    - An "F" or a "0" on the examination or assignment.
    - Suspension from the class and other sanctions and/or penalties authorized by the Board of Trustees for violations of the District Code of Conduct.
    - A record of the student's violation placed in the student's disciplinary file.
  - III. Student's Right to Appeal
 

Students have the right to appeal disciplinary actions through the Board of Trustees Discipline procedures. A final grade may be contested through the student grievance procedures.
  - IV. Reporting a Violation
 

When an alleged incident of academic dishonesty occurs, it is recommended that a faculty member take the following steps to report the incident:

    - a) Inform the student and the department chair of the nature of the alleged violation and the impending course of action.
    - b) Complete the Academic Dishonesty Report Form and submit it, along with any related evidence, to the V.P. of Student Services. The student should also receive a copy of the form from the instructor within ten (10) working days of the incident.
    - c) The V.P. of Student Services will forward information about the incident to the Department Chair and the appropriate Dean of Academic Affairs.
    - d) The V.P. of Student Services or designee will investigate the allegations and recommend any appropriate disciplinary actions.
  - V. Faculty Responsibilities
 

In order to maintain an environment free of academic dishonesty, the following recommendations are made to the faculty regarding their responsibility to uphold academic integrity:

Make every attempt to conduct their classroom in a manner which encourages honorable behavior and learning, to ensure student success and discourage academic dishonesty.

Inform students of the course requirements, grading procedures and expectations of responsible academic conduct.

Inform students of the College policy on Academic Integrity and the potential consequences for violations of this policy.

Inform students of their right to due process should they wish to contest the cheating allegation.

# Student Services & Academic Resources

## Student Services

The primary purpose of the Office of Student Services is to protect the right of every student to receive a higher education and to ensure that this right will not be infringed upon arbitrarily, capriciously, or in a discriminatory manner, or without due process of law. The Vice President of Student Services acts as an advocate for the students. Another responsibility of the office is to enforce the Code of Student Conduct for the safety and protection of the college community and the preservation of academic integrity.

Pierce College offers a broad array of support services for students. These student services are designed to assist students in accomplishing their educational objectives and to provide opportunities for involvement in a number of co-curricular activities. Overall supervision is the responsibility of the Vice President of Student Services.

## Financial Aid

### What is Financial Aid?

Financial aid is made available by federal and state governments in the form of grants, scholarships, loans, and employment. Private sources also provide educational funds in the form of scholarships. This assistance makes it possible for students to continue their education beyond high school, even if they and/or their families cannot meet the full cost of education at the college they choose to attend. The basis for such assistance is the belief that students and their families have the primary responsibility to meet educational costs. Financial aid is available only to fill the gap between a family's contribution and the student's yearly academic expenses.

### Who is eligible for Financial Aid?

To be considered for financial aid, students must meet the following minimum requirements:

- Be a U.S. citizen or an eligible non-citizen. An eligible non-citizen is a U.S. permanent resident who has documentation from the Department of Homeland Security verifying that his/her stay in the U.S. is for other than a temporary purpose.
- Demonstrate financial need.
- Be making Satisfactory Academic Progress in a course of study leading to a Certificate, AA or AS Degree, or Transfer to a Baccalaureate Degree Program.
- Not be in default on any student loan such as Federal Perkins Loans, Federal Stafford Loans (subsidized and unsubsidized), Federal Direct Loans (subsidized or unsubsidized), Supplemental Loans to Assist Students (SLS), or FPLUS Loans (Parent Loans for undergraduate students) at any college attended.
- Not owe a refund on a Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG) or Academic Competitiveness Grant (ACG) or SMART Grant.

- Be registered with Selective Service, if required to do so.
- Be enrolled as a regular student in an eligible program.
- Have a valid Social Security Number (SSN).
- Demonstrate an Ability to Benefit as defined below.

### Ability to Benefit

Students who meet one of the qualifications listed below have demonstrated the ability to benefit from a college education in accordance with applicable Federal Regulations.

- Received a high school diploma; or
- Passed a high school proficiency examination; or
- Received a Certificate of General Educational Development (GED); or
- Successfully completed a two-year program (minimum 48 units) that is acceptable for full credit towards a bachelor's degree. A student may be admitted on the basis that he/she has the recognized equivalent of a high school diploma; or
- Passed an independently administered test that is approved by the Secretary of the U.S. Department of Education provided the student is at least eighteen (18) years old. Tests are administered at the Assessment Center by appointment at (818) 719-6499.

### When to Apply

- **NOVEMBER**
  - Submit the College Admission Application for the academic year you are attending.
  - Obtain a U.S. Department of Education Personal Identification Number (PIN) now.
  - Your PIN will serve as an e-signature and will expedite the financial aid and loan processes. Go to [www.pin.ed.gov](http://www.pin.ed.gov) to apply for a PIN.
  - For dependent students, your parents also need to apply for a PIN.
- **JANUARY/FEBRUARY**
  - Submit your Free Application for Federal Student Aid (FAFSA) and Cal Grant Verification.
  - Go to [www.fafsa.ed.gov](http://www.fafsa.ed.gov) to apply for the FAFSA.
- **MARCH**
  - Deadline for PRIORITY financial aid application is March 2nd – be sure your FAFSA is submitted.
  - Deadline for GPA Verification form is March 2nd – be sure your GPA verification form is filed with the California Student Aid Commission.
  - Do NOT wait until you are admitted to Pierce College before submitting your FAFSA and GPA Verification form.
- **APRIL**
  - Deadline for PRIORITY funding to apply for limited funding financial aid programs (such as Federal Work-Study, FSEOG, and Perkins Loan) is April 2nd – be sure you have submitted your application for admissions to the college and submitted the required documents to the Financial Aid Office.

- **MAY**
  - To receive your financial aid disbursement by the first week of the Fall semester, all supporting documents must be submitted by May 1st.
  - The priority date is established to encourage early application for financial aid. Students who missed the priority date may still apply, but funds may be limited.
- **MAY/JUNE**
  - Award notifications are issued by priority applications.
- **AUGUST/SEPTEMBER**
  - Financial Aid disbursement for priority applicants.
- **OTHER DEADLINES**
  - September 2nd – Cal Grant second chance deadline for Community College students.
  - Mid November – Deadline to apply for Fall only student loans.
  - Mid April – Deadline for academic year loans.

To receive Title IV Financial Aid as noted above, the Pierce College Financial Aid Office must have on file a valid Institutional Student Information Report (ISIR) by the last day of enrollment for a term/semester or June 30, 2011, whichever is earlier.

### How To Apply

To apply for federal and state financial aid programs, complete and submit the Free Application for Federal Student Aid (FAFSA). The FAFSA is an all inclusive application form that allows students to apply for all programs.

Apply electronically at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) (Note: Be sure to print and mail the signature page when you transmit your application, if you do not have a PIN to electronically sign the FAFSA.)

If you do not have a Personal Identification Number (PIN), we recommend that you apply for one at [www.pin.ed.gov](http://www.pin.ed.gov)

### Verification Policy

Federal verification requirements apply to the following programs:

- Federal Pell Grant
- Academic Competitiveness Grant (ACG)
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study Program (FWS)
- Federal Perkins Loan Program
- Federal Direct Loan Program
- Federal Family Education Loan Program

If your application has been selected for verification by the federal processor, you will be required to provide additional documentation with a specific deadline. Failure to meet this deadline will result in the denial of financial aid.

For the Federal Direct Loan Program and the Federal Family Education Loan Program, verification must be completed 20 working days prior to the last day of enrollment period to allow for loan processing time.

Students whose applications are selected for verification may be paid on any corrected valid SAR/ISIR that is received within 120 days after the student's last day of enrollment.

If an applicant does not complete verification by the established deadline, all federal financial aid is forfeited for the award year. The Financial Aid Office maintains the right to request additional information which may be required to process your application. Those may include but are not limited to:

- Tax Return
- Verification of Untaxed Income
- Verification Worksheet
- Selective Service Certification
- Social Security Verification
- Permanent resident documents, if an eligible non-citizen

### English As A Second Language (ESL)

Students taking only ESL classes must submit both an ESL Certification Form and a Student Educational Plan to the Financial Aid Office within the first semester. Both forms must be signed by an academic counselor. ESL Certification Cards are available in the Financial Aid Office and in the Counseling Center.

### Audited Classes

Students cannot receive financial aid, including the BOGFW, for enrollment in audited classes. No exceptions to this policy can be made.

### Enrollment at Other LACCD Colleges

Consortium Agreements are in effect for all colleges within the Los Angeles Community College District. If you are attending more than one college within the District in the same academic period, payment will be based on all units taken. You must maintain at least a one (1) unit level of enrollment at the Home/Primary campus (the college processing your financial aid) for the entire award period. For financial aid programs that are limited in funding, a six (6) unit minimum enrollment is required at the home campus. For further information, please contact the Financial Aid Office.

**Please note:** Pierce College does not participate in Consortium Agreements outside of the Los Angeles Community College District.

### ITV Classes

Students taking ITV courses must be enrolled in at least one (1) unit at the home school that is processing their financial aid in order to receive financial aid, provided eligibility exists. For financial aid programs that are limited in funding, students must be enrolled in a minimum of six (6) units at the home school; units from other colleges may not be combined for all other programs. Students enrolled in ITV courses receive their transcripts for those courses from Los Angeles Mission College. Students enrolled only in ITV courses and wish to be considered for financial aid, must apply at Los Angeles Mission College as the home school for financial aid purposes.

ITV classes are included in disbursements for all other classes.

## Tax Credit

*American Opportunity Credit* – replaces and expands the Hope Credit for tax years 2009 and 2010. More parents and students will qualify over the next two years for a tax credit. The new tax credit is available to a broader range of taxpayers, including many with higher incomes and those who owe no tax. The full credit is available to individuals whose modified adjusted gross income is \$80,000 or less, \$160,000 or less for married couples filing a joint return. Those who do not make enough money to have to file a tax return should also consider filing because they can get up to \$1,000 back. The new credit also adds required course materials to the list of qualifying expenses and allows the credit to be claimed for four post-secondary education years instead of two. Many of those eligible will qualify for the maximum annual credit of \$2,500 per student, which is \$500 more than the Hope Credit.

*Lifetime Learning Credit* – Families may be able to claim up to \$2,000 for tuition and required fees each year. The maximum credit is determined on a per-taxpayer (family) basis, regardless of the number of postsecondary students in a family. Students who fees are covered by a fee waiver, scholarship, or grant would not be able to add their costs to their families for tax credit calculation.

You should consult a tax professional for further details or consult the following website: <http://www.irs.gov/pub/irs-pdf/p970.pdf>

## Types of Financial Aid Available

### Federal Financial Aid Grants

#### *Federal PELL Grant Program*

The Federal PELL Grant Program is a federally funded program that provides assistance to undergraduate students who have not yet earned a baccalaureate or first professional degree and who demonstrate financial need. Awards are based on the student's Expected Family Contribution (EFC) and enrollment status. The EFC is calculated based on the information such as income and assets on the FAFSA.

In certain cases, a family's financial situation can change because of:

- Death in the family
- Separation or divorce
- Loss of employment
- Loss of non-taxable income or benefits

In such cases, the student should contact the Financial Aid Office.

New regulations now allow students to receive a PELL Grant if enrolled in Summer, Fall and Spring semesters as part of the effort to encourage students to accelerate their education. The new regulations were put in place to make sure only eligible students receive the additional PELL Grant funding, including: students must complete a majority of the units they enroll for in Summer and Fall and students must be enrolled at least half-time in the Spring semester to receive Spring financial assistance. For additional information, please check with the Financial Aid Office.

#### *Academic Competitiveness Grant (ACG)*

ACG is a federal grant given to students who meet the following criteria:

- U.S. citizen or eligible non-citizen

- Federal PELL Grant recipient
- Enrollment of at least half-time (6 units or more)
- 1st or 2nd year undergraduate, and
- Completed a rigorous secondary school program of study.

First year undergraduate students may be eligible for up to \$750 per academic year. Second year undergraduate students may be eligible for up to \$1,300 per academic year. Students must have completed one academic year with a 3.0 GPA to qualify for the 2nd year ACG award.

#### *Federal Supplemental Educational Opportunity Grant (FSEOG)*

The FSEOG is a federal grant program designed to supplement other sources of financial aid for students with exceptional need. FSEOG awards are based on financial need and fund availability. There is a six (6) unit minimum enrollment requirement at the college where students are receiving financial aid; units from other colleges may not be combined for this award. FSEOG awards range upward from \$100 to \$400 per year, depending on need and packaging policy.

### State Financial Aid Grants

To qualify for any of the state-funded grants, a student must be a California resident and be attending (or planning to attend) an eligible college in California.

#### *Board of Governors Fee Waiver Program (BOGFW)*

The BOGFW is offered by the California Community Colleges. Applicants do not have to be enrolled in a specific number of units or courses to receive the BOGFW. Please note that payment of health fees is no longer part of the fee waiver. All BOGFW fee waiver recipients are required to pay the student health fee.

You are eligible to apply for a BOGFW if you are:

- A California resident, **and**
- You are enrolled in at least one unit.

You may qualify for a BOGFW if any of the following categories applies to you:

- A. At the time of enrollment you are a recipient of benefits under the TANF/CalWORKs Program (formerly AFDC), Supplemental Security Income/State Supplementary Program (SSI/SSP), or General Assistance Program (GA). You have certification from the California Department of Veterans Affairs or the National Guard Adjutant that you are eligible for a dependent's fee waiver. Documented proof of benefits is required.
- B. You meet the following income standards:

Number in Household (including yourself)	Total 2009 family Income (adjusted gross income and/or untaxed income)
1	\$16,245
2	\$21,855
3	\$27,465
4	\$33,075

Add \$5,610 for each additional dependents or have a zero (0) Expected Family Contribution (EFC) on student's financial aid application.

- C. You are qualified for financial aid. To qualify under this criteria, you will need to complete the FAFSA. If you qualify after you pay your enrollment fees, you should complete a "Request for Refund" form available in the college Business Office.

### Cal Grants

Students must meet the following eligibility requirements for the Cal Grant Programs:

- Be a U.S. citizen or permanent resident
- Have a valid Social Security Number (SSN)
- Be a California resident
- Be attending at least half-time at a qualifying California college
- Have financial need at the college of attendance
- Be making satisfactory academic progress as determined by the college
- Have not already earned a bachelor's or professional degree, or the equivalent.
- Meet the income and asset ceiling as established by CSAC
- Meet Selective Service requirements.

**Deadline date:** First deadline is March 2, 2010. A second deadline for community college applicants is September 2, 2010, but we highly recommend that applicants meet the March 2 deadline when more funding is available.

### Students must submit a GPA Verification and FAFSA by the applicable deadlines to the California Student Aid Commission.

GPA verification for students enrolled within the Los Angeles Community College District will be electronically sent to the Commission by the deadline date for those who meet specific criteria. *Contact your Financial Aid Office to see if you meet the criteria to have your GPA electronically sent and for other possible options.*

### Types of grants available:

#### Entitlement Grants

- *Cal Grant A* – provides grant funds to help pay for tuition/fees at qualifying institutions offering baccalaureate degree programs. If you receive a **Cal Grant A** but choose to attend a CA Community College first, your award will be held in reserve for up to three years until you transfer to a four-year college.
- *Cal Grant B* – provides subsistence payments for new recipients in the amount of \$1,551 for a full-time, full year award. Payments are reduced accordingly for three-quarter and half-time enrollment for each payment period. Cal Grant B recipients who transfer to a tuition/fee charging school after completing one or two years at a community college may have their grant increased to include tuition and fees as well as subsistence.
- Cal Grant Transfer Entitlement Award is for eligible CA Community College students who are transferring to a four-year college and are under age 28 as of December 31 of the award year.

#### Competitive Grants

- Cal Grant A and B awards are used for the same purpose as the A and B entitlement awards, except that they are not guaranteed and the number of awards is limited.
- Cal Grant C recipients are selected based on financial need and vocational aptitude. Students must be enrolled in a vocational program at a California Community College, independent college, or vocational college, in a course of study lasting from four months to two years. Cal Grant C awards **may not be** used to pursue a four-year degree program, graduate study, or general education.

### Chafee Grant

The California Chafee Grant is a federal grant administered by the California Student Aid Commission and provides assistance to current or former foster youth to use for college courses or vocational school training. Eligible students may receive up to \$5,000 per academic year. To learn more about this program and to apply online, go to <https://www.chafee.csac.ca.gov/default.aspx>

### Law Enforcement Personnel Dependents Grant Program (LEPD)

This grant program provides need-based educational grants to the dependents and spouses of California peace officers (Highway Patrol, Marshals, Sheriffs, Police Officers), Department of Corrections and California Youth Authority employees, and permanent/full-time firefighters employed by public entities who have been killed in the performance of duty or disabled as a result of an accident or injury caused by external violence or physical force incurred in the performance of duty.

Grant awards match the amount of a Cal Grant award and range from \$100 to \$11,259 for up to four years.

For more information and application materials, write directly to: California Student Aid Commission, Specialized Programs, P.O. Box 419029, Rancho Cordova, CA 95741-9029 or call (888) 224-7268 Option #3.

### Child Development Grant Program

This program is a need-based grant designed to encourage students to enter the field of child care and development in a licensed children's center. Students who plan to enroll at least half-time in coursework leading to a Child Development Permit as a teacher, master teacher, site supervisor, or program director, are eligible to apply through the college they plan to attend. For more information, go to [www.csac.ca.gov](http://www.csac.ca.gov) or call (888) 224-7268 Option #3.

### Federal Student Loans (Aid that you have to pay back)

**CAUTION ABOUT STUDENT LOANS:** It takes time for a loan application to be processed by the college, lender and/or the government. It may be several weeks after an application has been accepted in the Financial Aid Office before the student receives the loan funds. Student loan funds are delivered to the student after enrollment and satisfactory academic progress requirements have been verified. All loans require a minimum of six (6) units. Check with the Financial Aid Office or visit the website at [www.piercecollege.edu/offices/financial\\_aid](http://www.piercecollege.edu/offices/financial_aid) for deadlines to request for a student loan.

### Pierce College participates in the following loan programs:

#### Federal Perkins Loan Program

The Federal Perkins Loan is an educational loan with a low (5%) fixed interest rate for students who have exceptional financial need. Loan amounts awarded within the Los Angeles Community College District are determined by individual colleges and the availability of funds.

Repayment begins nine (9) months after the borrower graduates, withdraws, or ceases to be enrolled at least half-time. A repayment period can be extended to 10 years. During the repayment period, five percent (5%) interest is charged on the unpaid balance of the loan principal.

### *Federal Stafford Loan*

The Federal Stafford Loan Program is a loan program made to students who show financial need while attending college at least half-time. For 2010-2011, the interest rate is 4.5% for subsidized loans and 6.8% for unsubsidized loans. Loans are made by the federal government. "Subsidized" means the government pays the interest while you are in college, in deferment status, or during your grace period. "Unsubsidized" means the government does not pay the interest while you are in college, in deferment status, or during your grace period.

In addition to completing a FAFSA, an applicant must submit a separate Loan Request Form and complete a Loan Entrance Counseling to apply for a loan.

### **Part-Time Employment**

#### *Federal Work-Study (FWS)*

The FWS program enables students to earn part of their financial aid award through part-time employment either on or off campus. To be eligible, a student must meet the eligibility requirements for federal financial aid and must maintain a good academic standing while employed under the program. Students must be enrolled in a minimum of six (6) units at the home campus to be considered for this program; units from other campuses cannot be combined.

### **Scholarships**

Throughout the year, the college receives announcements on scholarship opportunities. The focus of each scholarship is different; some require good grades, some require financial need, and some are awarded to students who are majoring in certain area of study. The Financial Aid Office has a listing of current scholarship offerings. Interested students are urged to go to the Financial Aid Office for information and assistance or visit the Scholarship website at [www.piercecollege.edu/offices/financial\\_aid/scholarships.asp](http://www.piercecollege.edu/offices/financial_aid/scholarships.asp)

### **How Financial Aid is Packaged**

Once the student's financial aid eligibility is established, a "package" of aid is provided which may be a combination of grants, work-study, and loan funds.

Pierce College prefers to meet a student's need with a combination of grant(s) and self-help aid whenever possible.

Financial Aid Offer Letters will be emailed to the student, if email has been provided on the FAFSA. In addition, students will be referred to read the Award Guide on the Financial Aid website which explains the responsibilities of the student and provides information on each award.

### **Disbursement**

Students who submit their required financial aid documents by the May 1st priority deadline may expect to receive their first financial aid disbursement during the first week of the semester, provided that all established deadlines have been met.

**NEW:** Effective Fall 2010, all financial aid students will be issued a debit card (myLACCDcard) and can choose to activate the card to receive financial aid disbursements or direct disbursements to an account of their choice. It is critical that students update their address on file with Admissions and Records Office to ensure receipt of their debit card. If students do not activate their debit card or direct financial aid disbursements to an account of their choice, financial aid disbursements will be delayed.

Disbursements will be adjusted if enrollment is less than full-time. Supplemental disbursements occur throughout the academic year. If the student's enrollment status increased and if student is due an additional disbursement, the amount of disbursement will be disbursed to the student's account of their choice. **Any outstanding institutional debt will be deducted from the financial aid disbursement.** Disbursements will be adjusted if enrollment increases or decreases. Payment for late-starting classes will not be issued until the class begins. After the second disbursement run date of the each semester, no further award adjustments can be made.

Full-time is considered 12 or more units per semester; three quarter-time is considered 9-11.5 units per semester; half-time is considered 6-8.5 units per semester; less than half-time is 1-5.5 units per semester.

Federal PELL Grant is scheduled for payment twice a semester. FSEOG, ACG and Cal Grants are scheduled once per semester and require an enrollment of six (6) or more approved units. Federal-Work Study (FWS) is paid through payroll every two weeks. Federal Student Loans are disbursed in two equal payments, once per semester, for students attending two semesters in the academic year. Federal Student Loans require an enrollment of six (6) approved units. For students requesting a loan for one semester only, the loan will be disbursed in two equal payments within the one semester.

### **Determining Financial Need**

Most financial aid awards are based on demonstrated financial need which is the difference between the Cost of Attendance (COA) and the Expected Family Contribution (EFC).

$$\text{COA minus EFC} = \text{Financial Need}$$

### *Cost of Attendance*

In order to treat all students equally, standardized budgets (Cost of Attendance) are established and applied to all applicants. This means all students with similar circumstances will receive the same allowance for tuition and fees, books and supplies, room and board, personal expenses and transportation.

Other expenses may include, but are not limited to, child care expenses, vocational/technical expenses, and handicapped expenses. Exceptions may be made to the budget in the cases where need can be shown and documented.

**2010-2011 Average Cost of Attendance**

	Living at home		Living Away from Home	
	9 Mos.	12 Mos.	9 Mos.	12 Mos.
Fees	\$ 698	\$ 1,044	\$ 698	\$ 1,044
Books & Supplies	\$ 1,620	\$ 2,430	\$ 1,620	\$ 2,430
Room & Board	\$ 4,806	\$ 6,408	\$11,556	\$15,408
Transportation	\$ 918	\$ 1,224	\$ 1,044	\$ 1,392
Personal Expenses	\$ 2,862	\$ 3,816	\$ 2,754	\$ 3,672
Total	\$10,904	\$14,922	\$17,672	\$23,946

*Non-Resident Tuition is added to fees depending on the student's residency code.*

**Expected Family Contribution**

Students and/or their parent(s) are expected to contribute something to the cost of higher education. Parental and/or student contribution (EFC) are determined from the information reported on the FAFSA and take into account the resources available such as income, assets, liabilities, size of family, number in college, taxes paid, etc.

**Child Care Expenses**

This is an adjustment to the Cost of Attendance provided to students with unusual and reasonable expenses for dependent/child care up to a maximum of \$1,000.

**Technical /Vocational Expenses**

Institutions may make adjustments for students in trade vocational programs that require supplies and equipment above and beyond the normal budgeted allowance for books and supplies. Some of these programs include: Registered Nursing, Physical Therapy, Animal Health Technology, Auto Mechanics, Photography and others where documentation is submitted to support the additional cost.

**Handicapped Expenses**

As documented and in excess of amounts provided by other agencies.

**Federal Refund Requirements**

**Students who receive financial aid and totally withdraw from ALL classes may have to repay some of the federal funds received prior to withdrawal.**

All students receiving federal aid, who withdraw from the institution in the first 60% of the term, are subject to **Return Regulations**. The Financial Aid Office will calculate the amount of federal funds earned by the student up to the point of withdrawal and students will be billed and must repay any federal grant funds received but not earned. **Failure to repay these funds will result in the denial of future federal financial aid at all colleges. Nonpayment of the unearned amount will be reported to the U.S. Department of Education for collection. The college is also required to report grant overpayments to the National Student Loan Data System.**

It is advised that you contact the Financial Aid Office **before withdrawing** from all of your classes so you understand the results of your actions. For the refund policy on enrollment fees and

non-resident tuition, please see the College Schedule of Classes or the College Catalog.

**Student Rights and Responsibilities****Rights**

All Los Angeles Community College District students who apply for and receive financial aid have a right to the following:

1. Information on all financial assistance available, which includes all federal, state, and institutional financial aid programs.
2. Application deadlines for all financial aid programs including deadlines for the submission of requested supporting documentation.
3. Specific information regarding enrollment fees, tuition and refunds due from students who withdraw from school prior to the end of the semester.
4. An explanation of how financial need is determined. This process includes establishing budgets for the costs of tuition and fees, books and supplies, room and board, transportation, personal and miscellaneous expenses, child care, etc., plus the student's income and assets, parental contribution, other financial aid (such as scholarships) and so on. Financial need is determined by the Central Processor from the information provided on the FAFSA.
5. Knowledge of what resources are considered in the calculation of student need.
6. Knowledge of how a financial aid package is determined.
7. An explanation of various programs awarded in the student's financial aid package. If a student feels he/she has been treated unfairly, a reconsideration of the award may be requested.
8. An explanation regarding requests for repayment of funds. This situation occurs when students withdraw prior to the end of the semester. Students must receive a clear explanation of the program funds that do not need to be repaid as well as the portion of the grant aid that the student is required to repay. If the student received a loan, the student is informed about what the interest rate is, the total amount to be repaid, when the repayment is to begin, and the conditions of deferment and cancellation during loan counseling sessions.
9. Knowledge of how the Los Angeles Community College District determines whether students are making "satisfactory academic progress" and what happens if they are not.
10. Knowledge of what facilities are available for handicapped students.

**Responsibilities**

Students must take responsibility for:

1. Reviewing and considering all information regarding the Los Angeles Community College District's academic programs prior to enrollment.
2. Having a valid Social Security Number (SSN) on file in the Admissions and Records Office for the purposes of reporting a Cal Grant Grade Point Average, loan deferments, etc.
3. Enrolling in an eligible program, which is defined as a Certificate, an Associate Degree (AA/AS), or a two-year academic Transfer Program that is acceptable for full credit toward a Baccalaureate Degree. Students must declare an educational goal and major, and update changes with the Admissions and Records Office.

4. Maintaining Satisfactory Academic Progress (SAP) to receive financial aid and meeting with an academic counselor to develop or review an Educational Plan (The SAP Policy is also in the college catalog.)
5. Promptly returning all additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency or agencies to which an application was submitted.
6. Completing all financial aid forms ACCURATELY AND COMPLETELY. If this is not done, aid could be delayed. Errors must be corrected before any financial aid can be received. Intentional misreporting of information on application forms for financial aid is a violation of the law and is considered a criminal offense subject to penalties under the U.S. Criminal Code, and the denial of the student's application. Additionally, regulations require that all cases of suspected fraud emanating from misrepresentation, be reported to the Office of Inspector General.
7. Reading and understanding all financial aid forms and information. We advise students to retain copies of all documents submitted.
8. Choosing a home school to process financial aid. Students MAY NOT receive financial aid from more than one institution at the same time or periods of overlapping terms.
9. Notifying the appropriate entity (college, lender, California Student Aid Commission, U.S. Department of Education, etc.) of changes in your name, address, school enrollment status, or transfer to another college.
10. Repaying financial aid funds if it is determined that the student was ineligible to receive funds for any reason (i.e. Return to Title IV, overpayments, over-awards).
11. Performing the work that is agreed upon in accepting a work-study award.
12. Knowing and complying with the deadlines for application or reapplication for financial aid.
13. Knowing and complying with the Los Angeles Community College District Title IV Refund Policy.

## Satisfactory Academic Progress Policy

### General Information

In accordance with the Higher Education Act of 1965, as amended, the Los Angeles Community College District (hereinafter referred to as LACCD) established the following Standards of Academic Progress. These standards apply to all students who apply for and receive financial aid from the programs listed below.

- Federal Pell Grant
- Academic Competitiveness Grant (ACG)
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study (FWS)
- Federal Perkins Loan
- Federal Family Educational Loan (FFEL)
- Federal Direct Student Loan (FDSL)
- Cal Grant B and C
- Child Development Teacher Grant

Professional Judgment may be exercised in applying these standards in accordance with Section 479A of the Higher Education Act of 1965, as amended.

Current and previous coursework earned at any college within the LACCD will be reviewed for compliance with the standards put forth in this policy.

### Consortium Classes

- All classes throughout the LACCD will be included when reviewing satisfactory academic progress.
- For students aided under a Consortium Agreement with colleges **outside** the LACCD, consortium classes will be included during satisfactory academic progress review by the home school, which is the college that processes the student's aid. Not all colleges participate in outside consortium agreements.

### General Requirements

Students receiving financial aid must be enrolled in an eligible program. An eligible program is defined as:

- A Certificate Program that prepares a student for gainful employment in a recognized occupation.
- An Associate Degree (AA or AS), or,
- A two-year academic Transfer Program that is acceptable for full credit toward a Bachelor's Degree.

To meet satisfactory academic progress standards student must:

- Maintain a 2.0 cumulative GPA (Grade Point Average).
- Fewer than ninety (90) attempted units for students who indicated AA/AS Degree or transfer as their educational goal.

Basic Skills/Remedial classes are excluded from the ninety (90) unit limit when determining units attempted. Students may receive federal aid for up to 30 units of remedial coursework.

Students who have already earned an Associate or higher degree will need to follow the appeal procedure.

In Progress (IP) grades count as attempted units in the maximum time frame only. It does not affect cumulative grade point average in the qualitative measure nor is it included as completed units in the quantitative measure.

- Completion of 67% cumulative units attempted.

Entries recorded in the student's academic record as Incomplete (INC), No Credit (NCR), and/or Withdrawal (W) are considered non-grades and must be 33% or less than the cumulative units attempted.

### Application of Standards

- Satisfactory Academic Progress for financial aid students will be determined annually at the beginning of the academic year.
- Students who are disqualified from financial aid will be notified by mail and may inquire about the appeal procedure in the Financial Aid Office.
- A student who has been disqualified at any college in the LACCD is disqualified at all colleges within the LACCD.
- A change of one (1) educational goal or major course of study will be permitted. Students are eligible to receive financial aid for one educational goal at the institution of attendance.

### Disqualification

Students will be **disqualified** if they have one or more of the following academic deficiencies at the end of the Spring semester.

- Total units attempted (excluding 30 units of Basic Skill/Remedial classes) are equal to or greater than ninety (90).
- Associate or higher degree has been earned.
- Cumulative GPA is less than 2.0.
- Cumulative Non-Grades are more than 33%.

## Warning Letter

Students will receive a Warning Letter at the end of the Fall semester if they have one or more of the following academic deficiencies:

- Cumulative GPA is less than 2.0.
- Cumulative non-grades are greater than 33%.
- Number of units attempted reaches forty-five (45).

## Advisory Letter

Students whose number of units attempted reaches forty-five will receive a reminder/advisory letter.

## Maximum Time Length

Students who are attending for the purpose of obtaining an Associate of Arts Degree (AA), an Associate of Science Degree (AS), a Certificate, or completion of requirements for Transfer to a four-year college are allowed 90 attempted units in which to complete their objective.

- Exceptions will be made only when the requirements of a student's objective cause the student to exceed the maximum time limit.
- Short Length Certificate Programs.  
Some certificate objectives in the Los Angeles Community Colleges may be completed in less time than that required for the Associate of Arts, Associate of Science and Transfer objectives.

The following table shows the normal completion time and maximum time for certificate programs of varying length.

Units required for the Certificate Program	Normal Length	Maximum Length
10 to 24	2 semesters	3 semesters
25 to 36	3 semesters	5 semesters
37 to 48	4 semesters	6 semesters

To be eligible for financial aid, a program must be at least six (6) months in length with a minimum of sixteen (16) units. Students enrolled in a certificate program may continue to qualify for financial aid up to ninety (90) attempted units, six (6) full-time semesters, or the equivalent, if they are planning to obtain an A.A. or A.S. Degree, or to Transfer to a four-year school in addition to obtaining the certificate.

## Summer and Winter Financial Aid

Summer and Winter terms are included in the evaluation of Satisfactory Academic Progress Standards.

## Appeal Procedure for Reinstatement of Financial Aid

Students who have been disqualified from receiving financial aid for unsatisfactory academic progress may appeal for reinstatement by submitting a formal Appeal Request Form to the Financial Aid Office along with any supporting documentation the student wishes to have considered. Students cannot be paid PELL Grant or campus-based financial aid retroactively on appeals that are approved after the payment period ends.

- The formal appeal must be submitted within 30 calendar days from the date of the disqualification letter.
- The Appeal Request Form should be completed in ink or typed and consist of a written statement from the student as to why he/she is appealing the disqualification.

Reinstatement may also be granted for reasons listed below:

- The death of a relative of the student;
- An injury or illness of the student;
- Other special circumstances.

If the appeal for unsatisfactory academic progress is denied or the student fails to submit the appeal within 30 calendar days from the date of the disqualification letter, the student may re-appeal after completing one semester in which all satisfactory academic progress standards have been met.

## Fraud

- A student who attempts to obtain financial aid by fraudulent means will be suspended from financial aid for unsatisfactory conduct.
- The college will report such instances to local law enforcement agencies, to the California Student Aid Commission, and to the Federal Government.
- Restitution of any financial aid received in such manner will be required.

## Other Information You Should Know

### Change of Enrollment

If your enrollment status changes during the semester please inform the Financial Aid Office. Your financial aid award may be modified to reflect the correct number of units in which you were enrolled at the time of the second disbursement check run. The adjustment of enrollment may cause an overpayment of financial aid funds.

**Repayment of financial aid funds is necessary** if the adjustment of enrollment causes an overpayment. You must resolve your overpayment prior to receiving any additional financial aid. Having an overpayment of federal funds will prevent you from receiving federal financial aid from any institution.

### Return to Title IV

The student's eligibility for financial aid is based upon enrollment. The Higher Education Amendment of 1998 governs the Return of Title IV funds policy for a student who completely withdraws from a period of enrollment (i.e. semester). These rules assume that a student "earns" aid based on his/her semester enrollment.

"Unearned" aid, other than Federal Work-Study, must be earned. Unearned aid is the amount of federal financial aid received that exceeds the amount the student has earned. Unearned aid may be subject to repayment.

During the first 60% of the semester enrollment a student "earns" aid in direct proportion to the time of his/her enrollment. The percentage of time the student remained enrolled is the percentage of aid for that period which the student earned. A student who remains enrolled beyond the 60% point of the semester earns all his/her aid for the period.

### State Tax Offset

Students should be aware that state income tax refunds might be offset by the institution for repayment of financial aid funds if it is determined the students were ineligible to receive funds, have defaulted on a student loan, or owe other debts to the school.

### Financial Aid Related Websites

- Pierce College Financial Aid website – [www.piercecollege.edu/offices/financial\\_aid](http://www.piercecollege.edu/offices/financial_aid)
- FAFSA On the Web – [www.fafsa.ed.gov](http://www.fafsa.ed.gov)

- Sign up for the Personal Identification Number (PIN) to electronically sign your FAFSA – [www.pin.ed.gov](http://www.pin.ed.gov)
- Information about the Cal Grant Program – [www.calgrants.org](http://www.calgrants.org)
- California Student Aid Commission – [www.csac.ca.gov](http://www.csac.ca.gov)
- Direct Loan Servicing Center – [www.dl.ed.gov](http://www.dl.ed.gov)
- EdFund website – [www.edfund.org](http://www.edfund.org)
- National Student Loan Database System – [www.nsls.ed.gov](http://www.nsls.ed.gov)

#### Telephone Numbers

- Pierce College Financial Aid, Scholarships, and Veterans Office – (818) 719-6428
- California Student Aid Commission – (888) 224-7268
- Central Loan Administration Unit (Perkins Loan) – (800) 822-5222
- Department of Veterans Affairs – (800) 827-1000
- Direct Loan Servicing Center – (800) 848-0979
- Federal Student Aid Information Center – (800) 433-3243

## Transfer Information

### The Transfer Center

The Pierce College Transfer Center has resources and services to make the transition from Pierce to a four-year college/university easier. Representatives from many public and private universities, including UCLA, CSUN, CSU Los Angeles and UC Santa Barbara meet regularly with prospective students to advise them regarding admissions, program planning, and other support services.

For additional information on these and other transfer-related activities, visit the Transfer Center on the first floor of the Student Services Building. You can also contact the Transfer Center at (818) 710-4126.

### Transfer Information Websites:

As a student, the internet is one of your most important resources for transfer information. We have workstations available to use in our center if you don't have internet access at home. So, please stop by and let us help.

You can use the Pierce College Transfer website as a portal to transfer information for the UC's, CSU's, privates and out-of-state colleges and universities:

#### Pierce College Transfer Website:

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

#### University of California Transfer Information:

[www.uctransfer.universityofcalifornia.edu](http://www.uctransfer.universityofcalifornia.edu)

#### California State University Transfer Information:

CSU Mentor: [www.csumentor.edu](http://www.csumentor.edu)

### California Private and Independent Transfer Information:

AICCU: [www.aiccupmentor.org](http://www.aiccupmentor.org)

### Which courses transfer?

#### California Public Institutions: UC and CSU

**ASSIST:** As a prospective transfer student, it is important to make sure that the community college courses you take are acceptable to the university for transfer credit. ASSIST is California's official statewide repository of transfer information for the California State University and University of California systems.

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

#### Pierce College and University of California Transfer Partnerships

Pierce has Transfer Admission Guarantees with many UC campuses. Complete details can be found at

[www.uctransfer.universityofcalifornia.edu](http://www.uctransfer.universityofcalifornia.edu)

#### Pierce College and California State University Transfer Partnerships

Pierce has a transfer agreement with CSU Northridge. Please visit the transfer website at [www.piercecollege.edu](http://www.piercecollege.edu) for details.

#### Pierce College and California Private Institution Transfer Partnerships

Through the Pierce Honor's Program, we have transfer agreements with some private universities. The requirements for the Honor's program at Pierce, as well as additional information, can be found on the Pierce College Transfer website or at the Honor's Office.

### Develop an Educational Plan

The most important action you can take to ensure success is to meet early with a Pierce counselor and develop an educational plan. This plan will include courses you need to meet transfer requirements. Using and updating an educational plan throughout your attendance at Pierce will ensure the most direct path to transfer and earning a baccalaureate degree.

### The Counseling Center

Prospective transfer students are encouraged to meet with a counselor in order to develop and refine educational plans and career goals. Each counselor is well-equipped to assist students in planning transfer-related coursework.

In addition to serving students in the Counseling Center, the counseling staff offers a number of Personal Development courses as part of the College's curriculum. These courses include skill-building activities to enhance program planning, personal and professional development, study and time management skills, and strategies for problem solving and decision-making. Please refer to the Personal Development section of Course Descriptions in this catalogue for additional information.

The Counseling Center is located on the first floor of the Student Services Building.

## General Education Agreements

The California State University and the University of California systems have developed systemwide general education agreements which enable community college transfer students to complete lower division courses that satisfy general education requirements at many CSU's and UC's.

**See the CSU GE Certified Plan and IGETC on pages 57-58.**

# Instructional Alternatives

## SPECIAL PROGRAMS

### Honors Program

The Pierce College Honors Program is designed for serious, motivated students. The program offers approximately 15 academically enriched general education courses each semester. These courses are challenging and enhance the academic skills necessary for successful transfer.

Classes are limited to 25 students, offering maximum interaction with faculty and peers. For further information see the current Schedule of Classes or call (818) 719-6455.

#### Eligibility

There are two basic eligibility requirements: grade point average and college-level writing ability. High school graduates need a 3.0 cumulative GPA, and continuing college students need a 3.25 GPA in all course work including 12 or more UC-transferable units. All students must qualify for College Reading & Composition 1 (English 101) either by scores on the Pierce College English placement test, by passing prerequisite courses, or an appropriate AP examination score.

***Please note: Honors certification is based on a 3.3 GPA in all UC transferable coursework completed. The 3.25 GPA is used for Honors Program eligibility only.***

#### Transfer

Honors Program students successfully transfer to colleges and universities across the country. However, we have a special arrangement with the UCLA College of Letters and Sciences Transfer Alliance Program (TAP). Students who complete at least 60 units in a pattern that satisfies both the UC lower division and major course requirements, complete at least eight (8) Honors classes or 24 Honors units including four (4) formal Honors classes within these 60 units, and maintain an overall grade point average of 3.3 in UC transferable units, are eligible for the TAP certification.

Satisfactory completion of the above guarantees priority consideration for admission to UCLA with junior standing. Similar agreements with UC Irvine, UC Riverside, UC Santa Cruz, Chapman University, Occidental College, CSU San Diego and CSU Fullerton are available.

### Application

To be admitted to the Honors Program you must be eligible for English 101 and have completed 12 units of UC transferable coursework with a minimum GPA of 3.25. Students coming directly from high school must also be eligible for English 101 with a minimum high school GPA of 3.0. Eligible students should file a completed Honors Program application, along with copies of appropriate transcripts and the English placement test results and submit these to the Honors Program office, VLGE 8340.

### Program Benefits

Students in the Honors Program receive special Honors counseling, and recognition both on the transcript and at graduation.

All Honors students also receive the special services provided by membership in the UCLA Transfer Alliance Program, whether or not they are planning to transfer to UCLA. These services include a free UCLA College Library card, tickets to cultural events, and much more.

### Instructional Television (ITV)

Each semester, the District-wide Instructional Television program of the Los Angeles Community College District presents, via television, a variety of transferable undergraduate level college credit courses.

Instructional Television courses are convenient, flexible and especially suitable for college students needing to supplement their on-campus program or to add classes for those times when campus attendance is not possible.

Students enroll by the telephone registration system or by mail, view telecourse lessons at home or at a campus Learning Resource Center, complete reading and study assignments, attend seminars held on weekends at a Los Angeles Community College near their home, and take a midterm and final exam.

An instructor with office hours and phone times is assigned to each telecourse. The students enrolled in Instructional Television classes keep in touch with faculty by telephone, voice mail, e-mail, U.S. mail, and fax, as well as at the seminars. Interested students are invited to contact Instructional Television at (818) 833-3594 or visit their web page at [www.lamission.edu/ITV](http://www.lamission.edu/ITV).

### PACE

Program of Accelerated College Education

You can graduate in two years by attending class one evening a week and on Saturdays for eight weeks. Designed for working adults, this program takes in consideration your hectic schedule and provides the classes necessary for graduation and to transfer to a four-year college and university. Classes taken in the PACE program are fully accredited and readily accepted.

#### PACE Characteristics:

- Earn an associates degree in two years
- Take classes one evening a week and every Saturday
- Complete 12-14 units in each college semester
- Take classes that are fully accredited and readily accepted by colleges and universities
- Decide on one of our three educational paths, Business, Educator or General Studies
- Call Today! (818) 710-2890

## PierceOnline!

Online courses at Pierce College provide the opportunity for students to take classes in a setting other than the traditional face-to-face classroom. Using the PierceOnLine portal, courses are offered to meet your individual needs and preferences.

All course materials and class activities can be accessed online 24/7 to meet your needs while you are at home, your office, or on a trip. With the use of innovative course delivery software, our professors deliver quality instruction at a distance.

## The Pierce College Extension Program

Pierce Extension is the educational outreach program of the College offering community and continuing education classes as well as cultural and recreational activities through the Office of Community Services on a not-for-credit basis.

Community Education provides a community based program, opportunities for personal and professional development, skill improvement and upgrading, cultural enrichment and recreational enjoyment for all ages, emphasizing lifelong personal and professional growth.

These activities are offered in addition to Pierce College's instructional program and are not academic equivalents of regular credit classes or prerequisites for the traditional college program. This program is supported by participant fees and receive no direct general purpose tax funds.

Through the Extension Program, Pierce College hopes to serve your interests, and through you, our whole community. For a calendar of activities or further information, please contact the Extension Services Office at (818) 719-6425 or visit <http://extension.piercecollege.edu>.

## Economic and Workforce Development - Contract Education and the Pierce Business Center

Services that we deliver to our community include but are not limited to the following:

- Contract Education offers customized, quality classes and timely workshops to local business and industry on campus or at the workplace. This program can augment a company's current training program or develop specialized classes to meet professional needs. Special Classes in areas such as Harassment Prevention and Security Guard Training to meet new California State laws.
  - We offer more than 200 classes in on-line training
  - Interpreters/translators are available in 150 languages
- Pierce Business Center offers nationwide testing services to the community for approximately 30 different subject areas. Among those include Transportation Security Administration (TSA), National Institute for Automotive Service Excellence and boarder Patrol and Port Security.
- Vocational classes in Fiber Optics, Green Technology and Solar Technology
- Pre-Employment Testing and Evaluation for prospective employees
  - Administering of current testing or construction of new testing
  - Evaluation of company employee screening materials
  - Assessment of employees

For further information please contact Judith Trester, Director, at (818) 710-2549.

## ENCORE Older Adult Program

ENCORE is a Pierce College program designed specifically for mature adults in our community.

ENCORE offers free noncredit classes and fee-based not for credit classes and provides volunteer opportunities. Classes range from arts & humanities, health & fitness, to finance and technology. There are no tests or papers to write. Learning for the joy of it!

ENCORE noncredit classes generally meet for 2 hours a week for 15 weeks. Classes are free and are funded through Sacramento. Students enrolled in ENCORE noncredit classes are Pierce College students in a noncredit program.

ENCORE fee-based not for credit classes generally meet for 3-6 weeks. Classes have a nominal fee and are self supporting. They require a different registration and a minimum enrollment to avoid cancellation.

For a schedule of classes or further information, please contact the ENCORE office at (818) 710-2561.

## Foster and Kinship Care Education & Project YESS

Pierce College Foster and Kinship Care Education (FKCE) offers continuing education for foster parents, relative caregivers, adoptive parents, and others who are interested in fostering or adopting children. Classes that satisfy "D" rate (to provide care for children who exhibit severe and persistent emotional and behavioral problems in a family home setting) and "F" rate (to provide care to medically fragile children in a family home setting) requirements are offered, as well as D, F, and W (White Family Foster Home) rate pre-service training for foster parents or relative caregivers to gain certification in those categories.

In addition, Pierce College FKCE and Student Outreach offer the Youth Empowerment Strategies for Success (YESS) program to eligible Foster Youth in the West San Fernando Valley. This program provides educational assessment, tutoring for foster youth ages 14-15, and Life Skills training for foster youth ages 16-21.

For a schedule of events or further information, please contact the Foster and Kinship Care Education office at (818) 710-2937, and for information on Project YESS, please call (818) 710-3379, or visit <http://extension.piercecollege.edu>.

## International Education Program: Study Abroad Classes

College credit classes are offered by the International Education Program with instructors and classes selected from the Pierce College curriculum. Opportunities for study include a summer program in Marine Biology in Mexico and Arts and Culture in Florence, Italy. Partnership programs are established with other California Community Colleges, LA Valley College [Summer Paris] and West LA [Summer Spain & Mexico]. The International Education Program demonstrates the commitment of Pierce College to furthering development of international and intercultural awareness. Call (818) 719-6444 for further information.

## Service-Learning Program

Service-Learning is an innovative educational program joining students, faculty, and the community via volunteer service. Students participate in thoughtfully organized service projects that meet actual community needs. These activities are coordinated with faculty and integrated into each student's academic curriculum. Over 1000 students enroll in the Service-Learning classes offered each year, assisting several hundred nonprofit charities and public agencies. The community gains resources and services that would otherwise be unavailable. And Pierce service-learners earn academic credit, while also gaining "real life" experience and valuable civic skills. For further information, please contact the Service-Learning office at (818) 710-2588.

# Educational Support Services

## Disabled Students Programs and Services

Students with physical, psychological or learning disabilities are offered a wide range of services including registration, special parking and counseling. These services are also available to students with a temporary disability such as injury or post-operative recuperation. All services and equipment are provided free of charge to any qualifying disabled student.

Deaf and learning disabled students are offered additional services including special classes, tutoring and computer-assisted instruction.

The Disabled Students Office is located in the Student Services Building, room 48175. The Office is open Monday and Friday from 8:00 a.m. until 4:00 p.m. and Tuesday through Thursday 8:00 a.m. until 5:30 p.m.

The following special services are offered:

- Interpreter services for the deaf
- Notetaking services
- Mobility assistance
- Specialized tutoring
- Registration assistance
- On-campus transportation
- Academic and career guidance
- C.C.T.V.
- Print magnifier
- Specially adapted computers
- Special classes

## Learning Disabilities Program

The Learning Disabilities Program, located in the Special Services Office, assists college students with the essential tools needed for success in their classes. Many students need help in basic reading, spelling and arithmetic skills as well as individualized special techniques for the realization of their full potential academically or vocationally.

The student's problems are diagnosed, and an individualized program is designed to meet their needs. Students advance at their own rate using a large variety of instructional materials. Special classes and tutorial sessions provide assistance. Specialized tutoring in regular classes can be provided by arranging for individualized adaptations with instructors.

## Extended Opportunity Program and Services (EOPS) and C.A.R.E.

Extended Opportunity Programs and Services (EOPS) is a state-funded comprehensive support system which recruits and assists qualified low-income students who have educational disadvantages. EOPS provides academic counseling, career exploration, tutoring, priority registration, book services and workshops aimed at helping students succeed in college. Participants must be full-time students. EOPS participants who are single parents with children under the age of 14 may receive additional services if they qualify for C.A.R.E. (Cooperative Agencies Resources for Education).

### EOPS/CARE Student Learning Outcomes

It is the goal of EOPS to ensure that each participating student is proficient in understanding the complexities of higher education, knowledgeable of resources necessary to be successful in their studies and to develop a "road map" to achieving their objectives. EOPS evaluates its effectiveness in providing quality services by identifying student learning outcomes and assessing the extent to which students have achieved those outcomes.

### Counseling

- Students will:
  1. Identify their career objective
  2. Identify their academic objective
  3. Will follow their Student Educational Plan developed in conjunction with their EOPS Counselor

### Support Services

- Students will enhance their academic success by:
  1. Participating in EOPS Tutoring
  2. Receiving books through the EOPS Book Service
  3. Participating in Academic Probation Workshops
- Students will develop a sense of self-worth and accomplishment by participating in the annual EOPS Graduation/Transfer ceremony.
- Students will be successful participants in EOPS by attending an EOPS New Student Orientation.

EOPS is located in the Student Services Building, Room 245. Office hours are 8 a.m. to 4 p.m., Monday through Friday. Early morning and evening appointments can be made by special arrangement.

## GAIN/CalWORKs Program

The GAIN/CalWORKs Program serves students who currently receive CalWORKs (public assistance) for themselves and at least one child under the age of eighteen and have or are in the process of developing a GAIN welfare-to-work plan. The program is funded by the California Community Colleges Chancellor's Office and the County of Los Angeles.

The program provides a variety of services designed to help students achieve academic success, career advancement and economic self-sufficiency. Among them are:

- Case management.
- Self-advocacy skills development.
- Books, supplies, fees, tools and uniforms, in partnership with the Los Angeles County GAIN program.
- On-campus child care for eligible children.
- Work-study opportunities.
- Completion and certification of required GAIN and Child Care Resource Center forms and documents.
- Informative workshops.
- Coordination with other campus programs.
- Referrals to community agencies for legal, counseling, domestic violence and social services.

The GAIN/CalWORKs Program is located in the Student Services Building, second floor. For more information and appointments please call 818-719-6400.

### International Students Program

International Education is a major undertaking of Pierce College. Our goal is to provide the unique support services needed by non-immigrant international students on F-1 visas. The college seeks to foster mutual respect and understanding for the diversity of cultures, languages and ideas of the people of the world. A warm welcome is extended to students from all over the world.

Students seeking to enter the college on an F1 visa need to contact the International Students Admissions Office as soon as they decide to study at Pierce College. Admissions requirements for international students are different from residents and non-residents on other types of visas. The application package can be obtained online or from:

International Student/Admissions: PMB 304  
Room 1001  
Pierce College  
6201 Winnetka  
Woodland Hills, CA 91371 USA  
website: [www.piercecollege.edu](http://www.piercecollege.edu)  
email: [intlstu@piercecollege.edu](mailto:intlstu@piercecollege.edu)

**Application Deadlines** — See page 10. See website and class schedules for exact dates.

Students are advised to apply 6-9 months in advance of the semester they wish to begin. New students are admitted for either the fall or spring semesters only, no summer or winter session admissions.

Upon admission, the student is notified of required arrival dates and scheduled for a mandatory orientation meeting. A counselor is available to assist students with academic, career, personal, visa and immigration questions.

All F-1 students must maintain their visa status by meeting specific requirements outlined by United States federal regulations under the Department of Homeland Security. Students must complete 12 units each semester, must maintain a 2.0 overall grade point average, must not accept unauthorized employment, must have a valid passport and must have a current I-20. Admitted students are required to seek advisement from the Designated School Official (DSO) in the International Students Program for any and all issues affecting their visa status.

Although the college does not have any dormitories, students can receive information about rentals and homestay programs from the International Students Program Office or our website. See links to Homestay Programs under "FAQ's - Frequently Asked Questions."

### Library

The college library has a collection of more than 103,000 books and subscribes to approximately 150 magazines, journals, and newspapers.

The library web page, located at [www.piercecollege.edu/students/library](http://www.piercecollege.edu/students/library), provides a link to the online book catalog as well as to online full-text journals, magazines, newspapers, informational databases, indexes, and thousands of eBooks.

Enrolled Pierce students are able to borrow library materials by presenting their current Pierce student I.D. card. Library policies and regulations are posted in the library and on the web page.

The library is centrally located on the main campus mall. Facilities include study carrels, group study rooms, computers, microfilm machines, and copiers.

Professional librarians are always available to teach search strategies to students and help them with their research needs. Students should consider the library their first and best source of information resources.

Please visit the Library website or call (818) 719-6409 for additional information.

### Center For Academic Success (CAS)

The CAS is committed to helping students in need of academic support acquire the skills and tools necessary to meet their individual academic, vocational, or personal goals. All tutoring services are free to currently enrolled Pierce College students.

*\*\*Students who wish to print must purchase a print card at the Pierce College Bookstore (\$3 minimum).*

#### Services include:

**COMPUTER LAB (VLGE 8401 & 8402):** Computer stations are available for student use. Students may utilize word processing, access the Internet, or take advantage of computer assisted instructional programs for class-related work. Students will need to purchase a print card from the bookstore in order to print documents.

Hours: Monday – Thursday 8 a.m. - 7 p.m.  
Friday – CLOSED

**TUTORIAL PROGRAM (VLGE 8320):** The Center for Academic Success tutoring program offers free individual and/or group tutoring in a variety of subject areas. Students must make appointments in advance; appointments are 30 minutes in length. Walk-ins will be seen only if tutors are available, on a first-come, first-served basis. Check the CAS website, call (818) 719-6414, or stop by the tutoring center for more information.

Hours: Monday - Thursday 9 a.m. - 7 p.m.  
Friday – CLOSED

**Winter and Summer Session Hours: To Be Announced.**  
**For more information, please call (818) 719-6414**

### Veterans Services

Veterans applying for Veterans Administration (VA) educational benefits are responsible for knowing the VA eligibility requirements and regulations. Eligibility for VA educational benefits can only be determined by the U.S. Department of Veterans Administration. Before we can certify enrollment for benefits, veterans must meet the

college admission requirements and supply the college with copies of official transcripts from previous training. The amount of VA educational benefits awarded is determined by the U.S. Department of Veterans Administration and is based on monthly enrollment for specific courses which are applicable toward an approved VA objective. Monthly rates may be accessed at [www.gibill.va.gov](http://www.gibill.va.gov)

Please note that the application process for Veterans Educational Benefits is different for new students who have never received benefits before from continuing/transfer students who have already initiated benefits. Applications for benefits may be obtained from the U.S. Veterans Administration or from the Veterans Office.

The Veterans Office is located in the Office of Financial Aid, Scholarships & Veterans in the Student Services Building, 2nd floor. The phone number is (818) 719-6428. Also, visit the Veterans website at [www.piercecollege.edu/offices/financial\\_aid](http://www.piercecollege.edu/offices/financial_aid). Our office hours are:

Monday & Tuesday	8:00 am – 4:00 pm
Wednesday & Thursday	8:00 am – 6:00 pm
Friday	8:00 am – 2:00 pm

### Educational Benefits

Programs at Pierce College are first approved for payment by the U.S. Department of Veterans Administration through the Council of Private Postsecondary Education. The Veteran may receive payment when repeating a class listed on the Educational Plan, providing that the Veteran meets the requirement of attaining a “C” or better in the selected course of study.

### Overpayment to Veterans

The U.S. Department of Veterans Administration holds veterans liable for overpayments received for reasons including failure to notify the VA and the college’s Veterans Office when they drop a class or receive an incomplete grade. Veterans who receive overpayment should promptly notify the VA and the college’s Veterans Office. The VA allows veterans to drop classes prior to the “last day to drop classes” as published in the Schedule of Classes. Veterans who drop classes after this date must provide the VA with a letter of explanation. Any change of program or enrollment status must first be approved by the Veterans Counselor in the Counseling Office and must be reported to the Veterans Office at Pierce College.

### Credit for Military Service

Pierce College grants up to six (6) units of credit for military service. Credit will also be granted for some classes at special military schools. Granting of credit for elective units is based on the veteran’s compliance with the following guidelines:

1. Current enrollment.
2. Having served at least 181 days in the Armed Services.
3. Presenting a copy of military separation paper (DD214) when petitioning for elective credit

### Tutoring

Veterans needing tutoring services must first obtain prior approval from the U.S. Veterans Administration. Tutors must be approved by the VA in order for a veteran to become eligible for reimbursement for the costs of tutorial services. Veterans contact the Pierce College’ Veterans Office for the necessary reimbursement forms.

## Counseling Services

The Counselors at Pierce College are trained in educational planning, career planning and personal counseling. Our goal is to help students clarify their goals, realistically evaluate their own strengths and challenges, and learn to develop their planning skills to achieve their goals.

Here is what we hope to accomplish with you, depending on your circumstances and needs:

- *Clarification of Issues/Problems*  
The student will understand and/or articulate the need to define clearly the issue to be addressed in Counseling before moving on to the next steps.
- *Realistic Self-Assessment*  
The student will be aware of and/or able to critically evaluate and integrate personal factors (interest, potential, limitations, financial, family, etc.) that may influence educational/career decisions.
- *Educational Planning*  
The student will be aware of and/or able to create and put into effect a plan of action to reach an educational goal (integrating self knowledge, program demands and requirements).

### Educational Planning and Counseling

Counselors assist students in setting educational goals, exploring alternatives, making decisions regarding their academic programs and understanding the effects of having made these decisions. Short-term courses are also offered to help students develop skills in such areas as decision making and personal development. Counselors are located in the main Counseling Office in the Student Services Building. Appointments may be made in the Counseling Office.

Faculty advisors, located in most departments, will also help students with academic and career information related to courses and programs in the academic area of the advisor.

### Personal Counseling

Students can obtain personal counseling from counselors in the Counseling Office. Counseling is available to students who feel a need for short-term help with personal problems or in a crisis situation. Assistance may be provided through a limited number of individual counseling sessions and referrals. To make an appointment to see a counselor, call 818-719-6440 or go to the Counseling Office in the Student Services Building.

### Career Center

The Career Services provided are individual career counseling appointments, personal development classes and workshops in career planning and job seeking skills for those persons undecided about their career or educational goals. A library of occupational information, including a computerized career information system, is available. The Career Center is located in the Student Services Building.

### Help Center

The Help Center provides personal and crisis counseling for students whose problems are interfering with their academic, career, and/or social functioning. This service is provided by designated counselors in Counseling and Special Services.

The Center helps students with problems of depression, anxiety, suicidal thoughts, relationship issues, sexual abuse, and other problems. When appropriate, referrals are made to private clinicians, community mental health facilities, the Health Office, or other community agencies.

For appointments, please call (818) 719-6440, or drop by the Counseling Office.

### The Transfer Center

The Pierce College Transfer Center has resources and services to make the transition from Pierce to a four-year college/university easier. Representatives from many public and private universities, including UCLA, CSUN, CSU Los Angeles and UC Santa Barbara meet regularly with prospective students to advise them regarding admissions, program planning, and other support services.

The Transfer Center provides students with the resources they need to plan their educational goal of obtaining a bachelor's degree. Students can personally meet with representatives from UCLA, CSUN and UCSB to name just a few. We also have catalogs, web resources, applications and five workstations with internet connectivity. Please refer to the Transfer Information section of this catalog for more information.

### Veterans Advisement

Veterans Advisement is available to all veterans and veteran dependents who desire to use their benefits. The Veterans Office is in the lobby of the Financial Aid Office in the Student Services Building, 2nd floor.

### Vocational Rehabilitation Services

Students who have a physical, emotional, or other disability may be eligible for the services of the State Department of Rehabilitation.

These services include vocational counseling and guidance, training (including payment of college costs), and job placement. Under certain circumstances students may also qualify for help with medical needs, living expenses and transportation and other services.

For further information, appointments may be made with a counselor in the **Special Services Office**.

## Other Services

### Student Store

Pierce College's Student Store is located next to parking lot #1 in the College Services Building. The store is a meeting place and an adjunct to both the academic and social life of the campus. It is an academically oriented resource, where the need for and interest in reading and study engendered in the classroom can be nurtured and reinforced. The store is also a social focal point on the campus, offering many goods and services required by the college community.

Pierce College's Student Store is owned and operated by the Los Angeles Community College District, under policies set down by the Board of Trustees.

The purpose of Pierce College's Student Store is to provide for the sale of book and supply requirements connected with the academic programs of the college. The Student Store is operated on sound business principles in the anticipation that its income will cover both its operating expenses and its attributable capital development costs.

### Business Office

All student finances are handled through the Business Office. Services available are: collection of fees for enrollment, non-resident, audit,

parking, and ASO. The Business Office also processes child development payments, MTA passes. Grant checks are distributed by this office and repayment collected for returned checks.

### Campus Child Development Center

**Southwest Corner of Mason Ave. and Olympic Drive. Entrance is located on Olympic Drive.**

The Campus Child Development Center serves two purposes: 1) To provide a high quality preschool program for the children of Pierce students, and 2) To provide a model program as a fieldwork site for adult students studying Child Development and related fields.

The Child Development Center offers a developmentally appropriate program to children 2.9 years of age through 5.6 years of age and toilet trained, whose parents are enrolled at Pierce College. We run primarily as a State Preschool program, with subsidized funding from California State Department of Education. Parents must qualify for this program under income guidelines furnished by the State Department of Education. We do have a small tuition based program, also.

The Center is open from 7:45 a.m. - 4:00 p.m., Monday through Friday. The following sessions are offered within these hours: Half day - 8:00 a.m. - 12:30/1:00, Monday through Friday, and Full day - 8:00 a.m. - 3:00/4:00 p.m., Monday through Friday. The program is staffed with highly educated and experienced teachers, and offers a minimum ratio of 1 adult to 6.5 children in each classroom. Our program is NAECP accredited (National Association of Early Childhood Programs).

The Campus Child Development Center is also utilized as a primary observation and practicum site for students studying Child Development and related fields. Adult students have the opportunity to observe and/or gain experience working with young children as they study to become Early Childhood Educators and Directors.

### Food Services

#### Cafeteria

The Cafeteria Building is located next to the Campus Center. Open Monday through Thursday. The main line Dining Room serves hot entrees, a sandwich deli, soup, fresh salad bar, and pastry. Cafeteria Hours: 6:45 a.m. to 7:00 p.m., Monday through Thursday, but subject to change. Closed Fridays.

#### Freudian Sip

Located next to the Student Store, Freudian Sip, a cybercafé, is an exciting gathering point for the Campus' Community and its visitors. Freudian Sip provides a vibrant, interactive environment of multimedia sights and sounds to accompany its diverse, high quality coffee house food and beverages. The 'Sip does catering, as well – from 5-1500 people. We look forward to serving you.

Freudian Sip Hours: 7 a.m. to 9 p.m., Monday through Thursday; 7 a.m. to 4 p.m., Friday; 8 a.m. to 12 p.m., Saturday. (Hours subject to change.)

#### Vending Machines

Located at various locations on campus. Serving hot and cold drinks, sandwiches, fruit and other miscellaneous snack items. Change machines are available in various vending machine locations.

Information or problems with any or all services, call (818) 719-6412 from 7 a.m. to 2 p.m., Monday through Thursday.

## Health Services

A variety of health services are available at the Student Health Center located on the second floor of the Student Services Building. The center provides first aid, crisis intervention, health assessment, health counseling, health referrals and health information. Students are welcome to drop in or call (818) 710-4270 for an appointment to see a physician, the college nurse, or a nurse practitioner.

The Student Health Center can provide low cost family planning services, extensive gynecological care, and the testing for, diagnosis of, and treatment of sexually transmitted diseases. Most bacterial infections can be treated with low-cost antibiotics that the Health Center can supply. Free condoms and over-the-counter medications are also provided on an as needed basis.

Consultation and/or referral regarding personal and emotional problems affecting a student's educational progress are also available through the Student Health Center. In addition, a licensed psychologist is available to students for short-term personal counseling. Appointments are made through the Health Center at 710-4270.

It is strongly urged that an identifying emblem be worn by persons with any medical problems or allergies. Students with known physical impairments must limit enrollment to courses in which they may participate with safety.

Students are encouraged to obtain a medical insurance plan. Several commercial student sickness, accident and dental plans are available. Information and applications for plans may be obtained in the Student Health Center, or on their website listed below.

Students who need medical assistance when the Student Health Center is closed should contact the Campus Sheriff.

Students participating in competitive sports are required to have a physical exam. The Health Center is not able to offer sports physicals based on restrictions found in the Education Code. Students should contact their coach/trainer for information regarding physical exams.

For additional information please check our website at [www.piercecollege.edu/offices/healthcenter](http://www.piercecollege.edu/offices/healthcenter)

## Instructional Media Center

The Instructional Media Center is located on the ground floor of the Library.

**Office hours:** Monday through Thursday, 8:00 a.m. - 10:00 p.m.; Friday, 8:00 a.m. - 3:45 p.m. and Saturday 8:00 a.m.- 1:00 p.m.

Students may receive supplemental instruction in language, history, media arts, and other disciplines using the Media Center's library of audio and videotapes. Faculty may check out instructional materials such as VHS tapes and DVD's for use in their classes. Students are encouraged to supplement their studies by using the services of the Instructional Media Center.

## Job Placement Center and Housing Services

**Employment:** Students seeking employment are encouraged to use the Job Placement Center Services. The office is well known in the business community and employers are constantly placing job orders for skilled and non-skilled employment opportunities in diverse occupational fields. Referrals are available to all enrolled students, graduates, and the community for part-time, full-time, temporary and summer work. The office maintains a working relationship with the State of California Employment Development Department

who is ready to assist job seekers on our referral. <http://info.piercecollege.edu/offices/jobcenter>.

**Housing:** The office maintains a listing of room and board opportunities in nearby private homes in exchange for work or for rent, as well as sharing situations with other students. Occasionally, houses and guest houses are available. The college does not inspect accommodations which are listed and assumes no responsibility.

**Location:** The Job Placement Center VILLAGE 8200.

## Los Angeles County Sheriff's Office

Pierce College is patrolled by Los Angeles County Sheriff's Deputies and Security Officers. The Sheriff's Deputies are Peace Officers pursuant to Penal Code section 830.1. The Sheriff's Security Officers are defined as "Public Officers," authorized by Penal Code section 831.4 and have received additional Peace Officer training per Penal Code section 832.

The Pierce College Sheriff's Office is responsible for reporting and investigating crimes, issuing traffic citations, responding to medical emergencies, traffic collisions and fire emergencies, as well as other incidents that require their assistance. Please report traffic accidents, injuries, thefts, lost and found items, or any unusual circumstances to the Sheriff's Office. The Sheriff's Office is located near the tennis courts next to Brahma Drive and is staffed twenty-four hours a day, seven days a week.

In case of an emergency there are Blue Emergency Phones at various locations around the campus. You may also use the on campus pay phones to contact the Sheriff's Office by dialing \*86. These phones are to be used in cases of emergencies or to report serious matters requiring immediate attention.

Parking lots are patrolled for your protection by the campus Sheriff's Deputies, Sheriff's Security Officers and Law Enforcement Cadets. Please lock your vehicle and do not leave anything of value visible. Valuables should be locked in the trunk of the vehicle. Evening escorts are available for students and faculty. Requests for escorts can be pre-arranged by contacting the Campus Sheriff's Office at (818)719-6450 or Ext. 6450 from campus phones. This is to ensure a more timely and prompt service.

Students will need to seek outside assistance for any vehicle problems such as keys locked in the vehicle, out of gas and dead batteries.

The Campus Sheriff's Office issues citations for illegal parking and for traffic violations. Please observe all Parking and Traffic Regulations as posted. Parking citations are a minimum of \$30. A citation for parking in a handicapped zone is \$330. For further information on parking citations you may call the citation hotline at (818) 710-2550. All unpaid citations are sent to the D.M.V. for registration hold; penalties are added. Be sure to read the current schedule of classes for specific parking and safety rules.

You may inquire at the Campus Sheriff's Office regarding lost property. However, you may also need to check the location(s) the item(s) were presumed to be lost. The Library, Information Desk and the Bookstore each have their own temporary lost and found storage.

Dogs are not allowed on campus with the exception of guide dogs for the blind. Skateboards, roller skates and roller blades are not permitted on campus.

## Student Right to Know

Pierce College in compliance with the Federal Students Right to Know and Campus Security Act of 1990 provides campus crime statistics on the Pierce website at [www.piercecollege.edu/offices/sheriff](http://www.piercecollege.edu/offices/sheriff).

# Campus Parking, Traffic And Safety Regulations

Access to campus is limited on weekends and at night. The campus is closed from 11:00 p.m. to 6:00 a.m. Only the Winnetka entrance will be open on weekends and holidays.

## Enforcement of Traffic and Parking Regulations

The maximum speed limit is eight (8) miles per hour on all parking facilities and 25 miles per hour on campus roads unless posted.

All persons driving a vehicle on the campus are required to comply with the traffic laws of the State of California and the rules and regulations pursuant to Section 21113A of the California Vehicle Code. Violations of any of the regulations set forth below may result in a citation being issued.

Section 21113A. CVC grants the President of Pierce College authority to regulate and impose special conditions regarding traffic and parking regulations which include the authority to have vehicles which block traffic flow and pose a safety hazard, or are abandoned with no license, towed away at the owner's expense.

Vehicles parking in areas designated as tow-away zones will be towed away, no exceptions. Please check fences and curbs for tow-away signs. **ALL POSTED CAMPUS TRAFFIC AND PARKING REGULATIONS WILL BE ENFORCED.** Parking on campus is a privilege and permission to park may be revoked at any time.

Pierce College assumes no responsibility for damage to any motor vehicle, theft of its contents, or injury to persons operating such vehicles on or off the campus.

**THERE IS NO FREE PARKING AREA ON THE CAMPUS. ALL PARKING AREAS REQUIRE A PERMIT. PARKING PERMITS MUST BE DISPLAYED CLEARLY FROM THE REAR VIEW MIRROR WHEN PARKING IN THE COLLEGE PARKING LOTS. PAY VALIDATION MACHINES FOR GUEST PARKING ARE LOCATED IN LOT 1, LOT 7 AND LOT 8. THESE ONE-DAY ONLY PARKING PERMITS CAN BE USED IN ANY PARKING LOT ON THE CAMPUS.**

**A VALID PERMIT MUST BE DISPLAYED AT ALL TIMES.**

**A STUDENT'S PIERCE COLLEGE PARKING DECAL IS VALID AT EACH LOS ANGELES COMMUNITY COLLEGE DISTRICT CAMPUS AT WHICH THE STUDENT IS CURRENTLY ENROLLED IN CLASSES.**

See STUDENT FEES section in this schedule of classes or the college catalog for more details.

Parking permits are not transferable and are only valid for the semester as indicated on the tag.

## General Regulations on Driving and Parking

1. The person in whose name the vehicle is registered will be held responsible for any violations involving the vehicle.
2. Yield the right of way to pedestrians at all times.
3. Driving or parking a vehicle on pedestrian paths, sidewalks, or safety zones is prohibited. All violators will be cited.
4. Curbs painted red indicate NO PARKING zones. Curbs painted yellow indicate loading and unloading zones for

passengers and business deliveries. Curbs painted green indicate "special parking" or limited parking time. Curbs painted blue indicate handicapped parking by Special Permit obtained from Special Services. Student parking is not permitted in Staff/Faculty lots without a Special Permit. Parking in red and yellow zones, loading docks, entrances to buildings and driveways constitutes illegal parking.

5. **No vehicle shall back into a stall. Vehicles must park clearly within marked stalls. Failure to do so will constitute illegal parking.**
6. The responsibility of finding a legal parking space rests with the motor vehicle operator. **LACK OF SPACE IS NOT CONSIDERED A VALID EXCUSE FOR VIOLATION OF THESE REGULATIONS.**
7. Any area on campus that has been closed off by barricades or other traffic control devices shall not be entered by any vehicle.
8. Motorcycles, motorscooters and motorized bicycles may not be parked in bicycle racks nor may they be driven on sidewalks or pedestrian paths. Motorcycles, motor scooters and motorized bicycles must park in motorcycle areas of lot No. 1 or 7. **MOTORCYCLES ARE NOT PERMITTED ON INNER CAMPUS ROADWAYS.**
9. Always lock your car and set brakes when parking.
10. If you feel you have received a parking citation in error, see College Sheriff between the hours of 8:00 am to 9:00 p.m., Monday–Friday.

Students are advised to be alert for large farm machinery moving on the campus, particularly early in the morning and evenings. Use extreme caution when driving around farm machinery, which travels slowly and makes very wide turns, and needs plenty of room to maneuver. If you park on the farm, please park completely off the road. Never park in front of gates and do not park in front of the animal barn doors. When encountering farm machinery, please yield to it.

## Bicycle Safety Rules

1. Ride with the traffic, obeying all traffic rules as you would on a public highway as per Section 21200 of the California Vehicle Code. It is your responsibility to watch out for pedestrians.
2. Bicycle racks are provided at various locations on the campus. Lock your bicycle to the rack to help prevent theft.
3. No bicycle riding is permitted on pedestrian sidewalks and mall walkways. Riding on sidewalks adjacent to classrooms, library, gyms, gardens, grass areas, or in any other college facilities is also not permitted. Walk your bike within these areas at all times.
4. You are strongly advised to lock your bicycles to bike racks which are provided near the entrances to the campus. If bicycles are chained to poles outside of the classroom they must be parked so that the bike does not obstruct sidewalks.
5. Roller-skates, in-line skates and skateboards are not permitted at any time on the campus.

## Cross Country Track and Adjacent Areas Closed from Dusk to Dawn

The area behind the Stadium which includes the Cross Country Track and adjacent walking and running areas will be closed from dusk to dawn each day. Signs have been posted in this area to alert users that this area is not available at night. Exceptions to this rule may be granted as long as they have been approved in advance by the College and/or the activities occurring within this area are being held within the instructional program.

**Dogs are not permitted on campus.** (except for seeing eye dogs)

## Non-District Sponsored Transportation

Some classes may be conducted off campus. Unless you are specifically advised otherwise, you are responsible for arranging for your own transportation to and from the class site. Although the District may assist in coordinating the transportation and/or recommend travel times, route or caravanning, be advised that the District assumes no liability or responsibility for the transportation and any person driving a personal vehicle is not an agent of the District.

# Student Activities

## Co-Curricular Activities

Co-Curricular or extra class activities are intended to provide students with the opportunity to be better prepared to fulfill the duties of citizenship in a democratic society and enrich their educational and personal development. This may be accomplished through extra class cultural activities, volunteer programs related to the instructional program, community-related affairs, athletics, and student government. Students learning to work with groups will develop skills to prepare them for cooperative and meaningful associations in both occupational and personal pursuits.

The development of a student activity program is a vital portion of the obligations that both faculty and administrators assume for students in any American college community. At Pierce, student activities are an integral part of the educational program.

## Intercollegiate Athletics and Eligibility

**Intercollegiate Athletics** are an integral part of the total college program. Men and women compete in the Western States Conference in all sports. The sports offered for men are baseball, basketball, football, swimming, tennis and volleyball. The sports offered for women are soccer, softball, swimming, volleyball, and basketball.

### Eligibility

All questions pertaining to athletic eligibility should be directed to the Director of Athletics at (818) 719-6421.

## Student Publications

Students in the Media Arts Department produce online, broadcast, multi-media and print material.

The Roundup newspaper is generally printed 11 Wednesdays during each of the Fall and Spring semesters. Back issues and breaking news are available year-round online at [www.theroundupnews.com](http://www.theroundupnews.com).

The campus magazine, The BULL, is published semi-annually as resources permit. Issues can be viewed online at [www.thebull-magazine.net](http://www.thebull-magazine.net).

The campus internet radio station, KPCRradio.com, was launched in Spring 2010. It provides streaming content 24-7, while live operating hours vary. Listen to the station at [www.kpcradio.com](http://www.kpcradio.com). Podcasts, multi-media stories and other content available at any time.

## Associated Students Organization (ASO)

The students of Pierce govern their own affairs through the organization known as the Associated Students Organization (A.S.O.). Each student who enrolls at the college may become a member. The Associated Students Organization provides a framework for many college student activities. Through active participation in student government and clubs, the student renders service, increases social and cultural awareness, improves leadership abilities, and creates a close association with other students. Students are encouraged to serve on campus and A.S.O. committees. For information visit the Student Activities Office in the Student Community Center.

### Qualifications for ASO Officers (Administrative Regulation E-22)

1. The following standards governing candidate and officer (as defined by the ASO constitution and by-laws) eligibility for appointed and elected Associated Student Organization officers (ASO), must be met:
  - A. The candidate or officer must be a currently paid member of the ASO, at the college where the election is being held and have successfully completed no more than 80 degree-applicable units in the District.
  - B. The candidate may seek only one campus office within the District.
  - C. The candidate or officer must have and maintain a cumulative and current GPA of at least 2.0 in units completed at all the colleges in the District during the semesters in which the student government office is applied for and held. Current means the most recently completed semester or session. The ASO Constitution may not set a higher GPA requirement.
  - D. The candidate or officer must not be on academic or progress probation, as defined by LACCD Board Rule 8200.10
  - E. At the time of election, or appointment, and throughout the term of office, the candidate or officer must be actively enrolled in, and must successfully complete a minimum of five (5) units per semester. The ASO Constitution may not set a higher unit requirement. Units in which a student receives an Incomplete (INC) will not be counted in the determining the number of units completed. Students falling below this requirement will automatically forfeit their office. Students, who forfeit office for failing to meet this unit requirement, will not be reinstated if INC grades are converted to letter grades and units are awarded for those courses. Candidates may be enrolled in more than one college in the District, but the candidate must be currently enrolled in a minimum of five (5) units at the college where the candidate is seeking office. Officers must maintain that enrollment at the college where the office is held.
  - F. Exceptions on the maximum unit requirement in Section 1a of this regulation may be made for students enrolled in a college degree, certificate or transfer program where the combination of program requirements and prerequisites may result in the student exceeding the 80 degree-applicable unit limit.

Exceptions will be decided by the College President based upon recommendations made by the Chief Student Services Officer.

In order to be considered for an exemption, a student, who exceeds the requisite 80 degree-applicable unit maximum, must satisfy at least one of the following conditions:

- The requirements of the student's declared associate degree major, certificate and/or transfer objective, as specified in the college catalog, caused the student to

enroll in courses that exceeded the 80 degree-applicable unit maximum.

— Program prerequisites, as specified in the college catalog, caused the student to exceed the 80 degree-applicable unit maximum.

2. A candidate or officer is ineligible for ASO office:
  - A. If he/she has served more than four (4) semesters in any one (1) or more student government elected or appointed offices in the District.
  - B. If a candidate or officer, who exceeded the unit maximum in Section 1a of this regulation and was granted an exception, fails to be enrolled in courses that are specifically required for his or her declared associate degree, certificate or transfer objective requirements, as specified in the college catalog.
3. An officer may serve a fifth semester if eligible at the time of assuming office with the approval of the college president or designee (e.g., has served three semesters and is a candidate for an office with a one-year term).
4. The Chief Student Services Officer and/or designee will verify a candidate or officer's eligibility. If the student should disagree with the findings of the Chief Student Services Officer and/or designee, he/she can appeal the decision through the student grievance procedures contained in LACCD Administrative Regulation E-55. Officers not adhering to the standards for office will be required to forfeit their positions.
5. Candidates or officers must comply with the minimum standards of the District Code of Conduct. Failure to comply will result in forfeiture of the position (Board Rule, Article VIII, Sections 9801-9806).
6. Any candidate or officer with a disability may request an accommodation for the requirements of Section 1e:
  - A. The approval of the accommodation for candidates with a disability will be made in individual instances on a case-by-case basis by the Chief Student Services Officer in consultation with the college Compliance Officer and/or the Director of the Disabled Student Program and Service (DSP&S) in compliance with Section 504 of the Rehabilitation Act and Title II of the Americans with Disabilities, as appropriate.
  - B. Qualification for an accommodation will be based on the impact of the disability on the candidate's/officer's ability to take 6 units. However, a candidate or officer must be enrolled in a minimum of five units throughout his/her term in accordance with Education Code section 76071.
  - C. Procedures for requesting an accommodation under E-22:
    - Candidates/officers must complete a written request form for accommodation available in the college's Student Services Office, and return it to the Chief Student Services Officer.
    - Each candidate or officer must present written documentation verifying the disability. Acceptable documentation includes, but is not limited to, written notice from the college DSP&S office or a certified or licensed professional, such as a doctor, psychologist, rehabilitation counselor, occupational or physical therapist.
7. Students enrolled in college credit and/or non-credit courses are eligible to vote at the college of attendance. Enrollment in Community Services classes does not meet this requirement.

## Student Clubs & Organizations

Approximately 20 campus clubs and organizations have open membership to students who are members of the Associated Students Organization. Service clubs, special interest clubs, department-related organizations, and religious clubs offer a variety of opportunities for student involvement.

The club program is coordinated by the Associated Students Organization through the Club Council. Clubs which have been active at Pierce during the past semesters include: Alpha Gamma Sigma; Animal Health Technology; Armenian Students Association; Bible Fellowship Club; California Nursing Students Association; Club Latino United for Education; Dance Club; International Students Club; Kabataang Filipino; Muslim Student Association; Parents Club; Phi Theta Kappa; Pierce Hillel; Pre-Vet Club; Sign Language Club; and United African-American Student Association.

Information on clubs is available in the Associated Students Office or Student Activities Office in the Student Community Center.

## Student Trustee Election Procedure

The Board of Trustees of the Los Angeles Community College District has established that within its membership there shall be one nonvoting student Board member. The term of office of the Student Board member shall be one year commencing on June 1 and ending on May 31.

### Qualifications:

Candidates for Student Trustee must:

1. Be currently enrolled and in good standing at one or more colleges in the District.
2. Be enrolled in 6 units. The student must maintain eligibility during his/her term of office. If eligibility is not maintained, forfeiture of office will be required.
3. Have completed a minimum of 12 units and a maximum of 80 transferable units of college work which includes a minimum of 12 units completed within the Los Angeles Community College District.

Exceptions on the maximum units requirement will be made for students enrolled in recognized Los Angeles Community College District programs where the combination of program units and prerequisites may exceed the 80 transferable units limit.

Exceptions will be decided upon by the Chancellor or designee based upon recommendations made by the Chief Student Services Officer or designee at the student's primary college of attendance.

In order to be considered for an exemption, a student, who exceeds the requisite 80 transferable unit maximum, must satisfy at least one of the following conditions:

1. The requirements of the student's declared associate degree major, certificate and/or transfer objective, as specified in the catalog at the student's primary college of attendance, caused the student to enroll in courses that exceeded the 80 transferable unit maximum.
2. Program prerequisites, as specified in the catalog at student's primary college of attendance, caused the student to exceed the 80 transferable unit maximum.
3. A returning student, who has already completed a college degree or certificate, and is enrolled in courses that are specifically required for the student's declared certificate, associate degree or transfer objective, as specified in the catalog at student's primary college of attendance.

For further information, contact the Student Activities office in the Student Community Center.

# Associate Degree Requirements

## The AA Degree Has The Following Common Requirements (Title 5 55063)

- Unit Requirement:**  
A minimum of 60 semester units in degree applicable courses.
- General Education Requirement:**  
For every major, students must complete a series of courses that make up the general education requirement of the degree.  
  
While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major requirement.
- Major Requirement:**  
In addition to the general education requirements, each degree requires a major.  
  
Effective for students admitted to a community college for the fall 2009 term, or any term thereafter, each course counted toward the major requirement must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.  
  
A course may be used to satisfy both a general education requirement and a major requirement.
- Scholarship Requirement:**  
A minimum "C" (2.0) cumulative grade point average in all courses used toward the degree.
- Residency Requirement:**  
A minimum of 12 of the units used toward the degree must be completed in residence at Pierce College.
- Competency Requirement: (LACCD E-79)**  
  
The following courses and examinations are approved to meet the competency requirement for the Associate Degree for all students entering Fall 2009 as defined in Board Rule 6201.12.

### Mathematics Competency

The competency requirement in mathematics for the Associate Degree may be met by completion of one of the following:

- Completion of one of the following courses (or its equivalent at another college) with a grade of "C" or better:
    - Mathematics 125 or any higher-level mathematics courses with a prerequisite of at least mathematics 125 or its equivalent.

**OR**
  - A passing score on the District (Intermediate Algebra) Mathematics Competency Examination.
- OR**

- A score of 3 or higher on one of the following AP Exams:
  - Calculus AB
  - Calculus BC
  - Statistics
- Complete the college assessment exam in mathematics and achieve a score determined comparable to satisfactory completion of intermediate algebra (Mathematics 123C, 124 A & B, 125, or 127 & 128). That is, students who place into a mathematics course above the level of intermediate algebra have met the competency requirement.

### Reading & Written Expression Competency

The competency requirement in reading and written expression for the Associate Degree may be met by completion of one of the following:

- Completion of English 101 (or its equivalent at another college) with a grade of "C" or better.
- OR**
- A score of 3 or higher on one of the following AP Exams:
    - English Language and Composition
    - English Composition and Literature
- OR**
- Competency may be met through English 101 credit-by-exam. See Credit-by-Exam policy section of this catalog for requirements.

The requirements of the Associate degree are grouped into the following three parts.

## Part 1 - General Education (GE) PLAN

The general education path you pick depends on whether or not you plan to transfer, and what major you are choosing. If you already know your major, you may want to do Parts 1 and 2 simultaneously.

### Which plan should you choose?

The choice of general education plans is listed with each major on the following pages.

- PLAN A—General Studies general education Plan**  
(available with majors of 35 units or less only)  
This associate-level general education plan is appropriate for students planning to obtain an associate degree, but does not necessarily prepare students to transfer and earn a baccalaureate degree.
- PLAN B—Career and Technical general education Plan**  
(available with majors of 36 units or more only)  
This associate-level general education plan is appropriate for students planning to obtain an associate degree, but does not necessarily prepare students to transfer and earn a baccalaureate degree.
- PLAN C—CSU General Education Breadth Certification Plan**  
This baccalaureate-level general education plan fulfills the associate degree general education requirements and is accepted as fulfillment of lower-division general education requirements at all California State University campuses

**PLAN D—IGETC Plan (Intersegmental General Education Transfer Curriculum)**

This baccalaureate-level general education plan fulfills the associate degree general education requirements and is accepted as fulfillment of lower-division general education requirements at all University of California and California State University Campuses.

**Part 2 - MAJOR**

Follow the requirements for a Major. Majors are listed on pages 62-63.

**Part 3 - ELECTIVES**

Pick Associate degree applicable courses as needed to reach 60 units.

**TRANSFER STUDENTS:**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

**PROCEDURE FOR REQUESTING THE DEGREE**

You must file a petition for the degree in the Graduation Office.

Please check the Schedule of Classes for deadlines. If you have completed coursework at other schools that you believe meets some of your degree requirements, you may petition for course substitution. Petitions are available in the Graduation Office.

Please consult a counselor for guidance.



## Part 1 PLAN A General Studies GE (General Education) Plan

All students must meet the following common requirements (see page 53 for details).

1. Unit Requirement
2. General Education Requirement
3. Major Requirement
4. Scholarship Requirement
5. Residency Requirement
6. Competency Requirement

While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes.

### Area A: Natural Sciences

**3 semester units minimum**

ANATOMY 1  
ANML SC 511  
ANTHRO 101, 111  
ASTRON 1, 2, 3  
BIOLOGY 3, 6, 7, 10, 11ABC, 12ABC, 110, 121, 122, 123  
CHEM 51, 60, 101, 102, 211, 212, 221  
ELECTRN 4A, 6A  
ENV SCI 1, 2, 7  
GEOG 1, 3, 15  
GEOLOGY 1, 2, 4, 6, 10, 12, 22ABCD  
METEOR 3  
MICRO 1, 20  
OCEANO 1, 2, 10  
PHYS SC 4, 13  
PHYSICS 6, 7, 11, 12, 15, 66, 67, 101, 102, 103  
PHYSIOL 1  
PLNT SC 103, 711, 901  
PSYCH 2, 73

### Area B: Social and Behavioral Sciences

**9 semester units minimum**

#### B1: American Institutions (3 semester units minimum)

HISTORY 11, 12, 13, 41, 42, 43, 44, 52, 56;  
POL SCI 1, 19, 30

#### B2. SOCIAL AND BEHAVIORAL SCIENCES (3 Semester Units minimum)

ADDICST 15  
ADM JUS 1, 2, 4, 67, 75, 383  
ANTHRO 102, 105, 106, 109, 132, 141  
BUS 1, 5  
CHICANO 2, 80  
CH DEV 1  
ECON 1, 2, 10, 16, 30, 60  
GEOG 2, 7, 14, 21, 22, 31  
HISTORY 3, 4, 5, 6, 11, 12, 13, 15, 20, 27, 39, 41, 42, 43, 44, 52, 76, 86, 87  
JOURNAL 100, 251  
LAW 3  
MGMT 31, 33  
PLNT SCI 110  
POL SCI 1, 2, 5, 7, 14, 19, 37, 42, 43

PSYCH 1, 3, 6, 11, 12, 13, 14, 16, 17, 18, 26, 32, 40, 41, 52, 66, 74  
SOC 1, 2, 3, 4, 8, 11, 13, 15, 21 28, 29, 35, 37, 86, 87  
SPANISH 10, 16, 26  
SPEECH 121, 122

**B3. Minimum of 3 additional semester units from B1 or B2 above.**

### Area C: Humanities

**3 semester units minimum**

ASL 1, 2, 3, 4, 40  
ANTHRO 104, 105, 121, 161, 162, 163  
ART 92, 101, 102, 103, 105, 109, 111, 119, 137, 138, 139, 201, 202, 203, 501, 502, 503, 604, 605, 606, 708  
CINEMA 3, 104, 107  
DANCE 290, 710, 801, 802, 803, 804, 812, 814, 818, 860  
ENGLISH 102, 103, 127, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 219, 239, 240, 250, 251, 252, 270  
FRENCH 1, 2, 3, 4, 5, 6, 8, 10  
HISTORY 1, 2, 43, 44, 86, 87  
HUMAN 6, 31, 60, 61  
ITALIAN 1, 2, 3, 4, 5, 6, 8  
JAPAN 1, 2, 3, 4, 8, 27  
LING 1, 2, 3  
MUSIC 101, 111, 112, 121, 122, 152, 181, 182, 183, 184, 201, 202, 203, 226, 251, 299, 321, 322, 323, 324, 341, 411, 412, 413, 414, 501, 531, 561, 571, 601, 602, 603, 604, 611, 612, 613, 614, 621, 622, 623, 624, 651, 705, 721, 741, 745, 755, 776, 777  
PHILOS 1, 2, 12, 14, 15, 19, 20, 29, 30, 33, 35, 40, 41, 42  
PHOTO 9, 10, 11, 27  
SOC 11  
SPANISH 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15, 21, 22, 25, 26, 27, 35, 36, 65  
THEATER 100, 110, 125, 265, 270, 271, 273, 300

### Area D: Language and Rationality

**12 semester units minimum**

#### D1. ENGLISH COMPOSITION (3 Semester Units minimum)

ENGLISH 28, 101, 102, 103  
JOURNALISM 101, 108  
CAOT 31, 32

### D2. COMMUNICATION AND ANALYTICAL THINKING

**(6 Semester Units minimum)**

ACCTG 1  
CAOT 77, 82  
CO SCI 501, 530, 572, 575  
GEOG 31, 32, 33  
GIS 31, 32, 33  
MATH 115, 125, 146, 215, 227, 235, 238, 240, 245, 260, 261, 262  
PHILOS 5, 6, 9  
PSYCH 26, 66, 69, 74  
SOC 4  
SPEECH 101, 102, 103, 104, 121, 122  
STAT 1, 7

**D3. Minimum of 3 additional semester units from D1 or D2 above.**

### Area E: Health and Physical Education

**3 semester units minimum**

#### E1. HEALTH EDUCATION (2 Semester Units minimum)

HEALTH 2, 8, 9, 11

#### E2. ONE PHYSICAL EDUCATION ACTIVITY (1 Semester Unit minimum)

HEALTH 2

**OR**

PHYS ED, 101, 102, 203, 212, 225, 228, 229, 230, 238, 259, 301, 304, 313, 322, 503, 504, 508, 511, 512, 513, 514, 516, 553, 554, 555, 556, 557, 558, 559, 560, 561, 640,

**OR**

PHYS ED 90A, 90B, 91, 665, 666, 675, 684, 690

**OR**

Dance Activity courses: a maximum of one unit may be applied to Area E2 from the following:

DANCE SPECIALTIES 401, 402, 431, 434, 437, 441, 490;

DANCE STUDIES 262, 452, 801, 802, 803, 804, 814, 818, 819, 820, 821, 860; DANCE TECHNIQUES 101, 290, 401, 410, 431

## Part 1 PLAN B Career and Technical GE (General Education) Plan

All students must meet the following common requirements (see page 53 for details).

1. Unit Requirement
2. General Education Requirement
3. Major Requirement
4. Scholarship Requirement
5. Residency Requirement
6. Competency Requirement

While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes.

### Area A: Natural Sciences

**3 semester units minimum**

ANATOMY 1  
 ANML SC 511  
 ANTHRO 101, 111  
 ASTRON 1, 2, 3  
 BIOLOGY 3, 6, 7, 10, 11ABC, 12ABC,  
 110, 121, 122, 123  
 CHEM 51, 60, 101, 102, 211, 212, 221  
 ELECTR 4A, 6A  
 ENV SCI 1, 2, 7  
 GEOG 1, 3, 15  
 GEOLOGY 1, 4, 6, 10, 12, 22ABCD  
 METEOR 3  
 MICRO 1, 20  
 OCEANO 1, 2, 10  
 PHYS SC 4, 13  
 PHYSICS 6, 7, 11, 12, 15, 66, 67, 101, 102,  
 103  
 PHYSIOL 1  
 PLNT SC 103, 711, 901  
 PSYCH 2, 73

### Area B: Social and Behavioral Sciences

**3 semester units minimum**

**B1: American Institutions**  
**(3 semester units minimum)**

HISTORY 11, 12, 13, 41, 42, 43, 44, 52,  
 56;  
 POL SCI 1, 19, 30

### Area C: Humanities

**3 semester units minimum**

ASL 1, 2, 3, 4, 40  
 ANTHRO 104, 105, 121, 161, 162, 163  
 ART 92, 101, 102, 103, 105, 109, 111,  
 119, 137, 138, 139, 201, 202, 203, 501,  
 502, 503, 604, 605, 606, 708  
 CINEMA 3, 104, 107  
 DANCE 290, 710, 801, 802, 803, 804,  
 812, 814, 818, 860  
 ENGLISH 102, 103, 127, 203, 204, 205,  
 206, 207, 208, 209, 210, 211, 212, 213,  
 214, 215, 216, 219, 239, 240, 250, 251,  
 252, 270

FRENCH 1, 2, 3, 4, 5, 6, 8, 10  
 HISTORY 1, 2, 43, 44, 86, 87  
 HUMAN 6, 31, 60, 61  
 ITALIAN 1, 2, 3, 4, 5, 6, 8  
 JAPAN 1, 2, 3, 4, 8, 27  
 LING 1, 2, 3  
 MUSIC 101, 111, 112, 121, 122, 152,  
 181, 182, 183, 184, 201, 202, 203, 226,  
 251, 299, 321, 322, 323, 324, 341, 411,  
 412, 413, 414, 501, 531, 561, 571, 601,  
 602, 603, 604, 611, 612, 613, 614, 621,  
 622, 623, 624, 651, 705, 721, 741, 745,  
 755, 776, 777  
 PHILOS 1, 2, 12, 14, 15, 19, 20, 29, 30,  
 33, 35, 40, 41, 42  
 PHOTO 9, 10, 11, 27  
 SOC 11  
 SPANISH 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15,  
 21, 22, 25, 26, 27, 35, 36, 65  
 THEATER 100, 110, 125, 265, 270, 271,  
 273, 300

### Area D: Language and Rationality

**6 semester units minimum**

**D1. ENGLISH COMPOSITION**  
**(3 Semester Units minimum)**

ENGLISH 28, 101, 102, 103  
 JOURNALISM 101, 108  
 CAOT 31, 32

**D2. COMMUNICATION AND ANALYTICAL THINKING**  
**(3 Semester Units minimum)**

ACCTG 1  
 CAOT 77, 82  
 CO SCI 501, 530, 572, 575  
 GEOG 31, 32, 33  
 GIS 31, 32, 33  
 MATH 115, 125, 146, 215, 227, 235,  
 238, 240, 245, 260, 261, 262  
 PHILOS 5, 6, 9  
 PSYCH 26, 66, 69, 74  
 SOC 4  
 SPEECH 101, 102, 103, 104, 121, 122  
 STAT 1, 7

### Area E: Health and Physical Education

**3 semester units minimum**

**E1. HEALTH EDUCATION**  
**(2 Semester Units minimum)**

HEALTH 2, 8, 9, 11

**E2. ONE PHYSICAL EDUCATION ACTIVITY**  
**(1 Semester Unit minimum)**

HEALTH 2

PHYS ED, 101, 102, 203, 212, 225,  
 228, 229, 230, 238, 259, 301, 304,  
 313, 322, 503, 504, 508, 511, 512,  
 513, 514, 516, 553, 554, 555, 556,  
 557, 558, 559, 560, 561, 640,

**OR**

PHYS ED 90A, 90B, 91, 665, 666,  
 675, 684, 690

**OR**

Dance Activity courses: a maximum of  
 one unit may be applied to Area E2  
 from the following: DANCE  
 SPECIALTIES 401, 402, 431, 434,  
 437, 441, 490; DANCE STUDIES  
 262, 452, 801, 802, 803, 804, 814,  
 818, 819, 820, 821, 860; DANCE  
 TECHNIQUES 101, 290, 401, 410,  
 431

**Part 1 PLAN C**

## Pierce College CSU General Education Certified Plan 2010-2011

*Every effort has been made to ensure the information below is accurate and timely. However, this information is unofficial and should be checked against the official information found on the ASSIST website @ [www.assist.org](http://www.assist.org). For additional information and requirements for transferring to a CSU campus visit the CSUMentor website @ [www.csumentor.edu](http://www.csumentor.edu). A more expanded version of this information, along with information on grade requirement, international coursework, and the application of AP exams to the CSU GE Plan can be found on the Pierce Transfer website at [www.piercecollege.edu](http://www.piercecollege.edu) and by coming in to talk to a Pierce academic counselor.*

### AREA A - ENGLISH LANGUAGE COMMUNICATION and CRITICAL THINKING

(9 semester or 12-15 quarter units. One course from each group.)

#### A-1: ORAL COMMUNICATION

Speech 101, 102, 104, 121

#### A-2: WRITTEN COMMUNICATION

English 101

#### A-3: CRITICAL THINKING

Philosophy 5, 6, 9; English 102, 103; Speech 104; Psychology 66.

### AREA B - SCIENTIFIC INQUIRY and QUANTITATIVE REASONING

(9 semester or 12-15 quarter units. At least one course each from Physical Science, Life Science, and Mathematics/Quantitative Reasoning. At least one of the science courses must contain a laboratory component that corresponds to the lecture course used. See Area B-3 below.)

**B-1: PHYSICAL SCIENCE:** Astronomy 1, 3; Chemistry 51, 60, 101, 102, 211, 212, 221; Environmental Science 1, 7; Geography 1, 3 (same as Meteorology 3); Geology 1, 2, 4, 10, 22ABCD (22ABCD must all be taken to receive certification credit); Meteorology 3 (same as Geography 3); Oceanography 1; Physical Science 4; Physics 6, 7, 11, 12, 66, 67, 101, 102, 103; Plant Science 103.

**B-2: LIFE SCIENCE:** Anatomy 1; Animal Science 511; Anthropology 101; Biology 3, 6, 7, 10, 11ABC, 12ABC, 110, 121, 123; Environmental Science 2; Microbiology 1, 20; Physiology 1; Plant Science 901; Psychology 2.

**B-3: LABORATORY ACTIVITY:** Anatomy 1; Animal Science 512; Anthropology 111; Astronomy 2, 3; Biology 3, 6, 7, 10, 11ABC, 12ABC, 110, 122, 123; Chemistry 51, 60, 101, 102, 211, 212, 221; Geography 15; Geology 4, 6, 7, 22ABCD (22ABCD must all be taken to receive certification credit); Microbiology 1, 20; Oceanography 10; Physical Science 4; Physics 6, 7, 66, 67, 101, 102, 103; Physiology 1. Psychology 73.

**B-4: MATHEMATICS/QUANTITATIVE REASONING:** Math 215, 227, 235, 238, 240, 245, 260, 261, 262; Statistics 1, 7.

### AREA C - ARTS and HUMANITIES

(9 semester or 12-15 quarter units. At least one course from C1 and one course from C2.)

**C-1 ARTS (Art, Dance, Music, Theater):** Art 101, 102, 103, 105, 109, 111, 137, 138, 139, 201, 300, 501, 502, 700, 708; Cinema 3, 104, 107; Dance Studies 801, 802, 803, 804, 812, 814, 818; English 213 (same as Theater 125); Humanities 6, 31, 60, 61; Music 111, 112, 121, 122, 226, 251, 299, 321, 322, 323, 324, 341, 411, 412, 413, 414, 501, 561, 571, 601, 611, 621, 651, 705, 721, 741, 755; Photography 9, 10, 11, 27; Theater 100, 110, 125 (same as English 213), 270, 271, 273.

#### C-2 HUMANITIES (Literature, Philosophy, Foreign Language):

Anthropology 104 (same as Linguistics 1), 121, 161; ASL 1, 2, 3, 4; English 102, 127, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 219, 239, 240, 250, 251, 252, 270; French 1, 2, 3,

4, 5, 6; History 1, 2, 43, 44, 86, 87; Humanities 6, 31, 60, 61; Italian 1, 2, 3, 4, 5, 6; Japanese 1, 2, 3, 4,, 8; Linguistics 1 (same as Anthropology 104); Philosophy 1, 2, 12, 14, 15, 19, 20, 29, 30, 33, 35, 40, 41, 42; Spanish 1, 2, 3, 4, 5, 6, 9, 11, 12, 15, 21, 22, 25, 26, 27, 65; Theater 125 (same as English 213).

### AREA D - SOCIAL SCIENCES

(9 semester or 12-15 quarter units, with courses taken in at least two categories.)

**CSU American History and Institutions Graduation Requirement (1 course from each group. 6 semester units or 9-12 quarter units.)** By taking 1 course from each group, you have met the CSU Graduation Requirement and you may count the courses toward satisfying Area D.

History 11, 12, 13, 41, 42, 43, 44, 52.  
Political Science 1, 19.

**D-1 Anthropology & Archeology:** Anthropology 102, 104, 105, 106, 109, 132, 141, 161, 162, 163; Ling 1.

**D-2 Economics:** Economics 1, 2, 16, 30, 60.

**D-3 Ethnic Studies:** Chicano 2, 80; History 43, 44; Spanish 10, 26.

**D-4 Gender Studies:** Anthropology 109; History 52; Psychology 32.

**D-5 Geography:** Geog 2, 7, 21, 22, 31.

**D-6 History:** History 3, 4, 5, 6, 11, 12, 13, 20, 27, 29, 39, 41, 42, 43, 44, 52, 76, 86, 87; Spanish 10, 16.

**D-7 Interdisciplinary Social/Behavioral Science:** Anthropology 162, 163; Broadcasting 1; Journalism 100, 251; Ling 2, 3; Speech 121, 122.

#### D-8 Political Science, Government and Legal Institutions:

Adm Jus 1, 2, 4; Chicano 80; Law 3; Political Science 1, 2, 5, 7, 14, 19, 30, 37 (same as Soc 37), 42, 43.

**D-9 Psychology:** Child Development 1 (same as Psychology 11); Psychology 1, 3, 6, 11 (same as Child Development 1), 12, 13, 14, 16, 17, 32, 40, 41, 52, 66, 74.

**D-0 Sociology:** Adm Jus 67, 75; Sociology 1, 2, 3, 4, 8, 11, 13, 15, 17, 21, 28, 29, 35, 37 (same as Pol Sci 37), 86, 87.

### AREA E - LIFELONG LEARNING and SELF-DEVELOPMENT

(3 semester or 4-5 quarter units. A maximum of 1 unit of Physical Education/Dance Activity Coursework may be counted toward the unit requirement.)

Dance Studies 801, 822; Dance Techniques/Dance Specialties 101, 290, 401, 402, 410, 431, 434, 437, 440, 441, 446, 490, 710; activity courses maximum 1 unit; Environmental Science 1; Health 8, 9, 11; Personal Development 20, 40; Philosophy 19; Physical Education 90, 91, 100-700 activity courses (maximum of 1 unit); Psychology 3, 32, 40, 41, 52, 60; Sociology 28.

**Part 1 PLAN D****Pierce College Intersegmental General Education Transfer Curriculum  
(IGETC) 2010-2011**

*Every effort has been made to ensure the information below is accurate and timely. However, this information is unofficial and should be checked against the official information found on the ASSIST website at [www.assist.org](http://www.assist.org). For additional information and requirements for transferring to a UC or CSU campus visit the CSUMentor website @ [www.csumentor.edu](http://www.csumentor.edu) and the UC transfer website at [www.uctransfer.org](http://www.uctransfer.org). A more expanded version of this information, along with information on grade requirement, international coursework, and the application of AP exams to the IGETC Plan can be found on the Pierce transfer website at [www.piercecollege.edu](http://www.piercecollege.edu) and by coming in to talk to a Pierce academic counselor.*

**AREA 1- ENGLISH COMMUNICATIONS:**

(CSU - 3 courses required, one from each group below. UC- 2 courses required, 1 each from Group A & B.)

**1- A: English Composition**, 1 course, 3 semester units or 4-5 quarter units. English 101

**1- B: Critical Thinking - English Composition**, English Composition, 1 course, 3 semester units or 4-5 quarter units. English 102, 103; Philosophy 5

**1- C: Oral Communication** (CSU requirement only) 1 course, 3 semester units or 4-5 quarter units. Speech 101, 102, 104, 121

**AREA 2 - MATHEMATICAL CONCEPTS and QUANTITATIVE REASONING:**

(1 course, 3 semester units or 4-5 quarter units)

Math 227, 235, 238, 245, 260, 261, 262; Statistics 1, 7

**AREA 3 - ARTS and HUMANITIES:**

(3 courses required, at least 1 from each group below. 9 semester units or 12-15 quarter units)

**3- A: ARTS:** Art 101, 102, 103, 105, 109, 111, 137, 138, 139, 501, 502; Cinema 3, 104, 107; Dance Studies 802, 803, 804; Music 111, 112, 121, 122; Photography 27; Theater 100, 110.

**3- B: HUMANITIES:** Anthropology 104 (same as Linguistics 1), 121; ASL 3, 4; English 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213 (same as Theater 125), 214, 215, 216, 219, 239, 240, 250, 251, 252, 270; French 3, 4, 5, 6; History 1, 2, 43, 44, 86, 87; Humanities 6, 31, 60; Italian 3, 4, 5, 6; Japanese 3; Linguistics 1 (same as Anthropology 104); Philosophy 1, 2, 12, 14, 15, 19, 20, 30, 33, 35, 40, 41, 42; Spanish 3, 4, 5, 6, 9, 12, 15, 25, 26, 65; Theater 125 (same as English 213).

**AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES:**

(3 courses from at least 2 disciplines 9 semester units or 12-15 quarter units)

Adm Jus 1, 2, 4, 67; Anthropology 102, 104, 105, 106, 109, 132, 161, 162, 163; Broadcasting 1; Chicano 2, 80; Child Development 1 (Same As Psychology 11); Economics 1, 2, 30, 60; Geography 2, 7, 21, 22; History 3, 4, 5, 6, 11, 12, 13, 20, 29, 39, 41, 42, 43, 44, 52, 76, 86, 87; Journalism 100, 251; Law 3; Ling 1, 2, 3; Political Science 1, 2, 5, 7, 14, 19, 30, 37 (same as Soc 37), 42, 43; Psychology 1, 6, 11 (same as Child Development 1), 12, 13, 14, 32, 41, 52, 66, 74; Sociology 1, 2, 3, 4, 8, 11, 13, 15, 21, 28, 29, 35, 37, 86, 87 (same as Pol Sci 37); Spanish 10, 16; Speech 121, 122.

**AREA 5 - PHYSICAL and BIOLOGICAL SCIENCES:**

(2 courses, 1 from each group, at least 1 must include a laboratory. Lab courses are **bold italic**. 7-9 semester units Or 9-12 quarter units. The lab selected must correspond to the lecture course used.)

**5- A: PHYSICAL SCIENCES:** Astronomy 1, **2, 3**; Chemistry **60, 101, 102, 211, 212, 221**; Environmental Science 1, 7; Geography 1, 3 (same as Meteorology 3), **15**; Geology 1, 2, **6, 7, 10, 22ABCD** (22ABCD must all be taken to receive certification credit); Meteorology 3 (same as Geography 3); Oceanography 1, **10**; Physical Science **4**; Physics **6, 7, 11, 12, 66, 67, 101, 102, 103**.

**5- B: BIOLOGICAL SCIENCES:** Anatomy **1**; Anthropology 101, **111**; Biology **3, 6, 7, 10, 11ABC, 110, 121, 122, 123**; Environmental Science 2; Microbiology **1, 20**; Physiology **1**; Psychology 2, **73**.

**AREA 6 - LANGUAGE OTHER THAN ENGLISH - UC Requirement Only**

ASL 2, French 2, Italian 2, Japanese 2; Spanish 2. If language level 3 or higher is used to satisfy this requirement, it may also be used in AREA 3 - B.

**High school:** 2 years of the same foreign language with "C" or better GPA.

**Other:** See complete information at [www.piercecollege.edu/students/transfer](http://www.piercecollege.edu/students/transfer). Click on IGETC.

**AREA 7 - CSU GRADUATION REQUIREMENT IN U. S. HISTORY, CONSTITUTION and AMERICAN IDEALS**

Not part of IGETC, but may be completed prior to transfer. 2 courses, 1 from each group, 6 semester units or 12 quarter units. Courses used to meet this requirement may also be used to satisfy requirements for IGETC. However, some CSU campuses may require students to take an additional course after transfer. CSU campuses should be consulted directly regarding their practice.

**U.S. HISTORY REQUIREMENT**

History 11, 12, 13, 41, 42, 43, 44, 52.

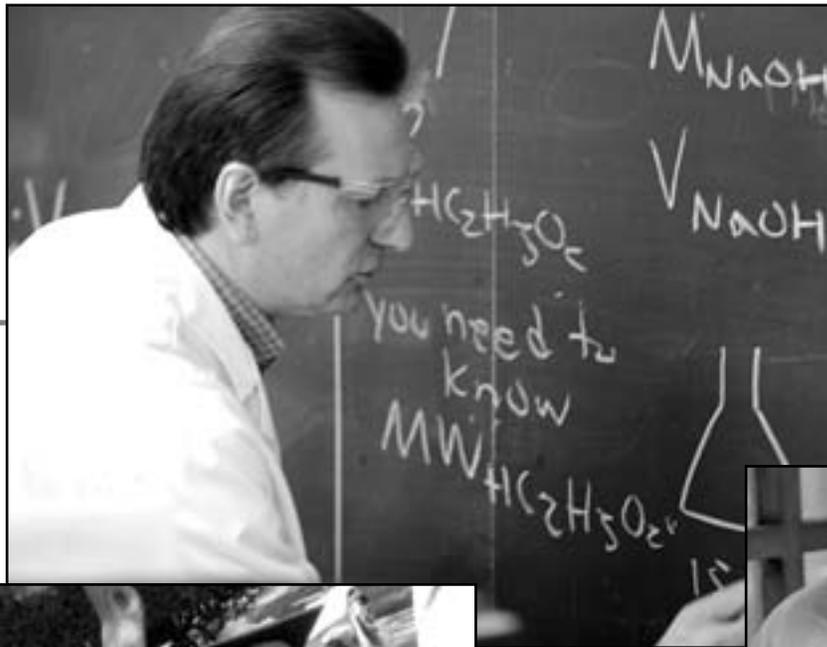
**FEDERAL STATE & LOCAL GOV'T REQUIREMENT**

Political Science 1, 19.

# Department & Program Organization

Department & Disciplines	Chairperson(s)	Phone/Office
<b>AGRICULTURE AND NATURAL RESOURCES</b> Animal Science Horse and Equine Science Natural Resources Management	<b>Richard South</b> General Agriculture Horticulture & Landscaping Veterinary Science & Technology	<b>719-6463</b> <b>AS 4103A/CFS 91043</b>
<b>ANTHROPOLOGICAL &amp; GEOGRAPHICAL SCIENCES</b> Anthropology Geography Linguistics	<b>Diane Levine</b> Archaeology Geographic Information Systems Meteorology	<b>710-2876</b> <b>FO 2903</b>
<b>ART/ARCHITECTURE</b> Architecture Ceramics Graphic Design Web Design	<b>Greg Gilbertson</b> Architectural History Drawing Painting Digital Imaging	<b>719-6475</b> <b>ART 3303C</b> Art History Fine Art Sculpture Multimedia
<b>ATHLETICS</b> Physical Education (Intercollegiate Athletics)	<b>Bob Lofrano</b>	<b>710-2823</b> <b>SOUTH GYM</b>
<b>BUSINESS ADMINISTRATION</b> Accounting Finance Marketing	<b>David Braun</b> Business International Business Real Estate	<b>719-6479</b> <b>BUS 3213D</b> Business Law Management Supervision
<b>CENTER FOR ACADEMIC SUCCESS</b> Learning Skills	<b>Kathy Boddicker</b> Tutoring	<b>710-2938</b> <b>VLGE 8406</b> Computer Labs
<b>CHEMISTRY</b>	<b>Isidore Goodman</b>	<b>719-6464</b> <b>CHEM 0804/CFS 91041</b>
<b>CHILD DEVELOPMENT</b>	<b>Joleen Voss-Rodriguez</b>	<b>719-6402</b> <b>BEH 1306</b>
<b>COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES</b> Administrative Professional Business Communications Computer Applications Computerized Accounting Desktop Publishing	<b>Lyn Clark</b> General Administrative Internet Legal Office Procedures Office Procedures Web Site Construction	<b>710-4244</b> <b>BUS 3210C</b>
<b>COMPUTER SCIENCE INFORMATION TECHNOLOGY</b> Computer and Network Technology Programming for Computer Science	<b>Lynne O'Hanlon</b> Programming for Business	<b>710-2933</b> <b>COSC 1503</b>
<b>COOPERATIVE EDUCATION</b>	<b>Ron Smetzer</b>	<b>710-4291</b> <b>VLGE 8200</b>
<b>COUNSELING</b> Personal Development	<b>Rudy Dompe</b>	<b>719-6440</b> <b>STUDENT SERVICES BLDG.</b>
<b>ENGLISH</b> English	<b>Donna Accardo</b> English as a Second Language	<b>710-2879</b> <b>FO 2501</b>
<b>HISTORY/HUMANITIES</b>	<b>Eugene Larson</b>	<b>710-4305</b> <b>FO 3101</b>
<b>HONORS PROGRAM</b>	<b>Elizabeth Strother</b>	<b>710-2224</b> <b>VLGE 8340</b>

Department & Disciplines	Chairperson(s)	Phone/Office
<b>INDUSTRIAL TECHNOLOGY</b> Automotive Service Technology Engineering, Mechanical Robotics	<b>Tom Fortune</b> Drafting, Mechanical Machine Shop-CNC	<b>719-6490</b> <b>AT 3803</b> Electronics Welding
<b>LIBRARY SCIENCE</b>	<b>Florence Robin</b>	<b>719-6409</b> <b>LIBRARY</b>
<b>LIFE SCIENCES</b> Anatomy Microbiology Physiology	<b>Lyn Koller</b> Biology (Including Marine Biology)	<b>710-4138</b> <b>LS 1715/CFS 91042</b>
<b>MATHEMATICS</b>	<b>Bob Martinez</b>	<b>719-6468</b> <b>MATH 1409E</b>
<b>MEDIA ARTS</b> Broadcasting Photography	<b>Jill Connelly</b> Cinema Public Relations	<b>710-4235</b> <b>VLGE 8100</b> Journalism Multimedia
<b>MODERN LANGUAGES</b> American Sign Language Italian	<b>Damiano Marano</b> French Japanese	<b>710-4319</b> <b>VLGE 8340</b> Spanish
<b>MUSIC</b>	<b>Stephen Piazza</b>	<b>719-6476</b> <b>MUS 3416A</b>
<b>NURSING</b> Registered Nursing (ADN)	<b>Joan Schneider</b>	<b>719-6477</b> <b>VLGE 8203/CFS 91029</b>
<b>P.A.C.E.</b>	<b>Dr. Arthur Gillis</b>	<b>719-6485</b> <b>VLGE 8340</b>
<b>PHILOSOPHY/ SOCIOLOGY</b> Philosophy	<b>Dr. Anna Bruzzese</b> Sociology	<b>710-4371</b> <b>BEH 1306 B</b>
<b>PHYSICAL EDUCATION</b> Health Education Physical Education	<b>William Norton</b> Recreation	<b>719-6473</b> <b>NORTH GYM</b>
<b>PHYSICS &amp; PLANETARY SCIENCES</b> Astronomy Geology Physical Science	<b>William Duxler</b> Environmental Science Oceanography Physics	<b>710-2931</b> <b>PHYS 0902/CFS 91040</b>
<b>POLITICAL SCIENCE / ECONOMICS / CRIMINAL JUSTICE</b> Criminal Justice Chicano Studies	<b>Kathy Oborn</b> Economics Political Science	<b>710-2587</b> <b>LIBRARY ROOM 1</b> Law
<b>PSYCHOLOGY</b> Addiction Studies Education	<b>Raymond Lim</b> Psychology Statistics	<b>710-4318</b> <b>BEH 1306C</b>
<b>SPECIAL EDUCATION</b>	<b>Norm Crozer</b>	<b>719-6430</b> <b>STUDENT SERVICES BLDG.</b>
<b>SPEECH COMMUNICATION</b>	<b>Jennifer Rosenberg</b>	<b>710-4297</b> <b>FO 2705</b>
<b>THEATER AND DANCE</b> Dance	<b>Gene Putnam</b> Theater	<b>719-6488</b> <b>PAB 3539</b>



# Educational Programs

## 2010-2011



**Pierce College**



Educational Programs

# Educational Programs

## Degree and Certificate Programs

### Associate of Arts (AA) or Associate of Science (AS)

Pierce offers a wide variety of programs that are listed on the following pages. Please refer to the previous section, Associate Degree Requirements for a description of our degree options. Students should consult with a counselor to ensure that they are completing the coursework that best meets their educational goal.

### Certificate of Achievement (C)

Pierce offers many state approved certificate programs that give students training in specific job skills. A grade of C or better is required in each course and at least 50% of the units required for the certificate must be completed in residence at Pierce College. In addition, students may request certificate of achievements in The CSU GE Breadth Certification general education plan or the Intersegmental General Education Transfer Curriculum (IGETC).

### Department Skill Certificate (SC)

Department Skills Certificates document a student's achievement of specific skills or coursework within a discipline. These certificates require fewer than 18 units of coursework. A grade of C or better is required in each course. At least 50% of the units required for the certificate must be completed in residence at Pierce College. These local department skills certificates do not go through state approval processes and will not appear on the students' official transcripts. See individual department office for details.

	Degree	Certificate
<b>Addiction Studies</b>	AA	C
<b>Agriculture</b>		
Agriculture Business	AS	
Floral Design and Management	AS	C
General Agriculture	AS	C
Horse Science	AS	C
Horticulture		
General Horticulture	AS	
Greenhouse and Nursery Industry	AS	
Landscape Installation and Maintenance Industry	AS	
Landscape Planning and Design	AS	
Basic Gardening (Basic)		SC
Basic Gardening (Advanced)		C
Landscape Technician (Basic)		C
Landscape Technician (Advanced)		C
Professional Gardening		C
Pre-Veterinary Medicine	AS	
Veterinary Technology	AS	
<b>American Sign Language (Interpreting)</b>	AA	

### Anthropology

Anthropology	SC
Archaeology	SC

### Architecture

Architecture Technology	AA	C
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### Art

Art	AA	
Ceramic Design	AA	
Drawing	AA	
Graphic Design	AA	C
Graphic Design for the Web		C
Painting	AA	
Sculpting	AA	

### Business Administration

Accounting	AA	
Payroll Accounting	SC	
Small Business Accounting	SC	
Tax Preparation	C	
Finance	SC	
General Business	AA	SC
Insurance	SC	
International Business	C	
International Trade	SC	
Management and Supervision	AA	
Management	SC	
Retail Management	C	
Small Business Entrepreneur	SC	
Marketing	AA	C

### Child Development

	AA
Preschool Teacher	C
Associate Teacher	C
Preschool Certificate (Cert. A)	C
Director Preschool (Cert. B)	C
Infant Care Teacher (Cert. C)	C
School Age Programs Teacher (Cert. D)	C

### Cinema

	SC
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### Computer Applications & Office Technologies

Administrative Professional	AA	C
General Administrative	AA	C
Legal Office Procedures	AA	C
Advanced Computer Applications	C	
Basic Computer Applications	C	
Basic Computerized Accounting	C	
Basic Internet	C	
Desktop Publishing	C	
Legal Office Skills	C	
Basic Word Processing: Microsoft Word	C	

# Educational Programs

Office Clerical		C
Office Communications		C
Web Site Construction and Maintenance		C
<b>Computer Science</b>		
Programming for Business	AA	C
Personal Computer Application Specialist		SC
Database Programming Specialist		SC
Programming for Computer Science	AS	C
Computer and Network Technology	AS	
Personal Computer Service Technology		C
Network Technology		C
Routing Technology		SC
Website Development		C
Web Development, Programming and Scripting		C
<b>Criminal Justice</b>	AA	
<b>Electronics</b>	AS	
Digital Option		C
Communications Option		C
Analog Option		C
<b>French</b>	AA	
<b>General Education Breadth Requirement</b>		
CSU GE Breadth Certification Plan		C
IGETC		C
<b>General Studies with an area of emphasis</b>	AA	
Arts and Humanities		
Science, Technology, Engineering and Mathematics		
Social and Behavioral Sciences		
Women's Studies		
<b>Geographic Information Systems (GIS)</b>		SC
<b>Geography</b>		SC
<b>Industrial Technology</b>		
Automotive Advanced Level Hybrid Diagnostic Technician		SC
Automotive Alternative Fuel Diagnostic Technician		SC
Automotive Basic Hybrid Service Technician		SC
Automotive Service Technology	AS	C
Automotive Light Service Tech		C
Automotive Emission Specialist		C
Automotive Performance Applications		C
Automotive Powertrain Specialist		C
Drafting - Mechanical	AA	
Basic Drafting - Mechanical		SC
Advanced Drafting - Mechanical		SC
Numerical Control Programming	AS	C
Machine Shop Technology		SC
CNC Operator		SC
CNC Programming		SC
Basic Welding		SC
Advanced Welding		SC

<b>Italian</b>	AA	
<b>Journalism</b>	AA	
<b>Latin American Studies</b>	AA	SC
Mexican Studies		SC
<b>Linguistics</b>		SC
<b>Mathematics</b>	AA	
<b>Meteorology</b>		SC
<b>Music</b>	AA	
<b>Nursing</b>	AA	
<b>Photojournalism</b>	AA	SC
<b>Political Science</b>	AA	
<b>Pre-Engineering</b>	AS	
<b>Spanish</b>	AA	SC
Hispanic Studies		SC
Spanish Translation		SC
<b>Speech Communication</b>		
Communication Studies		SC
<b>Theater Arts</b>	AA	
Costume Option	AA	
Technical Theater Option	AA	C
<b>Women's Studies</b>		SC

## Student Responsibility

The suggested sequence of courses in each program is the most desirable to follow; but the order may be changed, if necessary, as long as prerequisites are met. It is the student's responsibility to meet course prerequisites and graduation requirements. The general education and physical education requirements for the Associate Degrees are listed in the "Associate Degree Requirements" section of this catalog.

## Associate Degree Requirements and Procedures

Refer to Page 53 for Associate Degree requirements and procedure for requesting a degree.

## Transfer Students

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

# Addiction Studies

## ADDICTION STUDIES

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

The Addiction Studies Program is designed to provide education and training in the knowledge, skills, and attitudes, (TAP 21), necessary for persons to function effectively and efficiently at all professional hire levels and in all vocational areas and settings in the field of addictive diseases and life style disorders – whether in prevention, intervention, treatment, or recovery – consistent with identified nationally recognized core skills, competencies, standards, ethics and values required in the “professional practice of addiction counseling.”

The Addiction Studies Program meets and exceeds official education requirements of the California Office of Alcohol and Drug Programs, and of all certifying or credentialing organizations. The Addiction Studies Program is accredited by the California Association of Alcohol and Drug Educators (CAADE). Each “advanced counseling skills” three-unit course provides 54 hours of “officially approved” Continuing Education for licensed MFT/LCSW, RN, and certified CATC, CADC I & II, NCAC/MAC, and is required by the California Office of Alcohol and Drug Program regulations to be accepted by “all certifying organizations.” Advanced counseling skills courses: Addiction Studies 11, 14, 15, 17, 18, 19, 20, 21, 22, and 23.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ADDICST 1	Understanding Addiction and Counseling	3
ADDICST 2	Drugs In Perspective: Pharmacology and Physiology	3
ADDICST 4	Addiction Counselor Training	3
ADDICST 5	Group Skills For Addiction Counselors	3
ADDICST 7	Addiction Treatment And Recovery	3
ADDICST 9	Field Work For Addiction Personnel	3
ADDICST 10	Addiction And The Family	3
ADDICST 13	Addictive Diseases & Lifestyle Disorders	3
ADDICST 16	Continuing Recovery: Specific Strategies And Basic Skills	3
ADDICST 91	Field Work For Addiction Personnel	3

MAJOR - ELECTIVE COURSES		UNITS
<b>Select a minimum of three courses (9 semester units) from the following:</b>		9
ADDICST 11	Drinking Driver Programs Personnel Training (3 units)	
ADDICST 14	Addiction And Theories Of Human Development (3 units)	
ADDICST 15	Sociological Aspects Of Addiction (3 units)	
ADDICST 17	Women And Addiction (3 units)	
ADDICST 18	Addiction And Eating Disorders (3 units)	
ADDICST 19	Alcohol And Drug Education And Prevention (3 units)	
ADDICST 20	Domestic Violence Counselor Training (3 units)	
ADDICST 21	Problem Gambling Counselor Training (3 units)	
ADDICST 22	Prevention Specialist Training (3 units)	
ADDICST 23	Batterer's Intervention Facilitator Training (3 units)	

**Select a minimum of one course (3 semester units) from the following:** 3

**ADDICST** 15 (3 units); **ANTHRO** 102 (3 units), 104 (3 units), 109 (3 units), 121 (3 units), 141 (3 units); **CH DEV** 1(3 units), 10 (3 units); **PSYCH** 1 (3 units), 2 (3 units), 3 (3 units), 6 (3 units), 11 (3 units), 13 (3 units), 14 (3 units), 16 (3 units), 32 (3 units), 41 (3 units), 52 (3 units), 60 (3 units), 66 (3 units); **SOC** 1 (3 units), 2 (3 units), 3 (3 units), 8 (3 units), 11 (3 units), 13 (3 units), 15 (3 units), 21 (3 units), 28 (3 units).

**Select a minimum of one course (3 semester units) from the following:** 3

**HISTORY** 11 (3 units), 12 (3 units), 13 (3 units), 14 (3 units), 41 (3 units), 42 (3 units), 43 (3 units), 44 (3 units), 52 (3 units); **POL SCI** 1 (3 units), 19 (3 units), 30 (3 units)

**MAJOR - TOTAL UNITS** 45

#### GENERAL EDUCATION - REQUIRED COURSES

**Students must complete one of the following General Education Plans:**

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## ADDICTION STUDIES

### ■ Certificate of Achievement

CERTIFICATE - REQUIRED COURSES		UNITS
ADDICST 1	Understanding Addiction and Counseling	3
ADDICST 2	Drugs In Perspective: Pharmacology and Physiology	3
ADDICST 4	Addiction Counselor Training	3
ADDICST 5	Group Skills For Addiction Counselors	3
ADDICST 7	Addiction Treatment And Recovery	3
ADDICST 9	Field Work For Addiction Personnel	3
ADDICST 10	Addiction And The Family	3
ADDICST 13	Addictive Diseases & Lifestyle Disorders	3
ADDICST 16	Continuing Recovery: Specific Strategies And Basic Skills	3
ADDICST 91	Field Work For Addiction Personnel	3

**CERTIFICATE - ELECTIVE COURSES** UNITS

**Select a minimum of three courses (9 semester units) from the following:** 9

ADDICST 11	Drinking Driver Programs Personnel Training (3 units)
ADDICST 14	Addiction And Theories Of Human Development (3 units)
ADDICST 15	Sociological Aspects Of Addiction (3 units)
ADDICST 17	Women And Addiction (3 units)
ADDICST 18	Addiction And Eating Disorders (3 units)
ADDICST 19	Alcohol And Drug Education And Prevention (3 units)
ADDICST 20	Domestic Violence Counselor Training (3 units)
ADDICST 21	Problem Gambling Counselor Training (3 units)
ADDICST 22	Prevention Specialist Training (3 units)
ADDICST 23	Batterer's Intervention Facilitator Training (3 units)

**Select a minimum of one course (3 semester units) from the following:** 3

**ADDICST** 15 (3 units); **ANTHRO** 102 (3 units), 104 (3 units), 109 (3 units), 121 (3 units), 141 (3 units); **CH DEV** 1(3 units), 10 (3 units); **PSYCH** 1 (3 units), 2 (3 units), 3 (3 units), 6 (3 units), 11 (3 units), 13 (3 units), 14 (3 units), 16 (3 units), 32 (3 units), 41 (3 units), 52 (3 units), 60 (3 units), 66 (3 units); **SOC** 1 (3 units), 2 (3 units), 3 (3 units), 8 (3 units), 11 (3 units), 13 (3 units), 15 (3 units), 21 (3 units), 28 (3 units).

**Select a minimum of one course (3 semester units) from the following:** 3

**HISTORY** 11 (3 units), 12 (3 units), 13 (3 units), 14 (3 units), 41 (3 units), 42 (3 units), 43 (3 units), 44 (3 units), 52 (3 units); **POL SCI** 1 (3 units), 19 (3 units), 30 (3 units)

**CERTIFICATE - TOTAL UNITS** 45

# Agriculture

## AGRICULTURE BUSINESS

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to offer students the opportunity to earn a degree in Agriculture-Business.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

	UNITS	
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
FINANCE 8	Personal Finance and Investments	3
MARKET 1	Principles of Selling	3
MARKET 21	Principles of Marketing	3
MGMT 13	Small Business Management I	3

Select a minimum of one course (3 semester units) from the following: 3

CAOT 31(3 units), 32 (3 units), 39 (3 units), 55 (3 units), 85 (3 units), 86 (3 units)

#### MAJOR - ELECTIVE COURSES

Select a minimum of 23 semester units from the following: 23

**ANML SC:** 120 (3 units), 180 (2 units), 181 (1-10 units), 302 (2 units), 401 (1 unit), 402 (2 units), 410 (2 units), 411 (1 unit), 412 (2 units), 420 (2 units), 421 (1 unit), 422 (2 units), 423 (1 unit), 430 (2 units), 431 (1 unit), 435 (2 units), 436 (1 unit), 441 (2 units), 460 (2 units), 466 (1 unit), 470 (3 units), 480 (3 units), 501 (3 units), 505 (3 units), 506 (2 units), 510 (3 units), 511 (3 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596 (1-10 units), 601 (3 units), 602 (3 units), 603 (10 units), 615 (1 unit), 616 (2 units), 617 (2 units), 620 (1 unit), 621 (1 unit), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units);  
**PLNT SC** 103 (3 units), 110 (3 units), 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 714 (3 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 ((1 unit), 806 (4 units), 807 (4 units), 808 (3 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 units), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896 C (3 units), 901 (3 units), 942 (2 units), 960 (2 units), 975 (2 units)

**MAJOR - TOTAL UNITS** 46

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## FLORAL DESIGN AND MANAGEMENT

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to prepare a person as a floral designer, flower shop manager or owner. The program has been developed through an advisory committee of floral designers, cut flower business persons, and Pierce College faculty.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

	UNITS	
* PLNT SC 701	Retail Floral Design and Practices I	2
* PLNT SC 702	Retail Floral Design and Practices II	2
* PLNT SC 703	Retail Floral Design and Practices III	2
* PLNT SC 704	Advanced Retail Floral Design and Practices	2
PLNT SC 708A	Floristry Projects	1
PLNT SC 708B	Floristry Projects	2
PLNT SC 708C	Floristry Projects	3

\*These courses must be taken in sequence.

#### MAJOR - ELECTIVE COURSES

Select a minimum of 28 semester units from the following: 28

**ACCTG** 1 (5 units); **ART** 201 (3 units), 501 (3 units); **BUS** 5 (3 units); **MARKET** 21 (3 units); **MGMT** 13 (3 units); **PLNT SC** 711 (4 units), 756 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit)

Other courses may be substituted with prior approval of the Department Chair.

**MAJOR - TOTAL UNITS** 42

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## FLORAL DESIGN AND MANAGEMENT

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This program teaches students the flowers and plants in Southern California used primarily in the florist trade. In laboratory work the student learns corsage making, flower arrangements, funeral offerings, and the use of plastic flowers. Lectures include shop management, buying, and salesmanship. Upon completion of the certificate program, the student is qualified to be employed in a flower shop.

CERTIFICATE - REQUIRED COURSES		UNITS
* PLNT SC 701	Retail Floral Design and Practices I	2
* PLNT SC 702	Retail Floral Design and Practices II	2
* PLNT SC 703	Retail Floral Design and Practices III	2
* PLNT SC 704	Advanced Retail Floral Design and Practices	2
PLNT SC 708A	Floristry Projects	1
PLNT SC 708B	Floristry Projects	2
PLNT SC 708C	Floristry Projects	3

\*These courses must be taken in sequence.

#### CERTIFICATE - ELECTIVE COURSES 16

Select a minimum of 16 semester units from the following:

**ACCTG** 1 (5 units); **ART** 201 (3 units), 501 (3 units); **BUS** 5 (3 units); **MGMT** 13 (3 units); **PLNT SC** 711(4 units), 756 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit)

Other courses may be substituted with prior approval of the Department Chair.

#### CERTIFICATE - TOTAL UNITS 30

## GENERAL AGRICULTURE

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to give students a broad background to prepare them for many different occupations in the field of agriculture and agricultural business.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ANML SC 501	Principles of Animal Science	3
CO SCI 501	Introduction to Computers and Their Uses	3
PLNT SC 103	Introduction to Soils	3
PLNT SC 714	Principles of Horticulture	3
PLNT SC 901	Natural Resources Conservation	3

#### MAJOR - ELECTIVE COURSES

5 MINIMUM

Select a minimum of one course from each group:

**GROUP 1: ANML SC** 120 (3 units), 180 (2 units), 181 (1-10 units); **PLNT SC** 103 (3 units), 110 (3 units)

**GROUP 2: ANML SC** 501 (3 units), 505 (3 units), 506 (2 units), 510 (3 units), 511 (3 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596 (1-10 units)

**GROUP 3: ANML SC** 601 (3 units), 602 (3 units), 603 (10 units), 611 (2 units), 615 (1 unit), 616 (2 units), 617 (2 units), 620 (1 unit), 621 (1 unit), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units)

**GROUP 4: PLNT SC** 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 714 (3 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit)

**GROUP 5: PLNT SC** 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 808 (3 unit), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C(3 units)

Select a minimum of 20 semester units from the courses below: 20

**ANML SC** 120 (3 units), 180 (2 units), 181 (10 units), 302 (2 units), 401 (1 unit), 402 (2 units), 410 (2 units), 411 (1 unit), 412 (2 units), 420 (2 units), 421 (1 unit), 422 (2 units), 423 (1 unit), 430 (2 units), 431 (1 unit), 435 (2 units), 436 (1 unit), 441 (2 units), 460 (2 units), 466 (1 unit), 470 (3 units), 480 (3 units), 505 (3 units), 506 (2 units), 510 (3 units), 511 (3 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596 (10 units), 601 (3 units), 602 (3 units), 603 (10 units), 611 (2 units), 615 (1 unit), 616 (2 units), 617 (2 units), 620 (1 unit), 621 (1 unit), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units); **PLNT SC** 110 (3 units), 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 808 (3 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896 C (3 units), 942 (2 units), 960 (2 units), 975 (3 units)

#### MAJOR - TOTAL UNITS

40 MINIMUM

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

*Plan A: NOT AVAILABLE WITH THIS MAJOR*

Plan B: Pierce Career and Technical GE plan 18 units

Plan C: CSU GE Breadth Certification Plan 39 units

Plan D: IGETC 34-39 units



## GENERAL AGRICULTURE

### ■ Certificate of Achievement

#### CERTIFICATE - REQUIRED COURSES UNITS

ANML SC 501	Principles of Animal Science	3
CO SCI 501	Introduction to Computers and Their Uses	3
PLNT SC 103	Introduction to Soils	3
PLNT SC 714	Principles of Horticulture	3

#### CERTIFICATE - ELECTIVE COURSES

Select a minimum of 6 units from each group below: 12

**GROUP 1: ANML SC 501** (3 units), 505 (3 units), 506 (2 units), 510 (3 units), 511 (3 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596 (10 units)

**GROUP 2: PLNT SC 800** (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 808 (4 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C (3 units)

Select a minimum of 1 course from each group below 2-16

**GROUP 1: ANML SC 601** (3 units), 602 (3 units), 603 (1-10 units), 611 (2 units), 615 (1 unit), 616 (2 units), 617 (2 units), 620 (1 unit), 621 (1 unit), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units)

**GROUP 2: PLNT SC 701** (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 714 (3 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit)

Select a minimum of 3 courses from the list below: 8-13

**ACCTG 1** (5 units), 2 (5 units), 15 (3 units), 17 (2 units); **BUS 1** (3 units), 5 (3 units), 10 (3 units); **FINANCE 1** (3 units), 2 (3 units), 8 (3 units); **INTBUS 1** (3 units), 6 (3 units), 22 (3 units); **MARKET 1** (3 units), 11 (3 units), 21 (3 units), 31 (3 units); **MGMT 2** (3 units), 6 (3 units), 13 (3 units), 31 (3 units), 33 (3 units); **REAL ES 1** (3 units), 3 (3 units); **SUPV 1** (3 units)

**CERTIFICATE - TOTAL UNITS 34 MINIMUM**

## HORSE SCIENCE

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to prepare students for a variety of jobs in the horse industry and is molded around a core of horse science, agriculture, and general education courses. Extensive practical experience and field trips to many horse facilities in and near Los Angeles County complement the academic portion of the program.

Department Subject Advisor: Paddy Warner

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### ENTRY LEVEL - REQUIRED COURSES UNITS

ANML SC 601	Horse Production	3
ANML SC 602	Horse Husbandry	3
PLNT SC 103	Introduction to Soils	3

#### MAJOR - REQUIRED COURSES

ANML SC 501	Principles of Animal Science	3
ANML SC 505	Animal Nutrition	3
ANML SC 510	Animal Health and Disease Control	3
ANML SC 511	Anatomy and Physiology of Animals	3
ANML SC 603A-E	Equine Management Techniques (2 units each)	10
ANML SC 620	Basic Equitation	1
ANML SC 621	Horseback Riding Laboratory	1
ANML SC 630	Beginning Equine Training	2
ANML SC 631	Advanced Equine Training	2
ANML SC 650	Equine Health and First Aid	2

#### MAJOR - ELECTIVE COURSES

Select a minimum of 10 semester units from the following:

**ANML SC 120** (3 units), 180 (2 units), 181 (10 units), 302 (2 units), 401 (1 unit), 402 (2 units), 410 (2 units), 411 (1 unit), 412 (2 units), 420 (2 units), 421 (1 unit), 422 (2 units), 423 (1 unit), 430 (2 units), 431 (1 unit), 435 (2 units), 436 (1 unit), 441 (2 units), 460 (2 units), 466 (1 unit), 470 (3 units), 480 (3 units), 506 (2 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596 (10 units), 615 (1 unit), 616 (2 units), 617 (2 units), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units); **PLNT SC 110** (3 units), 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 714 (3 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 808 (3 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896 C (3 units), 901 (3 units), 942 (2 units), 960 (2 units), 975 (3 units)

**MAJOR - TOTAL UNITS 49**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## HORSE SCIENCE

### ■ Certificate of Achievement

#### CERTIFICATE - REQUIRED COURSES UNITS

ANML SC 501	Principles of Animal Science	3
ANML SC 505	Animal Nutrition	3
ANML SC 510	Animal Health and Disease Control	3
ANML SC 511	Anatomy and Physiology of Animals	3
ANML SC 601	Horse Production	3
ANML SC 602	Horse Husbandry	3
ANML SC 620	Basic Equitation	1
ANML SC 621	Horseback Riding Laboratory	1
ANML SC 630	Beginning Equine Training	2

**CERTIFICATE - ELECTIVE COURSES**

Select a minimum of 6 semester units from the following courses: 6

**ANML SC** 120 (3 units), 180 (2 units), 181 (10 units) 501(3 units), 505 (3 units), 506 (2 units), 510 (3 units), 511 (3 units), 512 (1 unit), 515 (2 units), 516 (1 unit), 530 (2 units), 531 (2 units), 596A (1 unit), 596B (2 units), 596C (3 units), 596D (4 units), 601 (3 units), 602 (3 units), 603A (2 units), 603B (2 units), 603C (2 units), 603D (2 units), 603E (2 units), 615 (1 unit), 616 (2 units), 617 (2 units), 620 (1 unit), 621 (1 unit), 630 (2 units), 631 (2 units), 640 (2 units), 645 (5 units), 650 (2 units);  
**PLNT SC** 103 (3 units), 110 (3 units)

**CERTIFICATE - TOTAL UNITS**

28

**HORTICULTURE – GENERAL**

## ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**ENTRY LEVEL - REQUIRED COURSES**

UNITS

PLNT SC 103	Introduction to Soils	3
PLNT SC 711	Botany for Horticulture	4
PLNT SC 714	Principles of Horticulture	3
PLNT SC 800	Plant Identification and Use I	3
PLNT SC 840	Introduction to Pest Management	3
PLNT SC 896A	Horticulture Projects A	1
PLNT SC 896B	Horticulture Projects B	2
PLNT SC 896C	Horticulture Projects C	3

**MAJOR - REQUIRED COURSES**

PLNT SC 716	Arboriculture I(Care of Trees and Shrubs)	1
PLNT SC 742A	Practicum in Horticulture A	1
PLNT SC 756	Greenhouse Plant Production (3 units)	
	or	
PLNT SC 757	Plant Propagation (3 units)	3
PLNT SC 760	Indoor Plant Care and Maintenance I	1
PLNT SC 808	Residential Landscape Design	3
PLNT SC 812	Landscape Installation and Maintenance I	3

**MAJOR - ELECTIVE COURSES**

Select a minimum of 7 semester units from the following courses: 7

**PLNT SC** 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 711 (4 units), 714 (3 units), 716 (1 unit), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 756 (3 units), 757 (3 units), 760 (1 unit), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 808 (3 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C (3 units)

**MAJOR - TOTAL UNITS**

41

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**GREENHOUSE AND NURSERY INDUSTRY**

## ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**ENTRY LEVEL - REQUIRED COURSES**

UNITS

PLNT SC 103	Introduction to Soils	3
PLNT SC 711	Botany for Horticulture	4
PLNT SC 714	Principles of Horticulture	3
PLNT SC 800	Plant Identification and Use I	3
PLNT SC 840	Introduction to Pest Management	3
PLNT SC 896A	Horticulture Projects A	1
PLNT SC 896B	Horticulture Projects B	2
PLNT SC 896C	Horticulture Projects C	3

**MAJOR - REQUIRED COURSES**

PLNT SC 716	Arboriculture I (Care of Trees and Shrubs)	1
PLNT SC 742B	Practicum in Horticulture B	1
PLNT SC 756	Greenhouse Plant Production	3
PLNT SC 757	Plant Propagation	3
PLNT SC 760	Indoor Plant Care and Maintenance I	1
PLNT SC 808	Residential Landscape Design	3

**MAJOR - ELECTIVE COURSES**

Select a minimum of 10 semester units from the following courses: 10

**PLNT SC** 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C (3 units)

**MAJOR - TOTAL UNITS**

47

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical general education plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

# LANDSCAPE INSTALLATION AND MAINTENANCE INDUSTRY

## ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

ENTRY LEVEL - REQUIRED COURSES		UNITS
PLNT SC 103	Introduction to Soils	3
PLNT SC 711	Botany for Horticulture	4
PLNT SC 714	Principles of Horticulture	3
PLNT SC 800	Plant Identification and Use I	3
PLNT SC 840	Introduction to Pest Management	3
PLNT SC 896A	Horticulture Projects A	1
PLNT SC 896B	Horticulture Projects B	2
PLNT SC 896C	Horticulture Projects C	3

### MAJOR - REQUIRED COURSES

PLNT SC 716	Arboriculture I (Care of Trees and Shrubs)	1
PLNT SC 722	Care of Horticulture Equipment I	1
PLNT SC 808	Residential Landscape Design	3
PLNT SC 812	Landscape Installation and Maintenance I	3
PLNT SC 815	Blueprint Reading and Cost Estimating	2
PLNT SC 818	Basic Construction Techniques	3
PLNT SC 820	Irrigation Design and Installation	3
PLNT SC 822	Turf and Groundcover Management	3

### MAJOR - ELECTIVES COURSES

Select a minimum of 10 semester units from the following courses: 10

PLNT SC 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C (3 units)

**MAJOR - TOTAL UNITS 54**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

# LANDSCAPE PLANNING AND DESIGN

## ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

ENTRY LEVEL - REQUIRED COURSES		UNITS
PLNT SC 103	Introduction to Soils	3
PLNT SC 711	Botany for Horticulture	4
PLNT SC 714	Principles of Horticulture	3
PLNT SC 800	Plant Identification and Use I	3
PLNT SC 840	Introduction to Pest Management	3
PLNT SC 896A	Horticulture Projects A	1
PLNT SC 896B	Horticulture Projects B	2
PLNT SC 896C	Horticulture Projects C	3

### MAJOR - REQUIRED COURSES

PLNT SC 801	Plant Identification and Use II	3
PLNT SC 802	Plant Identification and Use III	3
PLNT SC 806	Landscape Planning and Design	4
PLNT SC 807	Advanced Landscape Planning and Design	4
PLNT SC 812	Landscape Installation and Maintenance I	3
PLNT SC 815	Blueprint Reading and Cost Estimating	2
PLNT SC 818	Basic Construction Techniques	3
PLNT SC 820	Irrigation Design and Installation	3
PLNT SC 822	Turf and Ground Cover Management	3

### MAJOR - ELECTIVES COURSES

Select a minimum of 4 semester units from the following courses: 4

PLNT SC 701 (2 units), 702 (2 units), 703 (2 units), 704 (2 units), 708 (6 units), 721 (1 unit), 722 (1 unit), 724 (1 unit), 725 (1 unit), 729 (3 units), 730 (1 unit), 742 (5 units), 761 (1 unit), 762 (1 unit), 800 (3 units), 801 (3 units), 802 (3 units), 803 (3 units), 804 (1 unit), 805 (1 unit), 806 (4 units), 807 (4 units), 811 (1 unit), 812 (3 units), 813 (3 units), 815 (2 units), 816 (1 unit), 817 (1 unit), 818 (3 units), 819 (3 units), 820 (3 units), 821 (3 units), 822 (3 units), 823 (3 units), 826 (3 units), 840 (3 units), 845 (1 unit), 848 (3 units), 851 (1 unit), 852 (1 unit), 896A (1 unit), 896B (2 units), 896C (3 units)

**MAJOR - TOTAL UNITS 54**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

## HORTICULTURE

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

These programs are designed to prepare a student for employment in the field of horticulture. Individuals are prepared for employment by various private companies in the horticulture industries, governmental agencies, or to become self-employed. These programs may also serve as continuing education for those already employed in some field of horticulture.

Students with a casual interest in horticulture desiring to take classes for information and interest are also accepted. Select from the courses listed below or other courses approved by the department.

#### DEPARTMENT SKILLS CERTIFICATE

#### UNITS

**Gardening (Basic): Select 10 units from the courses listed below. 10**

The Certificate of Gardening (Basic) is a department skills certificate and will not appear on the students' official transcript.

#### CERTIFICATE OF ACHIEVEMENT

Gardening (Advanced): Select 20 units from the courses listed below	20
Landscape Technician (Basic): Select 30 units from the courses listed below	30
Landscape Technician (Advanced): Select 40 units from the courses listed below	40
Professional Gardening: Select 50 units from the courses listed below	50

**PLNT SC 103** (3 units), **701** (2 units), **702** (2 units), **703** (2 units), **704** (2 units), **708** (6 units), **711** (4 units), **714** (3 units), **716** (1 unit), **721** (1 unit), **722** (1 unit), **724** (1 unit), **725** (1 unit), **729** (3 units), **730** (1 unit), **742** (5 units), **756** (3 units), **757** (3 units), **760** (1 unit), **761** (1 unit), **762** (1 unit), **800** (3 units), **801** (3 units), **802** (3 units), **803** (3 units), **804** (1 unit), **805** (1 unit), **806** (4 units), **807** (4 units), **808** (3 units), **811** (1 unit), **812** (3 units), **813** (3 units), **815** (2 units), **816** (1 unit), **817** (1 unit), **818** (3 units), **819** (3 units), **820** (3 units), **821** (3 units), **822** (3 units), **823** (3 units), **826** (3 units), **840** (3 units), **845** (1 unit), **848** (3 units), **851** (1 unit), **852** (1 unit), **896** (6 units)

## PRE-VETERINARY MEDICINE

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

The Pierce College Pre-Veterinary Program has articulation agreements with UC Davis School of Veterinary Medicine and several other colleges across the nation. This agreement allows our pre-veterinary students to apply directly into the graduate veterinary school after completing an AS degree and taking upper division genetics at another college/university. Work with licensed veterinarians is required for admission to Veterinary school, so that students understand the duties and responsibilities of a practitioner. The average student accepted into graduate veterinary schools complete between 2,000-4,000 hours of animal, veterinary and biomedical experience prior to being admitted. Experience should include work with large and small animals and a variety of species. Agriculture classes at Pierce College with corresponding laboratory sections are appropriate ways to gain experience even though many are not UC transferable for credit. We encourage pre-veterinary students to get involved in the laboratory classes with veterinary technology students.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

*Department Subject Advisor: Dr. Lee Shapiro*

#### MAJOR - REQUIRED COURSES

#### UNITS

<sup>1</sup> ANML SC 120	Ethical Issues of Using Animals	3
ANML SC 181	Veterinary Field Work	3
ANML SC 401	Orientation to Veterinary Science	1
ANML SC 501	Principles of Animal Science	3
<sup>2</sup> ANML SC 505	Animal Nutrition	3
ANML SC 511	Animal Anatomy and Physiology	3
ANML SC 512	Animal Anatomy and Physiology Laboratory	1
BIOLOGY 6	General Biology 1 (Prerequisite college chemistry with lab)	5
BIOLOGY 7	General Biology 2	5
CHEM 101	General Chemistry I	5
CHEM 102	General Chemistry II	5
CHEM 211	Organic Chemistry for Science Majors	5
CHEM. 212	Organic Chemistry for Science Majors II	5
CHEM 221	Biochemistry	5
ENGLISH 101	College Reading and Composition I	3
ENGLISH 102	College Reading and Composition II	3
ENGLISH 103	Composition and Critical Thinking	3
MATH 227	Statistics	4
MICRO 1	Introduction to Microbiology	5
PHYSICS 6	General Physics I	4
PHYSICS 7	General Physics II (Prerequisite Trigonometry)	4
PHYSIOL 1	Introduction to Human Physiology 1	4



**PRE-VETERINARY EXPERIENTIAL TRAINING**

Select two courses (minimum 3 semester units) from the following  
 One course must be a lecture and one course must be a lab: 3

ANML SC 410	Animal Nursing I (2 units)
ANML SC 411	Animal Nursing I Laboratory (1 unit)
ANML SC 420	Clinical Procedures in Animal Care I (2 units)
ANML SC 421	Clinical Procedures in Animal Care I Laboratory (1 unit)
ANML SC 430	Veterinary Clinical Pathology (2 units) and
ANML SC 431	Veterinary Clinical Pathology Lab (1 unit)
ANML SC 435	Veterinary Radiography (2 units)
ANML SC 436	Veterinary Radiography Lab (1 unit)
<sup>3</sup> ANML SC 441	Large Animal Nursing Laboratory (2 units)
ANML SC 506	Urban Farm Animal Health Techniques (2 units)
ANML SC 515	Applied Animal Reproduction (2 units)
ANML SC 516	Artificial Insemination Laboratory (1 unit)
ANML SC 530	Poultry Production (2 units)
ANML SC 531	Poultry Production Lab (2 units)
ANML SC 603	Equine Management Techniques (2 units)
ANML SC 650	Equine Health and First Aid (2 units)

The Pierce Agriculture Department also offers electives for those veterinary science students who wish to develop particular areas of interest or for anyone who wants to enhance his or her knowledge of animals.

**ELECTIVES (OPTIONAL)**

ANML SC 450	Introduction to Animal Facilitated Therapy (1 unit)
ANML SC 460	First Aid for Companion Animals (2 units)
ANML SC 466	Avian Care and Husbandry (1 unit)
ANML SC 596	Agricultural Enterprise Projects (10 units)
ANML SC 601	Horse Production (3 units)
ANML SC 602	Horse Husbandry (3 units)
ANML SC 603	Equine Management Techniques (10 units)
ANML SC 650	Equine Health and First Aid (2 units)

**MAJOR - TOTAL UNITS** 85

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

<sup>1</sup>Offered Spring semester of even numbered years only

<sup>2</sup>Offered Fall semester only

<sup>3</sup>Strongly recommended for all students



**VETERINARY TECHNOLOGY**

■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

Department Subject Advisor: Elizabeth White

Earning an AS degree in Veterinary Technology from Pierce College qualifies a student to sit for the national and state board exams. The comprehensive scope of the Veterinary Technology major provides the student with the skills and knowledge necessary for employment as a Registered Veterinary Technician in many different capacities and settings. The curriculum integrates lecture classes with hands-on lab classes and outside clinical experiences, and meets or exceeds all American Veterinary Medical Association standards. Students are given ample opportunity to work with a wide variety of domestic animals here on campus. The coursework is separated into three categories: prerequisites, general education and advanced classes.

Prior to being permitted to enroll in advanced level classes, students must complete all prerequisites and submit an application to the RVT Program Director. Students must earn at least a "C" in all categories of classes. The coursework can be completed in two years, (including summer sessions), but most students take longer to complete the program.

The Veterinary Technology Major is accredited by the American Veterinary Medical Association. Academic counseling is strongly recommended prior to starting the RVT program.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**ENTRY LEVEL REQUIREMENTS**

	UNITS	
ANML SC 180	Animal Care Experience	2
ANML SC 181A	Field Work	1
ANML SC 401	Intro to Vet Tech	1
ANML SC 501	Principles of Animal Science	3
ANML SC 510	Animal Health & Disease Control	3
ANML SC 511	Anatomy and Physiology of Animals	3
ANML SC 512	Anatomy/Physiology of Animals Laboratory	1
BIOLOGY 3	Introduction to Biology	4
CAOT 82	Microcomputer Software Survey (3 units)	3
	Or	
CO SCI 501	Personal Computer Application Software (3 units)	3
CHEM 51	Fundamentals of Chemistry 1	5
ENGLISH 101	College Reading & Comprehension	3
MICRO 20	General Microbiology	4

ADVANCED VETERINARY TECHNOLOGY CLASSES		UNITS
ANML SC 402	Topics in Veterinary Technology	2
ANML SC 410	Small Animal Nursing I	2
ANML SC 411	Small Animal Nursing I Lab	1
ANML SC 412	Small Animal Nursing II	2
ANML SC 413	Small Animal Nursing II Lab	1
ANML SC 420	Clinical Procedures I	2
ANML SC 421	Clinical Procedures I Lab	1
ANML SC 422	Clinical Procedures II	2
ANML SC 423	Clinical Procedures II Lab	1
ANML SC 430	Clinical Pathology	2
ANML SC 431	Clinical Pathology Lab	1
ANML SC 435	Veterinary Radiography	2
ANML SC 436	Veterinary Radiography Lab	1
ANML SC 441	Large Animal Nursing	2
ANML SC 470	Laboratory Animal Care	2
ANML SC 480	Clinical Experience for Vet Techs	6
<b>MAJOR - TOTAL UNITS</b>		<b>63</b>

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

NOTE: Students enrolled in advanced level veterinary technology classes must participate in daily kennel duty, including weekends.

## American Sign Language

### AMERICAN SIGN LANGUAGE/ INTERPRETING PROGRAM

#### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

Prerequisites: ASL 1 and 2;

Advisory: ASL 101A and 101B.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

### PROGRAM INFORMATION

This program is designed to prepare for a career in interpreting for deaf and hearing people. Students will be trained in the various aspects of interpreting and upon completion of the program should be prepared to work in the field. As an interpreter one will function as a facilitator between the deaf person and the hearing person.

MAJOR - REQUIRED COURSES		UNITS
ANTHRO 104	Human Language and Communication	3
A S L 3	American Sign Language III	4
A S L 4	American Sign Language IV	4
A S L 5	Introduction to Interpreting	3
A S L 6	English-to-Sign Interpreting/Transliterating	4
A S L 10	Sign-to-English Interpreting/Transliterating	4
A S L 16	Creative Signing	2
A S L 22	Professional Issues and Practice I	2
A S L 23	Professional Issues and Practice II	2
A S L 30	Fingerspelling I	1
A S L 31	Fingerspelling II	1
A S L 40	Introduction to Deaf Culture	3
A S L 55	Interpreting	4
A S L 65	Transliterating	4
<sup>1</sup> A S L 101C	American Sign Language Lab	1
A S L 101D	American Sign Language Lab	1
ENGLISH 101	College Reading and Composition I	3
SPEECH 121	The Process of Interpersonal Communication (3 units)	
	Or	
SPEECH 101	Oral Communication I (3 units)	3
<b>MAJOR - TOTAL UNITS</b>		<b>49</b>

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

<sup>1</sup> Required for ASL/Interpreting majors; optional for non-majors..

## Archaeology

### ARCHAEOLOGY Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

This certificate provides an introduction to archaeological theory and hands-on experience with analytical strategies and field methods. Students will have sufficient training to participate in archaeological research programs

REQUIRED COURSES		UNITS
ANTHRO 105	Prehistoric Peoples	3
ANTHRO 106	Introduction to Archaeology	4
ANTHRO 113	Field Archaeology	3
ANTHRO 185	Directed Study	1

Select a minimum of 4 semester units from the following:		UNITS
ANTHRO 115	Prehistoric Technology	3
ANTHRO 141	Culture, Illness & Healing	3
ANTHRO 132	Native Peoples of North America	3
ANTHRO 119	Introduction to Forensic Anthropology	2
GIS 31	Introduction to Geographic Information System	3
GEOLOGY 1	Physical Geology	3
GEOLOGY 6	Physical Geology Laboratory	2
LIB SCI 102	Internet Research Methods	1

**CERTIFICATE – TOTAL UNITS 15-17**  
**(A MINIMUM OF 10 UNITS MUST BE COMPLETED AT PIERCE COLLEGE)**

# Anthropology

## ANTHROPOLOGY

### Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

This certificate is granted by the Department of Anthropological and Geographical Sciences to students who have completed a program of introductory courses in general anthropology.

REQUIRED COURSES		UNITS
Anthro 101	Human Biological Evolution	3
Anthro 102	Human Ways of Life: Cultural Anthropology	3

Select a minimum of 8 semester units from the following:

Anthro 104	Human Biological Evolution	3
	Or	
Ling 1	Introduction to Language and Linguistics	3
Anthro 105	Prehistoric Peoples	3
Anthro 106	Introduction to Archaeology	4
Anthro 109	Gender, Sex and Culture	3
Anthro 111	Laboratory in Human Biological Evolution	2
Anthro 119	An Introduction to Forensic Anthropology	2
Anthro 121	Anthropology of Religion, Magic & Witchcraft	3
Anthro 132	Native Peoples of North America	3
Anthro 141	Culture, Illness and Healing	3
Anthro 150	Current Topics in Anthropology	1-3

**CERTIFICATE - TOTAL UNITS 14**

# Architecture

## ARCHITECTURE TECHNOLOGY

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to prepare students interested in obtaining employment as architectural technicians or transferring to schools of Architecture. The program has been developed through an advisory committee of architects, technicians, contractors, and Pierce College faculty.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ARC 110	Introduction to Architecture	1
ARC 111	Methods of Construction	2
ARC 121	Freehand Drawing I	2
ARC 151	Materials of Construction	3
ARC 152	Equipment of Buildings	3
ARC 162	Computer Aided Design and Drafting	3
ARC 172	Architectural Drawing I	3
ARC 173	Architectural Drawing II	3
ARC 201	Basic Architectural Design I	3
ARC 202	Basic Architectural Design II	3
ARC 221	Architectural Rendering	2
ARC 271	Architectural Drawing III	3
ARC 272	Architectural Drawing IV	3
ENV 101	Elements of Architecture	3
MATH 125	Intermediate Algebra	5

**MAJOR - TOTAL UNITS 42**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

Note: CA State Polytechnic Universities, San Luis Obispo and Pomona offer degrees in Architecture and Planning. See a counselor or department advisor for further information.

## ARCHITECTURE TECHNOLOGY

### ■ Certificate of Achievement

CERTIFICATE - REQUIRED COURSES		UNITS
ARC 110	Introduction to Architecture	1
ARC 111	Methods of Construction	2
ARC 121	Freehand Drawing I	2
ARC 151	Materials of Construction	3
ARC 152	Equipment of Buildings	3
ARC 162	Computer Aided Design and Drafting	3
ARC 172	Architectural Drawing I	3
ARC 173	Architectural Drawing II	3
ARC 201	Basic Architectural Design I	3
ARC 202	Basic Architectural Design II	3
ARC 221	Architectural Rendering	2
ARC 271	Architectural Drawing III	3
ENV 101	Elements of Architecture	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>34</b>

## Art

### ART

#### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### PROGRAM INFORMATION

This degree is designed to provide students with a broad depth of exposure to the Art discipline.

MAJOR - REQUIRED COURSES		UNITS
ART 101	Survey of Art History I	3
ART 102	Survey of Art History II	3
ART 201	Drawing I	3
ART 202	Drawing II	3
ART 204	Life Drawing I	3
ART 300	Introduction to Painting (3 units)	3
	Or	
ART 307	Oil Painting I (3 units)	3
ART 501	Beginning Two-Dimensional Design	3
ART 502	Beginning Three-Dimensional Design	3
ART 503	Intermediate Design	3
ART 700	Introduction to Sculpture	3
ART 708	Introduction to Ceramics	3
<b>MAJOR - TOTAL UNITS</b>		<b>33</b>

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## CERAMICS

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This degree is designed for students wishing to study ceramics.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ART 101	Survey of Art History I	3
ART 102	Survey of Art History II	3
ART 201	Drawing I	3
ART 202	Drawing II	3
ART 501	Beginning Two-Dimensional Design	3
ART 502	Beginning Three-Dimensional Design	3
ART 700	Introduction to Sculpture	3
ART 708	Introduction to Ceramics	3
ART 709	Ceramics I	3
ART 710	Ceramics II	3
ART 711	Ceramics III	3
<b>MAJOR - TOTAL UNITS</b>		<b>33</b>

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

# SCULPTURE

## ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

This degree is for students majoring in Sculpting.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ART 101	Survey of Art History I	3
ART 102	Survey of Art History II	3
ART 201	Drawing I	3
ART 202	Drawing II	3
ART 204	Life Drawing I	3
ART 501	Beginning Two-Dimensional Design	3
ART 502	Beginning Three-Dimensional Design	3
ART 700	Introduction to Sculpture	3
ART 701	Sculpture I	3
ART 702	Sculpture II	3
ART 703	Sculpture III	3

**MAJOR - TOTAL UNITS 33**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

- Plan A: General Studies general education plan 30 units
- Plan B: *NOT AVAILABLE WITH THIS MAJOR*
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

# DRAWING

## ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

This degree is for students majoring in Drawing.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ART 101	Survey of Art History I	3
ART 102	Survey of Art History II	3
ART 201	Drawing I	3
ART 202	Drawing II	3
ART 203	Drawing III	3
ART 204	Life Drawing I	3
ART 205	Life Drawing II	3
ART 206	Life Drawing III	3
ART 207	Life Drawing IV	3
ART 300	Introduction to Painting (3 units)	
	Or	
ART 307	Oil Painting I (3 units)	3
ART 501	Beginning Two-Dimensional Design	3
ART 502	Beginning Three-Dimensional Design	3
ART 503	Intermediate Design	3

**MAJOR - TOTAL UNITS 39**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

- Plan A: *NOT AVAILABLE WITH THIS MAJOR*
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

# PAINTING

## ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

This degree is for students majoring in Painting.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ART 101	Survey of Art History I	3
ART 102	Survey of Art History II	3
ART 201	Drawing I	3
ART 202	Drawing II	3
ART 203	Drawing III	3
ART 204	Life Drawing I	3
ART 205	Life Drawing II	3
ART 206	Life Drawing III	3
ART 207	Life Drawing IV	3
ART 300	Introduction to Painting (3 units)	3
	Or	
ART 307	Oil Painting I (3 units)	
ART 308	Oil Painting II	3
ART 309	Oil Painting III	3
ART 501	Beginning Two-Dimensional Design	3
ART 502	Beginning Three-Dimensional Design	3
ART 503	Intermediate Design	3

**MAJOR - TOTAL UNITS 45**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**GRAPHIC DESIGN**

## ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

This program is planned for students who expect to make advertising art or graphic design their vocation.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**MAJOR - REQUIRED COURSES**

		UNITS
ART 103	Art Appreciation I	3
ART 201	Drawing I	3
ART 501	Beginning Two-Dimensional Design	3
ART 604	Graphic Design I	3
ART 605	Graphic Design II	3
ART 620	Illustration I	3
ART 606	Graphic Design III	3
ART 621	Illustration II	3
ART 617	Graphic Communications IV	3
ART 622	Illustration for the Graphic Designer	3

**MAJOR - ELECTIVE COURSES**

Select a minimum of 2 courses (6 semester units) from the following 6

ART 204	Life Drawing I (3 units)
ART 300	Introduction to Painting (3 units)
ART 502	Beginning Three-Dimensional Design (3 units)

**MAJOR - TOTAL UNITS 36**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**GRAPHIC DESIGN**

## ■ Certificate of Achievement

**PROGRAM INFORMATION**

This program provides specialized training in Graphic Design for employment.

**CERTIFICATE - REQUIRED COURSES**

		UNITS
ART 201	Drawing I	3
ART 501	2D Design	3
ART 502	3D Design	3
ART 503	Intermediate Design	3
ART 604	Graphic Design I	3
ART 605	Graphic Design II	3
ART 606	Graphic Design III	3
ART 615	Graphic Communications II	4
ART 616	Graphic Communications III	4
ART 617	Graphic Communications IV	4
ART 620	Illustration I	3
ART 621	Illustration II	3
ART 622	Illustration for the Graphic Designer	3
ART 650	Graphic Design for the World Wide Web	3
ART 651	Animation for Web	3

**CERTIFICATE - TOTAL UNITS 48**

**GRAPHIC DESIGN FOR THE WEB**

## ■ Certificate of Achievement

This certificate is planned for students who expect to start a career in graphic design with a specialty in web design. Satisfactory completion of courses below leads to a certificate of achievement in Graphic Design for the Web.

**CERTIFICATE - REQUIRED COURSES**

		UNITS
ART 501	Beginning Two-Dimensional Design	3
ART 604	Graphic Design I	3
ART 605	Graphic Design II	3
ART 650	Graphic Design for the World Wide Web	3
ART 651	Animation for the Web	3

**CERTIFICATE - TOTAL UNITS 15**



# Business Administration

## ACCOUNTING

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to prepare a student for entry into the business community as an accounting clerk or a middle-management trainee. It will provide the educational background for preparing the student to fulfill the needs of business in maintaining records, financial controls, and preparing informational reports for management decision-making processes and for governmental requirements. Typical Positions: bookkeeper, accounting clerk, assistant auditor, financial analyst, and proprietor.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
ACCTG 15	Tax Accounting I	3
ACCTG 17	Payroll Accounting	2
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
CAOT 32	Business Communications	3
CAOT 78	Microcomputer Accounting Applications for the Electronic Office	3
FINANCE 1	Principles of Finance	3
MGMT 13	Small Business Management I	3

#### MAJOR - ELECTIVE COURSES

Select a minimum of 15 semester units from the following		15
BUS 10	Fundamentals of Tax Return Preparation (3 units)	
COOP ED 195	Work Experience (1-4 units)	
FINANCE 2	Investments (3 units)	
FINANCE 8	Personal Finance (3 units)	
INTBUS 1	International Trade (3 units)	
MARKET 1	Principles of Selling (3 units)	
MARKET 21	Principles of Marketing (3 units)	
MGMT 2	Organization and Management Theory (3 units)	
MGMT 33	Personnel Management (3 units)	
SUPV 1	Elements of Supervision (3 units)	

**MAJOR - TOTAL UNITS** 48

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

<sup>1</sup>Volunteer Income Tax Assistance course.

### Learning Outcomes

Upon completion of this degree program, a student should be able to:

- Describe the major parts of an accounting system and explain the role of journals and ledgers within it.
- Apply transaction analysis and input transactions into an accounting system.
- Explain how managers use accounting information in decision making and planning.
- Classify an individual's tax data into the components of an individual tax return.
- Describe the major characteristics of organization's payroll system.

## PAYROLL ACCOUNTING

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate prepares students for basic entry-level bookkeeping and other support positions in payroll administration. Courses offer exposure to relevant computer applications. All of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Accounting, and most are UC:CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
ACCTG 17	Payroll Accounting	2
BUS 1	Introduction to Business	3

**CERTIFICATE - TOTAL UNITS** 15

### Learning Outcomes

Upon successful completion of this skills certificate, students will be able to:

- Analyze the difference between Federal and State Payroll Laws.
- Diagram a basic payroll process for an organization.
- Enumerate and explain how the payroll function fits into an organization's accounting system.



## SMALL BUSINESS ACCOUNTING

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate prepares students for basic entry-level bookkeeping and other support positions in small and medium sized businesses. Courses offer exposure to relevant computer applications. All of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Accounting, and most are UC:CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
BUS 1	Introduction to Business (3 units)	
	Or	
MGMT 13	Small Business Management I (3 units)	3
CAOT 78	Microcomputer Accounting Applications for the Electronic Office	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>16</b>

### Learning Outcomes

Upon successful completion of this skills certificate, students will be able to:

- Describe the use of the microcomputer in the bookkeeping and accounting functions of a business.
- Describe how accounting fits into a business plan.
- Construct a chart demonstrating the steps in the accounting process.

## TAX PREPARATION

### ■ Certificate of Achievement<sup>1</sup>

#### PROGRAM INFORMATION

This certificate prepares students for basic entry-level bookkeeping and other support positions in the tax preparation industry. Courses offer exposure to relevant computer applications. Most of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Accounting, and most are UC:CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
ACCTG 15	Tax Accounting I (3 units)	3
	Or	
BUS 10	Fundamentals of Tax Return Preparation (3 units)	
BUS 1	Introduction to Business	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>16</b>

<sup>1</sup>Volunteer Income Tax Assistance course

### Learning Outcomes

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

- Classify an individual's tax data into the components of the individual tax system.
- Demonstrate the process of preparing an individual's tax return.
- Explain how tax accounting fits into an accounting system.

## FINANCE

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate prepares students for basic entry-level positions in the financial services industry, including banking, insurance, brokerage and real estate. Each course offers exposure to relevant computer applications. Many of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration, and all are CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
FINANCE 1	Principles of Finance	3
FINANCE 2	Investments	3
FINANCE 8	Personal Finance	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>17</b>

### Learning Outcomes

Upon successful completion of this skills certificate program, students will be able to:

- Develop personal financial plans.
- Evaluate standard investment vehicles with respect to current economic conditions and long term prospects.
- Demonstrate and integrate computer literacy within the framework of finance.

## GENERAL BUSINESS

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to provide a broad formal business education for those students thinking of starting their own business. It provides great latitude in course selection to allow students to tailor the program to their goals.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
CAOT 32	Business Communications	3
CAOT 82	Microcomputer Software Survey in the Office	3
MARKET 1	Principles of Selling	3
MARKET 11	Fundamentals of Advertising	3
MARKET 21	Principles of Marketing	3
MGMT 2	Organization and Management Theory	3
MGMT 13	Small Business Management I	3

MAJOR - REQUIRED COURSES		
<b>Select a minimum of 15 semester units from the following</b>		<b>15</b>
ACCTG 2	Introductory Accounting II (5 units)	
FINANCE 1	Principles of Finance (3 units)	
FINANCE 2	Investments (3 units)	
FINANCE 8	Personal Finance (3 units)	
INTBUS 1	International Trade (3 units)	
MARKET 31	Retail Merchandising (3 units)	
MGMT 31	Human Relations for Employees (3 units)	
MGMT 33	Personnel Management (3 units)	
PUB REL 1	Public Relations (3 units)	
REAL ES 1	Real Estate Principles (3 units)	
SUPV 1	Elements of Supervision (3 units)	

**MAJOR - TOTAL UNITS** **47**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

- Upon completion of this degree program, a student should be able to:*
- Describe the three major forms of business ownership and the advantages and disadvantages of each one.
  - Demonstrate how the integration of technology into an organization can affect the success of a business.
  - Describe the basic management functions.
  - Outline the components of the two major financial statements.

## GENERAL BUSINESS

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate prepares students for entry-level employment and offers other majors a basic preparation in business administration. Courses offer exposure to relevant computer applications. All of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration, and all are CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
MARKET 1	Principles of Selling (3 units)	3
	Or	
MARKET 21	Principles of Marketing (3 units)	
MGMT 2	Organization and Management Theory (3 units)	3
	Or	
MGMT 13	Small Business Management I (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>17</b>

### Learning Outcomes

*Upon successful completion of this skills certificate program, students will be able to:*

- Analyze a contract to determine if it is valid.
- Analyze the basic forms of business ownership.
- Describe the role of the marketing function in the success of a business.



## INSURANCE

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate is designed to prepare students for entry-level positions in the insurance industry. These positions include appraiser, agent, customer service, administrative assistant, sales representative, and underwriting. Coursework required for the certificate is intended to help prepare students for insurance certifications as well.

CERTIFICATE - REQUIRED COURSES		UNITS
INSURANCE 101	Principles of Property and Liability Insurance	3
INSURANCE 102	Personal Insurance	3
INSURANCE 103	Commercial Insurance	3
<b>Plus 6 additional units from:</b>		<b>6</b>
BUS 5	Business Law (3 units)	
CAOT 32	Business Communications (3 units)	
CAOT 82	Microcomputer Software Survey in the Office (3 units)	
MARKET 1	Principles of Selling (3 units)	
MARKET 21	(3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

### Learning Outcomes

Upon successful completion of this skills certificate program, students will be able to:

- Describe the basic components of insurance policies.
- Analyze and describe how the insurance industry is regulated
- Analyze the function of the different types of insurers

## INTERNATIONAL BUSINESS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

The Pierce College Business Administration Department International Certificate Program is designed to enable the student to function in many types of international jobs within a reasonable amount of time by offering courses with immediate practical value.

CERTIFICATE - REQUIRED COURSES		UNITS
BUS 1	Introduction to Business	3
GEOG 2	Cultural Elements of Geography	3
INTBUS 1	Introduction to International Trade	3
INTBUS 6	International Marketing	3
INTBUS 18	Basics of Exporting	1
INTBUS 19	Basics of Importing	1
INTBUS 22	International Management	3
MARKET 21	Principles of Marketing	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>20</b>

### Learning Outcomes

Upon successful completion of this certificate program, students will be able to:

- Explain basic trade theory and the foreign currency markets.
- Design a marketing plan for consumer and industrial products in the global marketplace.
- Apply important U.S. Government export and import regulations to traded goods and correctly use export and import documentation.

## INTERNATIONAL TRADE

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate is designed to introduce students to basic business concepts as well as the area of international business. This certificate is the first part of our state recognized International Business Certificate Program.

CERTIFICATE - REQUIRED COURSES		UNITS
BUS 1	Introduction to Business	3
INTBUS 1	Introduction to International Trade	3
INTBUS 22	International Management	3
MARKET 21	Principles of Marketing	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>12</b>

### Learning Outcomes

Upon successful completion of this skills certificate, students will be able to:

- Explain basic trade theory and the foreign currency markets.
- Apply US government export and import regulations to exported and imported products.

## MANAGEMENT AND SUPERVISION

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to meet the needs of 1) employed persons desiring to prepare for supervisory positions, and 2) supervisors and other management personnel who wish to gain knowledge which will enable them either to perform their duties more effectively or to advance to more responsible positions. This course of study was developed with the assistance of our Business Advisory Committee. Those courses applied towards the Certificates of Achievement are also applicable for this Degree. Typical Positions: Various supervisory and managerial positions in the industrial and commercial community.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
CAOT 32	Business Communications	3
CAOT 82	Microcomputer Software Survey in the Office	3
MARKET 21	Principles of Marketing	3
MGMT 2	Organization and Management Theory	3
MGMT 31	Human Relations for Employees	3
MGMT 33	Personnel Management	3

**MAJOR - ELECTIVE COURSES:**

<b>Select a minimum of 12 units from the following courses</b>		<b>12</b>
ACCTG 2	Introductory Accounting II (5 units)	
FINANCE 1	Principles of Finance (3 units)	
FINANCE 2	Investments (3 units)	
FINANCE 8	Personal Finance (3 units)	
INTBUS 1	International Trade (3 units)	
INTBUS 6	International Marketing (3 units)	
INTBUS 22	International Management (3 units)	
MARKET 1	Principles of Selling (3 units)	
MGMT 13	Small Business Management I (3 units)	
PUB REL 1	Public Relations (3 units)	
SUPV 1	Elements of Supervision (3 units)	

**MAJOR - TOTAL UNITS** **41**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

**Learning Outcomes**

*Upon completion of this degree program, a student should be able to:*

- Explain the importance of managing in today's business environment and the necessary skills needed by effective managers.
- Analyze a company's strengths and weaknesses against the opportunities and threats in the outside environment.
- Develop a planning and decision making process.
- Apply critical thinking, team building, and problem solving skills.
- Apply the primary United States laws and regulations that a manager must understand.
- Outline the components of the communication process.

**MANAGEMENT**

■ **Department Skills Certificate**

Department skill certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate prepares students for first level management jobs, support positions in personnel management, and positions in any firm utilizing selfmanaged teams. Courses offer exposure to relevant computer applications. Many of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Management, and all are CSU transferable

<b>CERTIFICATE - REQUIRED COURSES</b>		<b>UNITS</b>
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
MGMT 2	Organization and Management Theory	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
MGMT 31	Human Relations for Employees (3 units)	
MGMT 33	Personnel Management (3 units)	
<hr/>		
PUB REL 1	Public Relations (3 units)	
SUPV 1	Elements of Supervision (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>17</b>

**Learning Outcomes**

*Upon successful completion of this skills certificate program, students will be able to:*

- Explain the importance of managing in today's business environment and the necessary skills and goals of effective managers.
- Analyze a company's strengths and weaknesses, and internal culture against the opportunities and threats in the outside environment.
- Develop a planning and decision making process.

**SMALL BUSINESS ENTREPRENEUR**

■ **Department Skills Certificate**

Department skill certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate prepares students who intend to open and operate their own small business or accept a management position in a small business. Courses offer exposure to relevant computer applications. All of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Management, and all are CSU transferable.

<b>CERTIFICATE - REQUIRED COURSES</b>		<b>UNITS</b>
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
MARKET 1	Principles of Selling	3
MGMT 13	Small Business Management I	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>17</b>

**Learning Outcomes**

*Upon successful completion of this skills certificate, students will be able to:*

- Analyze the major issues involved in managing a small business.
- Illustrate the major characteristics of the three basic forms of business ownership.
- Develop a business plan that includes; marketing, finance, and management components.



## RETAIL MANAGEMENT

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

The retail management certificate will result in two awards: one certificate issued by the Business Administration Department and another industry certificate issued by the Western Association of Food Chains. This curriculum prepares students for careers as managers in various retail sectors.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
CAOT 31	Business English	3
CAOT 85	Microcomputer Office Applications Spreadsheet	3
MARKET 21	Principles of Marketing	3
MARKET 31	Retail Merchandising	3
MATH 115	Elementary Algebra	5
MGMT 2	Organization and Management Theory	3
MGMT 31	Human Relations for Employees	3
MGMT 33	Personnel Management	3
SPEECH 101	Oral Communication I	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>34</b>

### Learning Outcomes

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

- Enumerate and describe where retailing fits into the process of marketing a product.
- Analyze a retail business operation.
- Construct a basic merchandising plan.

## MARKETING

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program was developed to prepare students to enter the broad area of marketing for the business enterprise. Upon successful completion of this program, the student has a background in the principles and practices involved in the distribution of products and services from producers through middlemen to the ultimate consumer. Career opportunities include sales, public relations, purchasing, and management. Typical positions: Retail, wholesale and industrial sales; buyer; merchandising supervision; proprietor.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
BUS 5	Business Law I	3
CAOT 32	Business Communications	3
CAOT 82	Microcomputer Software Survey in the Office	3
MARKET 1	Principles of Selling	3
MARKET 11	Fundamentals of Advertising	3
MARKET 21	Principles of Marketing	3
MGMT 13	Small Business Management I	3
PUB REL 1	Public Relations	3

MAJOR - ELECTIVE COURSES (15 UNITS MINIMUM)		15
COOP ED 195	Work Experience (1-4 units)	
INTBUS 1	International Trade (3 units)	
INTBUS 6	International Marketing (3 units)	
MARKET 31	Retail Merchandising (3 units)	
MGMT 2	Organization and Management Theory (3 units)	
MGMT 31	Human Relations for Employees (3 units)	
SUPV 1	Elements of Supervision (3 units)	

**MAJOR - TOTAL UNITS** 47

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

Upon completion of this degree program, a student should be able to:

- Analyze the business activities of an organization and determine which of them is part of the marketing mix.
- Create and construct a marketing plan for an organization, product, or event.
- Develop an advertising campaign for a product, event, or an organization.
- Recognize and describe the components of the communication process.
- Diagram the process of marketing a product.



# MARKETING

## ■ Certificate of Achievement

### PROGRAM INFORMATION

This certificate prepares students for basic entry-level positions in sales, retailing, and other aspects of marketing. Courses offer exposure to relevant computer applications. All of these courses may be used to apply toward the fulfillment of the Associate in Arts Degree in Business Administration - Marketing, and most are CSU transferable.

CERTIFICATE - REQUIRED COURSES		UNITS
BUS 1	Introduction to Business	3
MARKET 1	Principles of Selling	3
MARKET 11	Fundamentals of Advertising	3
MARKET 21	Principles of Marketing	3
INTBUS 6	International Marketing (3 units)	3
	Or	
PUB REL 1	Public Relations (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

### Learning Outcomes

Upon successful completion of this certificate program, students will be able to:

- Research and construct a promotional plan for an event, a product or an organization.
- Prepare and deliver a sales presentation utilizing the consultative selling skills approach.
- Diagram the process of marketing a product.

# Child Development

The Child Development Program offers the student several options. Completion of each program leads to an occupational certificate, transfer option and/or Associate of Arts degree. All child development classes are applicable to the State Child Development Permit. The Child Development Program is planned to meet the needs of those students wishing to prepare for employment or who are presently employed in the field of Early Childhood Education. The curriculum prepares students to teach in programs for young children, which include: Private, Parent-Cooperative, Head Start, Children's Centers, and Infant or School-age Programs. Each student should analyze these programs for their differences as well similarities before choosing a specific option. Students with background in Child Development are able to pursue professional opportunities in both educational and business fields.

Child Development website: <http://info.piercecollege.edu/departments/childdev/>

## ■ Associate of Arts Degree

### PATHWAY TO BACHELOR'S DEGREE

Students who complete this AA degree are eligible to apply for the Teacher Level Permit through the California Department of Education Commission on Teacher Credentialing. With this AA degree, no work experience is required for the Teacher Level Permit.

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

This degree is intended for students wish to receive an AA degree AND who plan to transfer to a 4-year institution. The student must complete 25 units in Child Development. Students must also meet the general education requirements of one of the following: Plan A: General Studies general education; Plan C: CSU GE Breadth Certification Plan; Plan D: IGETC

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES:		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 2	Early Childhood Principles & Practices	3
CH DEV 3	Creative Experiences I	3
CH DEV 4	Creative Experiences II	3
CH DEV 11	Home, School, & Community Relations	3
CH DEV 22	Practicum in Child Development I	4

### MAJOR - ELECTIVE COURSES

Select a minimum of two courses (6 semester units) from the following:		6
CH DEV 10	Child Health (3 units)	
CH DEV 42	The Child in the Multicultural Society (3 units)	
CH DEV 34	Observation & Assessment of Children (3 units)	

MAJOR - TOTAL UNITS	25
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### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: NOT AVAILABLE WITH THIS MAJOR	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

Upon completion of this degree program, a student should be able to:

- Apply evidence-based theoretical and practical concepts with typically and atypically developing young children and their families in the field of early care and education.
- Demonstrate competence in facilitating the development of young children as unique individuals through the use of developmentally appropriate curriculum that promotes physical, cognitive and socio-emotional development.
- Articulate and demonstrate professional ethics and conduct in all work with agencies, families, and children.
- Identify, appreciate, and demonstrate respect for inclusive practices and diversity within individuals, families, cultures, and communities.

## TERMINAL VOCATIONAL DEGREE

### ■ Associate of Arts Degree

All major courses must be completed with a grade of "C" or better.

Students who complete this AA degree are eligible to apply for the "Teacher Level" Child Development Permit through the California Department of Education Commission on Teacher Credentialing. Students apply for the Child Development Permit through the California Commission on Teacher Credentialing [www.ctc.ca.gov](http://www.ctc.ca.gov) or through the Child Development Training Consortium [www.childdevelopment.org](http://www.childdevelopment.org)

Note: No work experience is required for the Teacher Level with an AA degree in Child Development. This AA degree meets all of the education requirements for the "Master Teacher Level" on the Child Development Permit. Students will need to have completed the required 350 days of work experience when applying for the Master Teacher Level Permit.

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This degree is 60 units with 37 units in Child Development. Students must also meet the general education requirements for the degree by completing Plan B: Career and Technical general education plan.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES:		UNITS
CH DEV 1	Child Growth & Development	3
CH DEV 2	Early Childhood Principles & Practices	3
CH DEV 3	Creative Experiences I	3
CH DEV 4	Creative Experiences II	3
CH DEV 11	Home, School, & Community Relations	3
CH DEV 22	Practicum in Child Development I	4
CH DEV 23	Practicum in Child Development II	4
CH DEV 65	Adult Supervision	2

#### MAJOR - ELECTIVE COURSES

Select a minimum of two courses (6 semester units) from one of the following groups: **6**

**GROUP 1:** CH DEV 30 Infant/Toddler Studies I (3 units) and CH DEV 31 Infant/Toddler Studies II (3 units)

**GROUP 2:** CH DEV 44 Special Needs I (3 units), CH DEV 45 Special Needs II (3 units)

**GROUP 3:** CH DEV 46 School Age Programs I(3 units), CH DEV 47 School Age Programs II (3 units)

**GROUP 4:** CH DEV 38 Administration & Supervision I (3 units), CH DEV 39 Administration & Supervision II (3 units)

Select a minimum of two courses (6 semester units) from the following: **6**

CH DEV 10	Child Health (3 units)
CH DEV 42	The Child in a Multicultural Society (3 units)
CH DEV 34	Observation and Assessment of Children (3 units)

**MAJOR - TOTAL UNITS** **37**

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR

Plan B: Pierce Career and Technical general education plan 18 units

Plan C: Not advisable with this major

Plan D: Not advisable with this major

\*These courses have a prerequisite

## OCCUPATION - PRESCHOOL TEACHER

### ■ Certificate of Achievement

With additional G.E. units and required experience, the student will be eligible for the Child Development Permit as defined under Title 5. Meeting this requirement will enable the student to teach in federal and state preschool programs.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 2	Early Childhood Principles and Practices	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
	Or	
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 10	Child Health	3
CH DEV 11	Home, School and Community Relations	3
*CH DEV 22	Practicum in Child Development I	4
*CH DEV 23	Practicum in Child Development II	4
CH DEV 42	The Child in a Multi-Cultural Society	3
*ENGLISH 28	Intermediate Reading & Composition	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 30	Infant Studies (3 units)	
CH DEV 38	Administration of Early Childhood Programs I (3 units)	
CH DEV 46	School Age Programs (3 units)	

**MAJOR - TOTAL UNITS** **32**

\*These courses have a prerequisite

## CHILD DEVELOPMENT ASSOCIATE TEACHER

### ■ Certificate of Achievement

With additional G.E. units and required experience, the student will be eligible for the Child Development Permit as defined under Title 5. Meeting this requirement will enable the student to teach in federal and state preschool programs.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 2	Early Childhood Principles and Practices	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
	Or	
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 10	Child Health	3
CH DEV 11	Home, School and Community Relations	3
*CH DEV 22	Practicum in Child Development I	4
*CH DEV 23	Practicum in Child Development II	4
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 30	Infant Studies (3 units)	
CH DEV 38	Administration of Early Childhood Programs I (3 units)	
CH DEV 42	The Child in a Multi-Cultural Society (3 units)	
CH DEV 46	School Age Programs (3 units)	

**CERTIFICATE - TOTAL UNITS** **26**

\*These courses have a prerequisite

## PRESCHOOL

### ■ Certificate of Achievement

Completion of 12 units meets the State Department of Social Services minimum requirements for Child Care Center fully qualified teacher in private, for-profit centers as defined in Title 22.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 2	Early Childhood Principles and Practices	3
CH DEV 11	Home, School and Community Relations	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 3	Creative Experiences for Children I (3 units)	
CH DEV 4	Creative Experiences for Children II (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>12</b>

## DIRECTOR, PRESCHOOL

### ■ Certificate of Achievement

Completion of 15 units meets the State Department of Social Services minimum requirements for Child Care Center Director in private, for-profit centers as defined in Title 22.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
Or		
CH DEV 4	Creative Experiences for Children I (3 units)	
CH DEV 11	Home, School and Community Relations	3
CH DEV 38	Administration of Early Childhood Programs I (3 units)	3
Or		
CH DEV 39	Administration of Early Childhood Programs II (3 units)	
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 2	Early Childhood Principles and Practices (3 units)	
CH DEV 10	Child Health (3 units)	
CH DEV 42	The Child in a Multi-Cultural Society (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## INFANT CARE TEACHER

### ■ Certificate of Achievement

Completion of 15 units meets the State Department of Social Services minimum requirements for Infant Care Teacher in private, for-profit and nonprofit centers as defined in Title 22.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
Or		
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 11	Home, School and Community Relations	3
CH DEV 30	Infant Studies I (3 units)	3
Or		
CH DEV 31	Infant Toddler Studies II (3 units)	
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 2	Early Childhood Principles and Practices (3 units)	
CH DEV 10	Child Health (3 units)	
CH DEV 42	The Child in a Multi-Cultural Society (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## SCHOOL AGE PROGRAMS TEACHER, CHILD CARE

### ■ Certificate of Achievement

Completion of 15 units meets the State Department of Social Services minimum requirements for Child Care Center School Age Programs Teacher/Aide in private, for-profit and non-profit centers as defined in Title 22.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
Or		
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 11	Home, School and Community Relations	3
CH DEV 46	School Age Programs I (3 units)	3
Or		
CH DEV 47	School Age Programs II (3 units)	
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
CH DEV 2	Early Childhood Principles and Practices (3 units)	
CH DEV 10	Child Health (3 units)	
CH DEV 42	The Child in a Multi-Cultural Society (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

# Cinema

## FILM

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

Cinema courses at Pierce are survey courses, providing an overview of various aspects of film. Courses are a combination of lecture and screening of entire movies and portions of film. Grading is rigorous. Cinema 3, 107 and PHOTO 10 transfer to CSUN for film majors. PHOTO 10 is a required course for film majors at CSUN.

CERTIFICATE - REQUIRED COURSES		UNITS
CINEMA 3	History of Motion Pictures and Television	3
CINEMA 104	History of Documentary Films	3
CINEMA 107	Understanding Motion Pictures	3
JOURNAL 99	Visual Communication in Media	3
JOURNAL 100	Social Values in Mass Communication	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
ENGLISH 240	Literature and the Motion Pictures (3 units)	
PHILOS 42	Philosophy of CINEMA (3 units)	
PHOTO 10	Beginning Photography (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>18</b>

# Computer Applications and Office Technologies

## GENERAL ADMINISTRATIVE

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Students may obtain an Associate of Arts degree in Computer Applications and Office Technologies by completing the courses shown below AND by satisfying all the requirements shown in the college catalog under Associate Degree Requirements. Students must complete one of the following general education plans for this major: Plan B: Career and Technical GE Plan; Plan C: CSU GE Breadth Certification Plan; Plan D: IGETC

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### ENTRY-LEVEL COURSES

		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007)	3

#### MAJOR - REQUIRED COURSES

ACCTG 1	Introductory Accounting I	5
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2008)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
<b>Select a minimum of 6 semester units from the following:</b>		<b>6</b>
<sup>2</sup> CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS4)	3
CAOT 96	Adobe Creative Suite for the Office and the Web	3
<sup>3</sup> CAOT 107	Microcomputer Office Applications: Web Design for the Office	3
<sup>3</sup> CAOT 108	Computer Design for the Office	2
	Or	
CAOT 110	Microcomputer Office Applications: Presentation Design	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS4)	3
CAOT 113	Introduction to Adobe Photoshop for the Office (CS4)	3
<sup>3</sup> CAOT 125	Microsoft Office Project	2
CAOT 132	Introduction to Student ePortfolios	2

#### MAJOR - TOTAL UNITS

**49-50**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

*Plan A: NOT AVAILABLE WITH THIS MAJOR*

Plan B: Pierce Career and Technical GE plan 18 units

Plan C: CSU GE Breadth Certification Plan 39 units

Plan D: IGETC 34-39 units

<sup>1</sup>See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.

### Learning Outcomes

Upon completion of this degree program, students will be able to:

- Develop methods for retaining information about computer software applications so that the information may be applied in practical situations and in solving challenging problems.
- Demonstrate competence in the use of state-of-the-art business-related software to create documents, spreadsheets, presentations, databases, and Web sites.
- Demonstrate efficiently the use of the Internet to complete the following business-related activities: communication, research, and e-commerce.
- Develop a proficiency level in the operation of the computer and other office technologies that will ensure a smooth transition into learning new applications and devices.
- Compose and create business documents—such as letters, memos, e-mail messages, reports, graphs, and charts—using correct grammar, spelling, punctuation, language style, and formats.

## GENERAL ADMINISTRATIVE

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

The General Administrative Program prepares students for employment in business, government, and educational offices using automated systems and procedures. Emphasis is placed on the development of language skills and the use of computer-based word processing, spreadsheet, database, and accounting software in the performance of office functions. In addition, students are prepared to assume general office duties and decision-making office responsibilities. Completion of this program enables students to qualify for intermediate office positions and lays the foundation for entry into office management positions.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007)	3

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2008)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
<b>Select a minimum of two courses (5-6 semester units) from the following:</b>		<b>5-6</b>
<sup>2</sup> CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS4)	3
CAOT 96	Adobe Creative Suite for the Office and the Web	3
<sup>3</sup> CAOT 107	Microcomputer Office Applications: Web Design for the Office	3
<sup>3</sup> CAOT 108	Presentation Design for the Office Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS4)	3
CAOT 113	Introduction to Adobe Photoshop for the Office (CS4)	3
<sup>3</sup> CAOT 125	Microsoft Office Project	2
CAOT 132	Introduction to Student ePortfolios	2

#### CERTIFICATE - TOTAL UNITS 49-50

<sup>1</sup>See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.

## LEGAL OFFICE PROCEDURES

### ■ Associate of Arts Degree

#### PROGRAM INFORMATION

Students may obtain an Associate of Arts degree in Computer Applications and Office Technologies by completing the courses shown below AND by satisfying all the requirements shown in the college catalog under Associate Degree Requirements. Students must complete one of the following general education plans for this major: Plan B: Career and Technical GE Plan; Plan C: CSU GE Breadth Certification Plan; Plan D: IGETC

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007)	3

#### MAJOR - REQUIRED COURSES

ACCTG 1	Introductory Accounting I	5
BUS 5	Business Law I	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 66	Voice-Recognition Software for Computer Input	1
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

<sup>2</sup> CAOT 23F	Legal Procedures IF	2
<sup>3</sup> CAOT 23G	Legal Procedures IG	3
CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3

#### MAJOR - TOTAL UNITS 46

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

<sup>1</sup>See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.

## LEGAL OFFICE PROCEDURES

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

The Legal Office Procedures program prepares students for employment in a legal office. Emphasis is placed on the development of language skills, the spellings and meanings of legal terminology, and the preparation of legal proceedings and cases. Extensive instruction in computer-based word processing programs and applications along with an introduction to other computerized office functions prepares students to obtain a position in a legal office.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007)	3

#### CERTIFICATE - REQUIRED COURSES

ACCTG 1	Introductory Accounting I	5
BUS 5	Business Law I	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 66	Voice-Recognition Software for Computer Input	1
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

<sup>2</sup> CAOT 23F	Legal Procedures IF	2
<sup>3</sup> CAOT 23G	Legal Procedures IG	3
CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3

#### CERTIFICATE - TOTAL UNITS 46

<sup>1</sup> See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup> Offered in the Fall semester only.

<sup>3</sup> Offered in the Spring semester only.

## ADMINISTRATIVE PROFESSIONAL

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Students may obtain an Associate of Arts degree in Computer Applications and Office Technologies by completing the courses shown below AND by satisfying all the requirements shown in the college catalog under Associate Degree Requirements. Students must complete one of the following general education plans for this major: Plan B: Career and Technical GE Plan; Plan C: CSU GE Breadth Certification Plan; Plan D IGETC

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

ENTRY-LEVEL COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3

#### MAJOR - REQUIRED COURSES

BUS 5	Business Law I	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2008)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3
ECON 2	Principles of Economics 2	3
MGMT 2	Organization and Management Theory	3

#### CAPSTONE COURSES

CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
<sup>3</sup> CAOT 108	Presentation design for the Office Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design	3

#### MAJOR - TOTAL UNITS 52-53

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

<sup>1</sup>See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.

**Learning Outcomes**

Upon completion of this degree program, students will be able to:

- Develop methods for retaining information about computer software applications so that the information may be applied in practical situations and in solving challenging problems.
- Demonstrate competence in the use of state-of-the-art business-related software to create documents, spreadsheets, presentations, databases, and Web sites.
- Demonstrate efficiently the use of the Internet to complete the following business-related activities: communication, research, and e-commerce.
- Develop a proficiency level in the operation of the computer and other office technologies that will ensure a smooth transition into learning new applications and devices.
- Compose and create business documents—such as letters, memos, e-mail messages, reports, graphs, and charts—using correct grammar, spelling, punctuation, language style, and formats.

**ADMINISTRATIVE PROFESSIONAL**

■ Certificate of Achievement

**PROGRAM INFORMATION**

The Administrative Professional Program prepares students for supervisory and managerial positions in business offices. This curriculum is directed toward enabling a candidate to complete successfully an examination developed and administered by the International Association for Administrative Professionals (IAAP) to attain the designation Certified Professional Secretary (CPS). Completion of this curriculum, acceptable scores on the CPS examination, and at least two years of successful office experience qualify the student for certification. CPS certification is the first step toward qualification for Certified Administrative Professional (CAP) certification.

ENTRY-LEVEL COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
BUS 1	Introduction to Business	3
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3

**CERTIFICATE - REQUIRED COURSES** UNITS

BUS 5	Business Law I	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 67	Microsoft Outlook for the Office	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2008)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3
ECON 2	Principles of Economics 2	3
MGMT 2	Organization and Management Theory	3

**CAPSTONE COURSES**

CAOT 32	Business Communications	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3
<sup>3</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
<sup>3</sup> CAOT 108	Presentation Design for the Office (MS PowerPoint 2007)	2
	Or	
CAOT 110	Microcomputer Office Applications: Presentation Design	3

**CERTIFICATE - TOTAL UNITS** **52-53**

<sup>1</sup>See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.

**BASIC COMPUTERIZED ACCOUNTING**

■ Certificate of Achievement

**PROGRAM INFORMATION**

Students are prepared for entry-level employment in business, government, or educational offices. Certificate holders will be able to use automated systems and procedures for bookkeeping and accounting applications, processing financial data, and creating managerial reports.

**CERTIFICATE - REQUIRED COURSES** UNITS

ACCTG 1	Introductory Accounting I	5
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2008)	3
CAOT 82	Microcomputer Software Survey in the Office	3
CAOT 85	Microcomputer Office Applications: Spreadsheet	3
	Or	
CAOT 74	Excel Concepts for Business Applications	2
<sup>2</sup> CAOT 92	Computer Windows Applications	2

**CERTIFICATE - TOTAL UNITS** **15-16**

\* For an Associate in Arts degree or a two-year certificate in Accounting, see Business Administration: Accounting.

<sup>2</sup> Offered in the Fall semester only.

## BASIC COMPUTER APPLICATIONS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Students are prepared for employment in business, government, and educational offices using computerized systems and procedures. Emphasis is placed on developing skills in the use of word processing, spreadsheet, and database software to perform routine office functions. Completion of this program enables students to qualify for entry-level positions in an automated office and lays the foundation for further study and advancement in office occupations.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007)	3
	Or	
CAOT 100	Windows-Based Computer Applications (MS Office 2007)	3

#### CERTIFICATE - REQUIRED COURSES

CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 66	Voice-Recognition Software for Computer Input	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSE

<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
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#### CERTIFICATE - TOTAL UNITS 26

<sup>1</sup>See Pierce College Catalog course description or CAOT Web site [www.piercecollege.edu/departments/c\\_a\\_o\\_t/](http://www.piercecollege.edu/departments/c_a_o_t/) for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered in the Fall semester only.

<sup>3</sup>Offered in the Spring semester only.



## ADVANCED COMPUTER APPLICATIONS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

After completing the Basic Computer Applications certificate program, students are prepared for entry-level positions in an automated office. The Advanced Computer Applications certificate adds 12 units, which lay the foundation for obtaining additional knowledge and skills in the Internet, advanced word processing functions, desktop publishing, and Web site development. Students completing this certificate are qualified for intermediate positions in an automated office.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007) (3 units)	3
	Or	
CAOT 100	Windows-Based Computer Applications (MS Office 2007) (3 units)	3

#### CERTIFICATE - REQUIRED COURSES

CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>3</sup> CAOT 66	Voice-Recognition Software for Computer Input	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2007)	3
<sup>2</sup> CAOT 92	Computer Windows Applications	2
<sup>3</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

<sup>2</sup> CAOT 86	Microcomputer Office Applications: Database (MS Access 2007)	3
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#### Select 12 semester units from the following: 12

<sup>3</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS4)	3
CAOT 96	Adobe Creative Suite CS4 Survey for the Office and Web	3
CAOT 107	Microcomputer Office Applications: Web Design for the Office	3
<sup>3</sup> CAOT 108	Presentation Design for the Office	2
	Or	
CAOT 110	Microcomputer Office Applications: Presentation Design	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS4)	3
CAOT 113	Introduction to Adobe Photoshop CS4 for the Office	3
CAOT 114	Adobe Acrobat CS4 for the Office and the Web	2
CAOT 120	Adobe Illustrator CS4 for the Office and the Web	3
CAOT 125	Microsoft Office Project	2
CAOT 132	Introduction to Student ePortfolios	2

#### CERTIFICATE - TOTAL UNITS 38-39

<sup>1</sup>See Pierce College Catalog course description or CAOT Web site [www.piercecollege.edu/departments/c\\_a\\_o\\_t/](http://www.piercecollege.edu/departments/c_a_o_t/) for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1 or 9.

<sup>2</sup>Offered Fall semester only.

<sup>3</sup>Offered Spring semester only.

## BASIC INTERNET

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Students may obtain a certificate of achievement specializing in the Internet by completing the courses shown below. Completion of this program provides students with the skills required by business offices for using the Internet to locate and capture information as well as for maintaining intranet and Internet Web pages.

ENTRY-LEVEL COURSES		UNITS
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2007) Or	3
CAOT 100	Windows-Based Computer Applications (MS Office 2007)	3

#### CERTIFICATE - REQUIRED COURSES

CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
<sup>1</sup> CAOT 92	Computer Windows Applications	2
<sup>2</sup> CAOT 97	Introduction to the Internet for CAOT	3

#### CAPSTONE COURSES

<sup>2</sup> CAOT 79	Word Processing Applications	3
<sup>2</sup> CAOT 107	Microcomputer Office Applications: Web Design for the Office Or	3
CAOT 109	Web Multimedia for the Office (Adobe CS4 Dreamweaver and Flash)	3

**CERTIFICATE - TOTAL UNITS** 17

<sup>1</sup>Offered Fall semester only.

<sup>2</sup>Offered Spring semester only.

## DESKTOP PUBLISHING

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Provides students with the knowledge and skills to create professional-looking documents for business, government organizations, and educational institutions using high-end desktop publishing and imaging software.

CERTIFICATE - REQUIRED COURSES		UNITS
ART 604	Graphic Design I	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007) Or	3
CAOT 96	Adobe Creative Suite CS4 Survey for the Office and the Web	3

#### CAPSTONE COURSES

<sup>1</sup> CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS4)	3
CAOT 113	Introduction to Adobe Photoshop for the Office	3
<sup>2</sup> CAOT 114	Adobe Acrobat CS4 for the Office and the Web	2
<sup>2</sup> CAOT 120	Adobe Illustrator CS4 for the Office and the Web	3

**CERTIFICATE - TOTAL UNITS** 17

<sup>1</sup>Offered Fall semester only.

<sup>2</sup>Offered Spring semester only.

## LEGAL OFFICE SKILLS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Provides the knowledge and skills needed to obtain an entry-level position in a legal office. Students will obtain word processing and communication skills as well as knowledge of legal office vocabulary and practical experience in preparing legal documents. Covers legal office procedures and legal office protocols.

CERTIFICATE - REQUIRED COURSES		UNITS
BUS 5	Business Law I	3
CAOT 31	Business English	3
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3

#### CAPSTONE COURSES

CAOT 23F	Legal Procedures IF	2
CAOT 23G	Legal Procedures IG	3
CAOT 32	Business Communications	3

**CERTIFICATE - TOTAL UNITS** 17

## BASIC WORD PROCESSING: MICROSOFT WORD FOR WINDOWS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Students may obtain a basic word processing certificate in Microsoft Word by completing the courses shown below. Completion of the program provides students with the skills required for entry-level employment in offices using Microsoft Word software.

ENTRY-LEVEL COURSE		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey in the Office (MS Office 2007)	3

#### CERTIFICATE - REQUIRED COURSES

CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2007)	3
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#### CAPSTONE COURSES

<sup>3</sup> CAOT 79	Word Processing Applications (MS Word 2007)	3
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**CERTIFICATE - TOTAL UNITS** 17

<sup>1</sup>See Course Description

<sup>2</sup>Offered in the fall semester only

<sup>3</sup>Offered in the spring semester only

## OFFICE COMMUNICATIONS

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

Students are prepared for employment in business, government, and educational offices. Emphasis is placed on the development of keyboarding and language skills to perform the following functions: prepare business documents, handle telephone inquiries, use an e-mail system, and complete forms. Completion of this program enables students to qualify for entry-level office positions and lays the foundation for further study and advancement in office occupations.

ENTRY-LEVEL COURSES		UNITS
<sup>1</sup> CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
<sup>2</sup> CAOT 34	Business Terminology	2

#### CAPSTONE COURSES

CAOT 32	Business Communications Or	3
CAOT 128	Communication Skills for the Business Professional	3
<sup>2</sup> CAOT 71	Voice-Recognition Software With Document Applications	3

**CERTIFICATE - TOTAL UNITS** **14**

<sup>1</sup>See Course Description

<sup>2</sup>Offered in the fall semester only

## OFFICE CLERICAL

### ■ Certificate of Achievement

Prepares students for entry-level office positions. Students will attain skills in computer keyboarding, proofreading, editing, and business letter formatting. They will be provided hands-on training in the Windows operating system and applications software, which includes document creation with word processing (Microsoft Word 2007), basic spreadsheet applications (Microsoft Excel 2007), and Internet applications. Students will develop reading, writing, business grammar, punctuation, and business oral communication skills. Students will learn indexing rules for filing. They will comprehend office records management and proper business telephone etiquette. They will possess knowledge of dress codes and work ethics. Students will be able to apply job-search techniques, including the content and format of a job application, cover letter, and résumé. Emphasis is placed on skills that promote success in the workplace.

CERTIFICATE - REQUIRED COURSES		UNITS
CAOT 1	Computer Keyboarding I	3
<sup>1</sup> CAOT 55	Career Skills for the Workplace 2000	3
CAOT 100	Windows-Based Computer Applications (MS Office 2007)	3
CAOT 130	Communication Skills in the Workplace	3

**CERTIFICATE - TOTAL UNITS** **12**

<sup>1</sup>Offered Fall semester only

## WEB SITE CONSTRUCTION AND MAINTENANCE

### ■ Certificate of Achievement

In the high-tech office environment, administrative professionals are often required to construct and maintain Internet Web sites and organizational intranet sites. Courses in the Web Site Construction and Maintenance Certificate of Achievement prepare students to assume this responsibility. Besides learning how to use and apply Web site authoring tools, students will acquire knowledge and skill in applying graphic design principles.

CERTIFICATE - REQUIRED COURSES		UNITS
ART 604	Graphic Design I	3
<sup>1</sup> CAOT 107	Microcomputer Office Applications: Web Design for the Office	3
<sup>1</sup> CAOT 108	Presentation Design for the Office Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design	3

#### CAPSTONE COURSES

CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS4)	3
CAOT 113	Introduction to Adobe Photoshop CS4 for the Office	3
<sup>1</sup> CAOT 114	Adobe Acrobat CS4 for the Office and the Web	2

**CERTIFICATE - TOTAL UNITS** **16-17**

<sup>1</sup>Offered Spring semester only.

# Computer Science and Information Technology

## COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

### ■ Associate Degree Programs

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

The Computer Science Department offers courses and curricula in several areas of emphasis in the computer field. The student may elect to complete the course work required to transfer to a four-year institution or may complete an occupationally oriented two-year curriculum. Students interested in completing the first two years of a bachelor's degree program should consult a member of the computer science staff or request copies of the transfer curricula from the department chairperson's office.

The department offers three areas of specialization at the associate degree level. They are Programming for Business, Programming for Computer Science, and Computer and Network Technology. Associate degree curricula require the completion of a specific pattern of course work. Any substitutions or variations must have prior approval of the department.

These occupational programs do not necessarily constitute the first two years of a Bachelor's degree transfer program in these fields. Consult a counselor for transfer requirements.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**PROGRAMMING FOR BUSINESS**

■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

NOTE: MATH 115 or 1 year of high school algebra with a grade of "C" or better is a required prerequisite to becoming a computer science major. Verification required upon request.

**PROGRAM INFORMATION**

The intent of this degree program is to provide graduates with the skills needed to produce computer programs in a business/industrial environment or transfer to a 4-year institution.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**MAJOR - REQUIRED COURSES**

		UNITS
ACCTG 1	Introduction to Accounting I	5
CO SCI 501	Introduction to Computers & Their Uses	3
CO SCI 508	Visual BASIC	3
CO SCI 533	Databases Using Access and SQL	3
CO SCI 547	Introduction to Digital Imaging Using Photoshop	3
CO SCI 550	Website Development Using Dreamweaver and Javascript	3
CO SCI 560	Business Systems Design Using Oracle Developer	3
CO SCI 572	Intro to Personal Computer Hardware and Operating Systems (3 units) Or	3
CO SCI 552	Programming in Java (3 units)	3
CO SCI 575	Programming Fundamentals for Computer Science	3
CO SCI 587	Introduction to Computer Networks	3
PHILOS 9	Symbolic Logic 1 (3 units) Or Math Elective (125 or higher) (3-5 units)	3-5

**TECHNICAL ELECTIVES**

Select a minimum of 15 units from one of the following sequences that will not duplicate the required courses listed above:

**SEQUENCE 1)** Advanced Programming - CO SCI 516 (3 units), CO SCI 536 (3 units), CO SCI 539 (3 units), CO SCI 540 (3 units), CO SCI 541 (3 units), CO SCI 552 (3 units)

**SEQUENCE 2)** Web/Network OS - CO SCI 534 (3 units), CO SCI 548 (3 units), CO SCI 553 (3 units), CO SCI 554 (3 units), CO SCI 555 (3 units), CO SCI 556 (3 units)

**SEQUENCE 3)** Information Systems - ACCTG 2 (5 units), BUS 5 (3 units), ECON 1 (3 units) and ECON 2 (3 units)

**MAJOR - TOTAL UNITS**

**50-52**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR

Plan B: Pierce Career and Technical GE plan 18 units

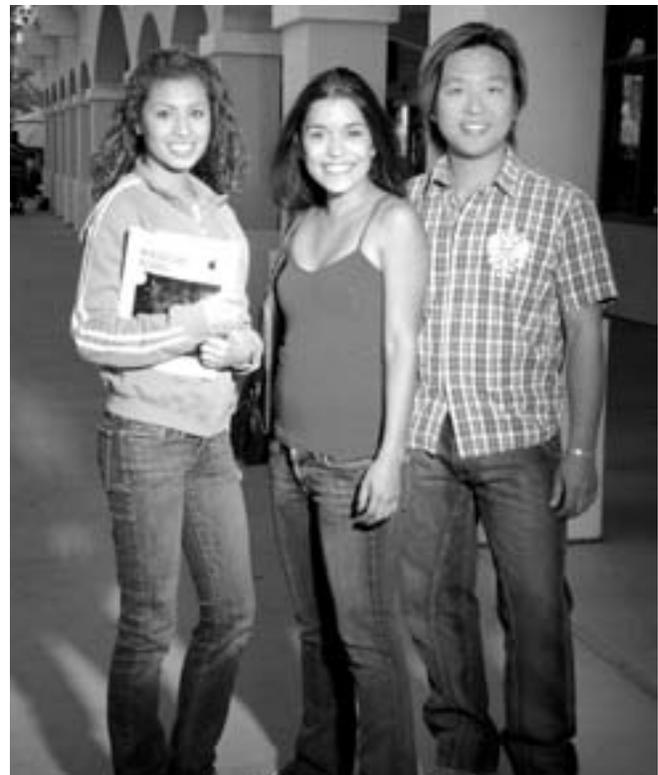
Plan C: CSU GE Breadth Certification Plan 39 units

Plan D: IGETC 34-39 units

**Learning Outcomes**

Upon completion of this degree program, a student should be able to:

- Develop, code and debug business-oriented computer programs in at least 2 different languages (currently C++, Visual Basic, and Java).
- Design and implement business systems and databases with an accounting foundation (currently Access, Oracle and SQL Server).
- Design and implement Web programs using digital images and current Web packages (currently Photoshop, Dreamweaver and JavaScript).
- Analyze how networks function and be able to do simple PC hardware troubleshooting.
- Demonstrate an additional area of expertise chosen from programming, Web/NOS or Information system classes. NOT ASSESSABLE!



## PROGRAMMING FOR BUSINESS

### ■ Certificate of Achievement

Prerequisites: MATH 115 or one year of high school algebra with a grade of "C" or better.

A minimum of 12 units must be taken in the Computer Science Department at Pierce College within the last 5 years.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting	5
CO SCI 501	Introduction to Computers and Their Uses	3
<sup>1</sup> CO SCI 508	Visual BASIC	3
<sup>1</sup> CO SCI 533	Databases Using Access and SQL	3
<sup>1</sup> CO SCI 541	Advanced Visual Basic and Database Programming	3
<sup>1</sup> CO SCI 552	Programming in Java	3
	Or	
<sup>1</sup> CO SCI 572	Introduction to Personal Computer Hardware and Operating Systems	3
CO SCI 560	Business Systems Design Using Oracle Developer	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>23</b>

<sup>1</sup>See Catalog course description for pre-requisites.

### Learning Outcomes

Upon completion of this certificate, a student should be able to:

- Develop, code and debug programs in the Visual Basic language.
- Demonstrate competence in Word, Excel and PowerPoint.
- Design and implement business systems and databases with an accounting foundation (currently Access, Oracle and SQL Server).
- Perform simple repair and troubleshooting on PC hardware.

## PERSONAL COMPUTER APPLICATION SPECIALIST

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

CERTIFICATE - REQUIRED COURSES		UNITS
CO SCI 501	Introduction to Computers and Their Uses	3
CO SCI 533	Databases Using Access and SQL	3
CO SCI 572	Introduction to Personal Computer Hardware and Operating Systems	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>9</b>

### Learning Outcomes

Upon completion of this certificate, a student should be able to:

- Demonstrate competence in Word, Excel and PowerPoint
- Design and implement small-system databases using Access and SQL
- Perform simple repair and troubleshooting on PC hardware.

## DATABASE PROGRAMMING SPECIALIST

### ■ Department Skills Certificate

Department skill certificates will not appear on the students' official transcripts.

CERTIFICATE - REQUIRED COURSES		UNITS
<sup>1</sup> CO SCI 508	Visual BASIC	3
<sup>1</sup> CO SCI 541	Advanced Visual Basic and Database Programming	3
<sup>1</sup> CO SCI 560	Business Systems Design Using Oracle Developer	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>9</b>

<sup>1</sup>See catalog course description for prerequisites.

### Learning Outcomes

Upon completion of this certificate, a student should be able to:

- Develop, code and debug programs in the Visual Basic language
- Design and implement small-system databases using Access and SQL
- Design and implement medium-sized business systems using Oracle Developer, SQL and SQL Server.

## PROGRAMMING FOR COMPUTER SCIENCE

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

NOTE: MATH 115 or one year of high school algebra with a grade of "C" or better is a prerequisite for this program. Verification is required upon request. However

MATH 262 (Calculus II) is a graduation requirement.

Recommendations: Proficiency in typing or keyboarding.

### PROGRAM INFORMATION

The intent of this degree program is to provide graduates with the skills needed to produce computer programs in a technical environment or transfer to a 4-year institution.

See a Pierce counselor in the first semester for transfer education advisement. The student must also contact the transfer institution to determine entrance level.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
CO SCI 501	Introduction to Computers & Their Uses	3
CO SCI 516	Beginning Computer Architecture and Organization	3
CO SCI 532	Advanced Data Structures and Introduction to Databases	3
CO SCI 536	Introduction to Data Structures	3
CO SCI 539	Programming in C	3
CO SCI 540	Object Oriented Programming in C++	3
CO SCI 546	Advanced Computer Architecture and Organization	3
CO SCI 552	Programming in Java	3
CO SCI 575	Programming Fundamental for Computer Science	3
MATH 261	Calculus I	5
MATH 262	Calculus II	5
PHILOS 9	Symbolic Logic	3
<b>Technical Elective: select a minimum of one course from the following list:</b>		<b>3-5</b>
CO SCI 508 (3 units), 572 (3 units), 547 (3 units), 548 (3 units), 550 (3 units), 555 (3 units), 556 (3 units), MATH 263 (5 units), 270 (3 units), 275 (3 units).		
<b>MAJOR - TOTAL UNITS</b>		<b>43-45</b>

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

**Learning Outcomes**

Upon completion of this degree program, a student should be able to:

- Demonstrate the use of computer programs in C, C++, assembly language, and Java
- Demonstrate the use of classic algorithms and data structures commonly used in software development
- Demonstrate the use of object-oriented programming techniques
- Demonstrate the use of pointers for creation of data structures and dynamic memory allocation
- Demonstrate the use of advanced data structure techniques, including the ability to analyze the costs (in both time and space) of various techniques
- Analyze combinational logic
- Develop and Analyze floating-point representations
- Analyze the impact that different computer architecture decisions have on system performance



**PROGRAMMING FOR COMPUTER SCIENCE**

■ Certificate of Achievement

All of these courses may be used to apply toward fulfillment of the requirements for an Associate degree in Programming for Computer Science.

Prerequisites: MATH 115 or one year of high school algebra with a grade of "C" or better. Verification required upon request.

CERTIFICATE - REQUIRED COURSES		UNITS
<sup>1</sup> CO SCI 516	Beginning Computer Architecture and Organization	3
<sup>1</sup> CO SCI 536	Introduction to Data Structures	3
<sup>1</sup> CO SCI 539	Programming in C	3
<sup>1</sup> CO SCI 540	Object Oriented Programming in C++	3
<sup>1</sup> CO SCI 552	Programming in Java	3
CO SCI 575	Programming Fundamentals for Computer Science	3

**CERTIFICATE - TOTAL UNITS 18**

<sup>1</sup>See Catalog course description for prerequisites.

**Learning Outcomes**

Upon completion of this certificate program, a student should be able to:

- Develop computer programs in C, C++, assembly language, and Java
- Demonstrate competence in the use the classic algorithms and data structures commonly used in software development
- Demonstrate competence in the use of object-oriented programming techniques
- Demonstrate competence in the use of pointers for creation of data structures and dynamic memory allocation

**COMPUTER AND NETWORK TECHNOLOGY**

■ Associate of Science Degree

NOTE: One year of high school algebra or MATH 115 with a grade of "C" or better is a prerequisite for this program. Verification is required upon request.

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

The intent of this program is to produce graduates with the balanced knowledge of hardware and software required to install, operate, maintain and trouble-shoot personal computers and computer networks in a variety of work environments.

Associate in Science graduates will be prepared to install, operate, maintain and trouble-shoot systems and networks for the service divisions of large computer manufactures and computer applications organizations.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
CO SCI 501	Introduction to Computers and Their Uses	3
<sup>1</sup> CO SCI 514	Network Operations and Systems	3
<sup>1</sup> CO SCI 534	Operating Systems	3
<sup>1</sup> CO SCI 535	Network Configuration and Control Systems	3
<sup>1</sup> CO SCI 537	Routing Systems, Devices and Protocols	3
CO SCI 538	Implementing Wide Area and Wireless Networking	3
CO SCI 572	Introduction to Personal Computer Hardware and Operating Systems	3
<sup>1</sup> CO SCI 578	Routing Systems Design and Programming	3
<sup>1</sup> CO SCI 581	Personal Computer Upgrades and Repair	3
<sup>1</sup> CO SCI 587	Introduction to Computer Networks	3
ELECTRN 4A	Fundamentals of Electronics I	3
ELECTRN 4B	Fundamentals of Electronics I Lab	1
ELECTRN 6A	Fundamentals of Electronics II	3
ELECTRN 6B	Fundamentals of Electronics II lab	1

<sup>1</sup>See course description for prerequisites.

#### Technical Electives:

Select a minimum of 9 units from any of the courses listed below: 9

1) **PROGRAMMING:** CO SCI 508 (3 units), 533 (3 units), 539 (3 units), 541 (3 units), 560 (3 units)

2) **WEB DEVELOPMENT:** CO SCI 553 (3 units), 554 (3 units), 547 (3 units), 548 (3 units), 550 (3 units), 555(3 units), 556 (3 units)

3) **ELECTRONICS:** ELECTRN 8A (3 units), 8B (1 unit), 44(3 units), 45 (1 unit), 72A(3 units), 72B (1 unit), 74A (3 units), 74B (1 unit).

**MAJOR - TOTAL UNITS 47**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR

Plan B: Pierce Career and Technical GE plan 18 units

Plan C: CSU GE Breadth Certification Plan 39 units

Plan D: IGETC 34-39 units

### Learning Outcomes

Students completing this degree program will know, or be able to do the following:

- Configure, maintain, and troubleshoot personal computer hardware and operating systems
- Demonstrate an understanding of the key components of network design and infrastructure
- Implement, configure, and maintain servers and server operating systems
- Implement, configure, and maintain network switching topologies
- Implement, configure, and maintain routers and routing protocols
- Integrate LAN and WAN technologies successfully
- Implement troubleshooting strategies for desktops, servers, and network infrastructure
- Demonstrate an understanding of the fundamentals of the electronics that drive computer networks.

## PERSONAL COMPUTER SERVICE TECHNOLOGY

### ■ Certificate of Achievement

Prerequisite: MATH 115 or one year of high school algebra with a grade of "C" or better. Verification required upon request.

#### PROGRAM INFORMATION

This program was developed in cooperation with the Computer Technology advisory committee for students who wish to take a technical program to prepare themselves for employment in the computer technology field.

#### CERTIFICATE - REQUIRED COURSES UNITS

CO SCI 501	Introduction to Computers and Their Uses	3
CO SCI 572	Introduction to Personal Computer Hardware and Operation Systems	3
<sup>1</sup> CO SCI 581	Personal Computer Upgrade and Repair	3
<sup>1</sup> CO SCI 587	Introduction to Computer Networks	3

**CERTIFICATE - TOTAL UNITS 12**

<sup>1</sup>See catalog course description for prerequisites.

### Learning Outcomes

Upon Completion of this Certificate students will be able to:

- Apply the principles of microcomputer hardware including memory, storage, CPUs, ports, video subsystems, etc.
- Apply the principles of microcomputer operating systems (Win3.x/Win NT/9x/2K/XP/Linux) work in a command line processing environment
- Install and maintain personal computer hardware
- Install, maintain, and trouble-shoot small SOHO wired (CAT-5) and wireless (WiFi) networks
- Install and tweak third-party security software (anti-virus, anti-spyware)

## NETWORK TECHNOLOGY

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This program was developed in cooperation with the Computer Technology advisory committee for students who wish to take a technical program to prepare themselves for employment in the computer network technology field.

#### CERTIFICATE - REQUIRED COURSES UNITS

<sup>1</sup> CO SCI 514	Network Operations and Systems	3
<sup>1</sup> CO SCI 534	Operating Systems	3
<sup>1</sup> CO SCI 535	Network Configuration and Control Systems	3
<sup>1</sup> CO SCI 587	Introduction to Computer Networks	3

**CERTIFICATE - TOTAL UNITS 12**

<sup>1</sup>See catalog course description for prerequisites.

Certificate: Network Technology (code 0799.00)

### Learning Outcomes

Students completing this certificate program will know, or be able to do the following:

- Demonstrate the understanding of the key components of network design and infrastructure Implement, configure, and maintain servers and server operating systems
- Implement, configure, and maintain desktop operating systems
- Implement file system security on a variety of operating system
- Apply a structured troubleshooting approach to solving system problems

## ROUTING TECHNOLOGY

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This program is designed for students who desire to extend their existing network training or background to further focus on the prominent routing technology, preparing them for employment in this field.

CERTIFICATE - REQUIRED COURSES		UNITS
<sup>1</sup> CO SCI 537	Routing Systems, Devices and Protocols	3
CO SCI 538	Implementing Wide Area and Wireless Networking	3
<sup>1</sup> CO SCI 578	Routing Systems Design and Programming	3
<sup>1</sup> CO SCI 587	Introduction to Computer Networks	3

**CERTIFICATE - TOTAL UNITS** **12**

<sup>1</sup>See catalog course description for prerequisites.

### Learning Outcomes

Students completing this certificate program will know, or be able to do the following:

- Demonstrate an understanding of the key components of network design and infrastructure
- Implement, configure, and maintain routers and routing protocols
- Integrate LAN and WAN technologies successfully
- Apply a structured troubleshooting approach to solving network problems that integrates an understanding of the OSI and TCP/IP layered models of networking
- Implement, configure, and maintain a network switching infrastructure

## WEBSITE DEVELOPMENT

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This program was designed for students who wish to develop skills which will enable them to create and administer web sites using various server side programming languages and prepare for employment in this field.

CERTIFICATE - REQUIRED COURSES		UNITS
<sup>1</sup> CO SCI 534	Operating Systems	3
CO SCI 547	Introduction to Digital Imaging Using Photoshop	3
<sup>1</sup> CO SCI 553	Web Page Development	3
<sup>1</sup> CO SCI 554	Server-Side Programming for the World Wide Web	3

**CERTIFICATE - TOTAL UNITS** **12**

<sup>1</sup>See catalog course description for prerequisites.

### Learning Outcomes

Upon Completion of this certificate students will be able to:

- Hand code web pages using HTML, XHTML, JavaScript, CSS and PHP
- Create server-side (active) web pages and applications (like a shopping cart)
- Implement an SQL database in server-side applications
- Manipulate graphic images using digital imaging software
- Perform the above tasks in a UNIX/Linux environment

## WEB DEVELOPMENT, PROGRAMMING AND SCRIPTING

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This program is designed for students who desire to develop skills which will enable them to create and administer websites using Web Development software, client side and server side programming and scripting.

CERTIFICATE - REQUIRED COURSES		UNITS
CO SCI 548	Web Development Using Flash and ActionScript	3
CO SCI 550	Web Development Using Dreamweaver and JavaScript	3
CO SCI 553	Introduction to Web Development	3
CO SCI 554	Server-Side Programming for the Web	3
CO SCI 555	Web Development Using JavaScript and AJAX	3
CO SCI 556	Advanced Dreamweaver	3

**CERTIFICATE - TOTAL UNITS** **18**

### Learning Outcomes

Students completing this certificate program will be able to:

- Develop a static website containing images, text, tables, forms and other related web page elements where all linked pages have a common design and appearance using Dreamweaver tools, HTML, XHTML and CSS for page formatting.
- Create and manipulate digital images, optimize files (jpeg, gif, png) for inclusion in web pages and in gif animations and Flash animations.
- Create Flash Movie animations containing graphic symbols, movie clips, button symbols and sound.
- Use Advanced Dreamweaver, ColdFusion, and MySQL to create dynamic, interactive web pages that include server-side behaviors such as password protection, user authentication.
- Utilize a database (such as Access and MySQL) to store and retrieve data to populate a dynamic web page and to input and output user data.

# Criminal Justice

## CRIMINAL JUSTICE

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Criminal Justice is a career-oriented liberal arts major focusing upon the interrelationship among crime, the criminal justice system and society as a whole. As such, there are many potential career opportunities in this field, such as:

- Community Agencies Crime Prevention Private Security
- Corrections Forensic Science Services Psychological Services
- Counseling Police Services Research
- Court & Legal Services Policy Development Social Work

The Associate in Arts Degree in Criminal Justice may also be used as undergraduate preparation for transfer to a Baccalaureate program at a four-year institution.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

UNITS

##### CRIMINAL JUSTICE CORE –

Choose a minimum of 18 semester units from the following:

ADM JUS 1	Introduction to the Administration of Justice	3
ADM JUS 2	Concepts of Criminal Law	3
ADM JUS 3	Legal Aspects of Evidence	3
ADM JUS 4	Principles and Procedures of the Justice System	3
ADM JUS 5	Criminal Investigation	3
ADM JUS 8	Juvenile Justice	3
ADM JUS 49	Narcotics & Vice Control	3
ADM JUS 67	Community Relations and Diversity	3
ADM JUS 75	Introduction to Corrections	3
ADM JUS 160	Police Organization and Administration	3

#### MAJOR - TOTAL UNITS

18

##### CSULA CRIMINAL JUSTICE CORE –

Recommend the following 18 semester units of coursework for students planning to transfer to California State University, Los Angeles (CSULA) in Criminal Justice

ADM JUS 1	Introduction to Administration of Justice	3
ADM JUS 2	Concepts of Criminal Law	3
ADM JUS 4	Principles and Procedures of the Justice System	3
ADM JUS 75	Introduction to Corrections	3
ADM JUS 160	Police Organization and Administration	3

#### CSULA MAJOR - TOTAL UNITS

18

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

For specific transfer institution requirements and questions please see Prof. Kathy Oborn, Faculty Advisor [obornkm@piercecollege.edu](mailto:obornkm@piercecollege.edu)

# Electronics

## ELECTRONICS

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Representatives from the electronics industry and Pierce College faculty have collaborated to design this course of study. Completion of this program prepares the student for employment as an electronics technician.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

UNITS

ELECTRN 4A	Fundamentals of Electronics IA	3
ELECTRN 4B	Fundamentals of Electronics IB	1
ELECTRN 6A	Fundamentals of Electronics IIA	3
ELECTRN 6B	Fundamentals of Electronics IIB	1
ELECTRN 8A	Electron Devices A	3
ELECTRN 8B	Electron Devices B	1
ELECTRN 26	Linear Circuits	3
ELECTRN 28	Electronic and Electro-Mechanical Drafting I	2
ELECTRN 44	Communications Electronics	3
ELECTRN 45	Communications Electronics Laboratory	1
ELECTRN 48A	Integrated Circuits	3
ELECTRN 48B	Integrated Circuits Laboratory	1
ELECTRN 60	Microwave Fundamentals	3
ELECTRN 61	Microwave Fundamentals Laboratory	1
ELECTRN 63	Circuit Analysis Laboratory	1
ELECTRN 72A	Digital Circuits IA	3
ELECTRN 72B	Digital Circuits IB	1
ELECTRN 74A	Microprocessors	3
ELECTRN 74B	Microprocessors Laboratory	1
ELECTRN 81	Projects Laboratory (1 unit repeated 3 times)	3

#### MAJOR - TOTAL UNITS

41

For additional electives, see Electronics Department Advisor. See Catalog descriptions for prerequisites and corequisites.

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

Please refer to the discipline webpage:  
[www.piercecollege.edu/departments/electronics](http://www.piercecollege.edu/departments/electronics)

**Learning Outcomes**

Upon completion of this program, students will be able to:

- Demonstrate a proficiency level in the operation of basic test equipment including Digital Multimeters, Oscilloscopes and Power Supplies.
- Demonstrate the use of scientific calculators effectively to compute fundamental Electronics Mathematics
- Demonstrate a proficiency level in the operation of digital training equipment and digital circuit construction, measurement and troubleshooting.
- Demonstrate a proficiency level in the construction, measurement and troubleshooting of analog electronic circuits from schematic diagrams.
- Demonstrate a proficiency in the use of a computer aided drawing program to generate schematics.
- Demonstrate the Use machine level programming to control a microprocessor or microcontroller.

**ELECTRONICS**

■ Certificate of Achievement

**PROGRAM INFORMATION**

In collaboration with industry, the College staff has developed the program as shown below which leads to a Certificate in Electronics with a specialization option in Digital, Communications, or Analog electronics. The certificate program has been designed to provide students with marketable skills at the completion of 24 units. If they wish, students may continue their education and obtain an Associate in Science Degree. To complete the Certificate Program, the core courses and one specialization option must be completed.

CERTIFICATE PROGRAM CORE REQUIREMENTS		UNITS
ELECTRN 4A	Fundamentals of Electronics IA	3
ELECTRN 4B	Fundamentals of Electronics IB	1
ELECTRN 6A	Fundamentals of Electronics IIA	3
ELECTRN 6B	Fundamentals of Electronics IIB	1
ELECTRN 8A	Electron Devices A	3
ELECTRN 8B	Electron Devices B	1
ELECTRN 28	Electronic and Electro-mechanical Drafting	2
ELECTRN 81	Projects Laboratory (1 Unit repeated twice)	2

**CERTIFICATE SPECIALIZATION OPTIONS:**

DIGITAL OPTION		UNITS
ELECTRN 72A	Digital Circuits IA	3
ELECTRN 72B	Digital Circuits IB	1
ELECTRN 74A	Microprocessors	3
ELECTRN 74B	Microprocessors Laboratory	1

COMMUNICATIONS OPTION		UNITS
ELECTRN 44	Communications Electronics	3
ELECTRN 45	Communications Electronics Laboratory	1
ELECTRN 60	Microwave Fundamentals	3
ELECTRN 61	Microwave Fundamentals Laboratory	1

ANALOG OPTION		UNITS
ELECTRN 26	Linear Circuits	3
ELECTRN 48A	Integrated Circuits	3
ELECTRN 48B	Integrated Circuits Laboratory	1
ELECTRN 63	Circuit Analysis Laboratory	1

**CERTIFICATE - TOTAL UNITS 24**

**Learning Outcomes**

Upon completion of this program, students will be able to:

- Demonstrate a proficiency level in the operation of basic test equipment including Digital Multimeters, Oscilloscopes and Power Supplies.
- Demonstrate the use of scientific calculators effectively to compute fundamental Electronics Mathematics
- Demonstrate a proficiency level in the operation of digital training equipment and digital circuit construction, measurement and troubleshooting.
- Demonstrate a proficiency level in the construction, measurement and troubleshooting of analog electronic circuits from schematic diagrams.
- Demonstrate a proficiency in the use of a computer aided drawing program to generate schematics.
- Demonstrate the Use machine level programming to control a microprocessor or microcontroller.



# French

## FRENCH

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

The main objective of the French program is to enable the students to acquire competence in the ability to understand, speak, read, and write French, and to develop an understanding and appreciation of the multicultural French speaking world.

Students are placed in French courses according to their years of previous study. In general one year of high-school French is equivalent to one semester at Pierce. Native speakers are encouraged to enroll in French 4, 5, or 6.

All French courses are taught primarily in the language. However, the instructor may choose to clarify certain concepts in English when necessary.

By the end of the first year, students are able to use the basic structure of the language and the practical vocabulary learned to converse on everyday topics, as well as to read and write at an elementary level.

French 3 combines with French 8 (Conversational French) to increase oral proficiency and also continues to raise the students' ability to read and write.

In French 4, 5, and 6, students gradually acquire more ease in expressing themselves orally and in writing. Combining a review of grammar with discussions and analysis of literary texts of increasing difficulty, these courses give students a broad overview of France and French-speaking countries and prepare them to live abroad.

#### INTERNATIONAL EDUCATION

Students are encouraged to participate in the International Education summer program of study in Paris offered by Pierce College.

#### CAREER OPPORTUNITIES

French is adapted to careers in international business or trade, telecommunications, fashion, the gourmet food industry, medical research, international law, diplomacy and the foreign service, aerospace technology, as well as in the arts and the humanities.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

MAJOR - REQUIRED COURSES		UNITS
FRENCH 8	Conversational French (2 units) Or	2-3
FRENCH 81	Practical French for Business (3 units)	
<b>Select a minimum of three courses (15 semester units) from the following:</b>		<b>15</b>
FRENCH 1	Elementary French I (5 units)	
FRENCH 2	Elementary French II (5 units)	
FRENCH 3	Intermediate French I (5 units)	
FRENCH 4	Intermediate French II (5 units)	
FRENCH 5	Advanced French I (5 units)	
FRENCH 6	Advanced French II (5 units)	

#### MAJOR - RECOMMENDED ELECTIVES

**ANTHRO** 102 (3 units); **ART** 102 (3 units), 103 (3 units); **ENGLISH** 203 (3 units), 204 (3 units); **HISTORY** 50; **HUMAN** 12, 13; **LING** 1 (3 units)

#### MAJOR - TOTAL UNITS

**17-18**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

# General Studies

## GENERAL STUDIES WITH AN AREA OF EMPHASIS

### ■ Associate of Arts Degree

Associate Degree Requirements must be completed with a cumulative grade point average of 2.0 or better.

#### PROGRAM INFORMATION

This degree provides an opportunity for students to earn an Associate of Arts (AA) degree in a comprehensive area of study and is intended for the student who may not be planning to transfer to a university.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**CHOOSE A SINGLE AREA OF EMPHASIS**

Complete 18 units in one of the areas of emphasis listed below.

Each course counted toward major and area of emphasis requirements must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.

**AREA OF EMPHASIS: ARTS AND HUMANITIES**

This area of emphasis represents the core courses for students who want to explore a broad area of courses in the arts and humanities including: Art History, Music, Theater, Journalism, Dance, Communication and Modern Languages.

**Courses used to satisfy the Area of Emphasis may also count toward general education requirements. Courses from a minimum two (2) academic disciplines must be completed from within the chosen Area of Emphasis. Each course used toward the unit requirement must be completed with a C or better or a P if the course is taken on a "pass-no pass" basis.**

**ANTHRO** 161 (3 units), 162 (3 units), 163 (3 units); **ART**: 101 (3 units), 102 (3 units), 103 (3 units), 105 (3 units), 107, (3 units), 109 (3 units), 111 (3 units), 119 (3 units), 137 (3 units), 138 (3 units), 139 (3 units), 201 (3 units), 202 (3 units), 203 (3 units), 204 (units), 205 (3 units), 206 (3 units), 207 (3 units), 209 (3 units), 300 (3 units), 301 (3 units), 302 (3 units), 304 (3 units), 305 (3 units), 306 (3 units), 307 (3 units), 308 (3 units), 501 (3 units), 502 (3 units), 503 (3 units), 519 (3 units), 603 (3 units), 604 (3 units), 605 (3 units), 606 (3 units), 615 (4 units), 616 (4 units), 617 (4 units), 620 (3 units), 621 (3 units), 622 (3 units), 650 (3 units), 651 (3 units), 700 (3 units), 701 (3 units), 702 (3 units), 703 (3 units), 708 (3 units), 709 (3 units), 710 (3 units), 711 (3 units); **ASL**: 1 (4 units), 2 (4 units), 3 (4 units), 4 (4 units), 5 (3 units), 6 (4 units), 10 (4 units), 15 (3 units), 16 (2 units), 22 (2 units), 23 (2 units), 25 (2 units), 30 (1 unit), 31 (1 unit), 40 (3 units), 55 (4 units), 65 (4 units), 101 (5 units); **CINEMA**: 3 (3 units), 5 (3 units), 104 (3 units), 107 (3 units); **DANCE**: 101 (1 unit), 290 (1 unit), 401 (1 unit), 410 (1 unit), 431 (1 unit), 434 (1 unit), 437 (1 unit), 440 (1 unit), 441 (1 unit), 446 (1 unit), 452 (1 unit), 801 (3 units), 802 (3 units), 803 (3 units), 804 (3 units), 812 (1 unit), 814 (2 units), 818 (2 units), 819 (4 units), 820 (4 units), 821 (4 units), 860 (3 units); **ENGLISH**: 127 (3 units), 203 (3 units), 204 (3 units), 205 (3 units), 206 (3 units), 207 (3 units), 208 (3 units), 209 (3 units), 210 (3 units), 211 (3 units), 213 (3 units) (same as THEATER 125), 214 (3 units), 215 (3 units), 216 (3 units), 218 (3 units), 219 (3 units), 239 (3 units), 240 (3 units), 250 (3 units), 251 (3 units), 252 (3 units), 270 (3 units); **FRENCH**: 1 (5 units), 2 (5 units), 3 (5 units), 4 (5 units), 5 (5 units), 6 (5 units), 8 (2 units), 10 (3 units); **HISTORY**: 1 (3 units), 2 (3 units), 43 (3 units), 44 (3 units), 86 (3 units), 87 (3 units); **HUMAN**: 6 (3 units), 31 (3 units), 60 (3 units), 61 (3 units); **ITALIAN**: 1 (5 units), 2 (5 units), 3 (5 units), 4 (5 units), 5 (5 units), 6 (5 units), 8 (2 units), 10 (3 units); **JAPAN**: 1 (5 units), 2 (5 units), 3 (5 units), 4 (5 units), 8 (2 units), 27 (3 units); **JOURNALISM** 251 (3 units); **LING**: 1 (3 units), 2 (3 units), 3 (3 units); **MUSIC**: 111 (3 units), 112 (3 units), 121 (3 units), 122 (3 units), 226 (2 units), 251 (.5 units), 299 (1 unit), 321 (2 units), 322 (2 units), 323 (2 units), 324 (2 units), 411 (2 units), 412 (2 units), 413 (2 units), 414 (2 units), 501 (.5 units), 561 (.5 units), 571 (.5 units), 601 (2 units), 611 (2 units), 621 (2 units), 651 (2 units), 705 (.5 units), 721 (1 unit), 741 (1 unit), 755 (.5 units); **PHILOS**: 1 (3 units), 2 (3 units), 12 (3 units), 14 (3 units), 15 (3 units), 19 (3 units), 20 (3 units), 30 (3 units), 33 (3 units), 35 (3 units), 40 (3 units), 41 (3 units), 42 (3 units); **PHOTO**: 9 (3 units), 10 (3 units), 11 (4 units), 27 (3 units); **PSYCH**: 60 (3 units); **PERSDEV**: 20 (3 units), 40 (3 units); **SPANISH**: 1 (5 units), 2 (5 units), 3 (5 units), 4 (5 units), 5 (5 units), 6 (5 units), 8 (2 units), 9 (3 units), 10 (3 units), 11 (3 units), 12 (3 units), 15 (3 units), 16 (3 units), 21 (3 units), 22 (3 units), 25 (3 units), 26 (3 units), 27 (3 units), 35 (3 units), 36 (3 units), 48 (3 units), 49 (3 units), 65 (3 units), 101 (1 unit); **THEATER**: 100 (3 units), 110 (3 units), 125 (3 units) (same as English 213)

**ARTS AND HUMANITIES EMPHASIS UNIT TOTAL****18 UNITS****AREA OF EMPHASIS: SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

This area of emphasis represents the core courses for students who want to explore a broad area of courses in the Sciences, Technology, Engineering or Mathematics. Students will develop an appreciation and understanding of the scientific method and an understanding of the relationships between science and other human activities.

**Courses used to satisfy the Area of Emphasis may also count toward general education requirements. Courses from a minimum two (2) academic disciplines must be completed from within the chosen Area of Emphasis. Each course used toward the unit requirement must be completed with a C or better or a P if the course is taken on a "pass-no pass" basis.**

**ANATOMY**: 1(4 units); **ANTHRO**: 101 (3 units), 109 (3 units), 111 (2 units), 119 (2 units), 141 (3 units); **ASTRON**: 1 (3 units), 2 (1 unit), 3 (4 units); **BIOLOGY**: 3 (4 units), 6 (5 units), 7 (5 units), 10 (4 units), 11 (3 units), 12 (3 units), 40 (3 units), 44 (2 units), 46 (3 units), 110 (1), 121 (3 units), 122 (2 units), 123 (3 units); **CHEM**: 51 (5 units), 60 (5 units), 101 (5 units), 102 (5 units), 211 (5 units), 212 (5 units), 221 (5 units); **CO SCI**: 516 (3 units), 532 (3 units), 536 (3 units), 539 (3 units), 540 (3 units), 546 (3 units), 575 (3 units); **ENV SCI**: 1 (3 units), 2 (3 units), 7 (3 units); **GEOG**: 1 (3 units), 2 (3 units), 3 (3 units), 7 (3 units), 14 (3 units), 15 (2 units), 20 (6 units), 21 (3 units), 31 (3 units), 32 (3 units), 33 (3 units), 36 (3 units), 38 (3 units), 39 (3 units); **GEOLOGY**: 1 (3 units), 4 (5 units), 6 (2 units), 7 (3 units), 10 (3 units), 12 (3 units); **MATH**: 215 (3 units), 227 (4 units), 235 (5 units), 238 (5 units), 240 (3 units), 245 (3 units), 260 (5 units), 261 (5 units), 262 (5 units), 263 (5 units), 270 (3 units), 275 (3 units); **METEOR**: 3 (3 units); **MICRO**: 1 (5 units), 20 (4 units); **OCEANO**: 1 (3 units), 2 (3 units), 10 (2 units); **PHYSICAL SCIENCE** 13 (3 units); **PHYSICS**: 6 (4 units), 7 (4 units), 12 (3 units), 15 (3 units), 66 (5 units), 67 (5 units), 101 (5 units), 102 (5 units), 103 (5 units); **PHYSIOL**: 1 (4 units); **PLNT SC**: 103 (3 units), 901 (3 units); **PSYCH**: 2 (3 units), 73 (1 unit)

**SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS EMPHASIS UNITS****18 UNITS****AREA OF EMPHASIS: SOCIAL AND BEHAVIORAL SCIENCES**

This area of emphasis represents the core courses for students who want to explore a broad area of courses in the Social and Behavioral Sciences including Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology.

**Courses used to satisfy the Area of Emphasis may also count toward general education requirements. Courses from a minimum two (2) academic disciplines must be completed from within the chosen Area of Emphasis. Each course used toward the unit requirement must be completed with a C or better or a P if the course is taken on a "pass-no pass" basis.**

**ACCTG**: 1 (5 units), 2 (5 units); **ADDICST**: 15 (3 units); **ADM JUS**: 1 (3 units), 2 (3 units), 4 (3 units), 67 (3 units); **ANTHRO**: 101 (3 units), 102 (3 units), 104 (3 units) (same as Linguistics 1), 105 (3 units), 106 (4 units), 109 (3 units), 111 (2 units), 121 (3 units), 119 (2 units), 132 (3 units), 141 (3 units), 161 (3 units), 162 (3 units), 163 (3 units); **ART**: 101 (3 units), 102 (3 units), 103 (3 units), 105 (3 units), 109 (3 units), 111 (3 units), 161 (3 units) (same as Anthro 104 and Ling 1), 162 (3 units) (same as Ling 2), 163 (3 units) (same as Ling 3); **BUS**: 5 (3 units); **CAOT**: 32 (3 units), 82 (3 units); **CHICANO**: 2 (3 units), 80 (3 units); **CH DEV**: 1 (3 units) (same as Psychology 11); **ECON**: 1 (3 units), 2 (3 units), 10 (3 units), 16 (3 units), 30 (3 units), 60 (3 units); **ENGLISH**: 101 (3 units), 102 (3 units), 103 (3 units); **ENV SCI**: 1 (3 units), 7 (3 units); **GEOG**: 1 (3 units), 2 (3 units), 3 (3 units), 7 (3 units), 14 (3 units), 15 (2 units), 20 (6 units), 21 (3 units), 22 (3 units); **GEOG** or **GIS**: 31 (3 units), 32 (3 units), 33 (3 units), 38 (3 units), 39 (3 units); **HISTORY**: 1 (3 units), 2 (3 units), 3 (3 units), 4 (3 units), 5 (3 units), 6 (3 units), 11 (3 units), 12 (3 units), 13 (3 units), 20 (3 units), 27 (3 units), 29 (3 units), 39 (3 units), 41 (3 units), 42 (3 units), 43 (3 units), 44 (3 units), 52 (3 units), 56 (3 units), 86 (3 units), 87 (3 units); **JOURNAL**: 100 (3 units), 251 (3 units); **LAW**: 3 (3 units); **LING**: 1 (3 units) (same as Anthro 104 and 161), 2 (3 units) (same as Anthro 162), 3 (3 units) (same as Anthro 163); **MATHEMATICS**: 215 (3 units), 227 (4 units), 235 (5 units), 238 (5 units), 240 (3 units), 245 (3 units), 260 (5 units), 261 (5 units), 262 (5 units), 263 (5 units), 291 (3 units); **PERSDEV**: 20 (3 units), 40 (3 units); **PHILOSOPHY**: 5 (3 units), 6 (3 units), 9 (3 units); **POL SCI**: 1 (3 units), 2 (3 units), 5 (3 units), 7 (3 units), 14 (3 units), 19 (3 units), 30 (3 units), 37 (3 units) (same as Sociology 37), 42 (3 units), 43 (3 units); **PSYCH**: 1 (3 units), 2 (3 units), 3 (3 units), 6 (3 units), 11 (3 units) (same as Child Development 1), 12 (3 units), 13 (3 units), 14 (3 units), 16 (3 units), 17 (3 units), 32 (3 units), 40 (3 units), 41 (3 units), 52 (3 units), 60 (3 units), 66 (3 units), 69, (3 units), 73 (1 unit), 74 (3 unit); **SOC**: 1 (3 units), 2 (3 units), 3 (3 units), 4 (3 units), 8 (3 units), 11 (3 units), 13 (3 units), 15 (3 units), 21 (3 units), 28 (3 units), 29 (3 units), 35 (3 units), 37 (3 units) (same as Political Science 37), 42 (2 units) 86 (3 units), 87 (3 units); **SPANISH**: 10 (3 units), 16 (3 units); **SPEECH**: 101 (3 units), 102 (3 units), 104 (3 units), 121 (3 units), 122 (3 units); **STATISTICS** 1 (3 units), 7 (4 units),

**SOCIAL AND BEHAVIORAL SCIENCE EMPHASIS UNITS****18 UNITS**

**AREA OF EMPHASIS: WOMEN'S STUDIES**

The Women's Studies Area of Emphasis is designed to enable students to integrate courses in several disciplines and achieve a broad understanding of the complex roles of women in American Society, past present, and future.

**ANTHRO** 109 (3 units); **ENGLISH** 239 (3 units), 252 (3 units); **HEALTH** 8 (3 units); **HISTORY** 52 (3 units); **POL SCI** 19 (3 units); **PSYCH** 16 (3 units), 32 (3 units), 52 (3 units); **SOC** 21 (3 units)

**WOMEN'S STUDIES EMPHASIS TOTAL UNITS** **18**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## Geographic Information Systems

### GEOGRAPHIC INFORMATION SYSTEMS (GIS)

#### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

The GIS Certificate is designed to provide the skills and knowledge necessary for immediate entry-level employment for persons interested in Geographic Information Systems (GIS) and automated mapping technology. It will also provide the needed upgrading and retraining of current employees in this rapidly expanding technological field.

<b>CERTIFICATE - REQUIRED COURSES</b>		<b>UNITS</b>
GEORG 31	Introduction to Geographic Information Systems (3 units) Or	3
GIS 31	Introduction to Geographic Information Systems (3 units)	
GEORG 32	GIS Applications: Arc View (3 units) Or	3
GIS 32	GIS Applications: Arc View (3 units)	
GEORG 36	GIS Cartography and Base Map Development (3 units) Or	3
GIS 36	GIS Cartography and Base Map Development (3 units)	
GEORG 38	Spatial Analysis and Modeling (3 units) Or	3
GIS 38	Spatial Analysis and Modeling (3 units)	

Select a minimum of one 1-unit course and one 3-unit course from the following: 4

GEORG 33 Intermediate GIS Applications: Arc View 93 units); GIS 33 Intermediate GIS Applications: Arc View (3 units)

GEORG 37 Introduction to Global Positioning System (GPS) (1 unit); GIS 37 Introduction to Global Positioning System (GPS) (1 unit)

GEORG 39 GIS for Science, Business, and Government (3 units); GIS 39 GIS for Science, Business, and Government (3 units)

GEORG 40 GIS Internship (1 unit); GIS 40 GIS Internship (1 unit)

**CERTIFICATE - TOTAL UNITS** **16**

## Geography

### Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

This certificate is granted by the Department of Anthropological and Geographical Sciences to students who have completed a program of introductory courses in geography.

**REQUIRED COURSES**

GEORG 1	Physical Geography	3
GEORG 2	Cultural Elements of Geography	3
	Or	
GEORG 7	World Regional Geography	3
GEORG 15	Physical Geography Laboratory	2
<b>Select a minimum of 8 semester units from the following:</b>		
GEORG 2*	Cultural Elements of Geography	3
GEORG 7*	World Regional Geography	3
GEORG 3	Introduction to Weather and Climate	3
	Or	
METEOR 3	Introduction to Weather and Climate	3
GEORG 14	Geography of California	3
GEORG 20	Field Studies in California Geography	1-6
GEORG 21	Introduction to the Geography of the United States and Canada	3
GEORG 22	Introduction to the Geography of Latin America	3
GEORG 31	Introduction to Geographic Information Systems	3
GEORG 32	GIS Applications: ArcView	3
GEORG 33	Intermediate GIS Applications: ArcView	3
GEORG 37	Introduction to Global Positioning Systems (GPS)	1

**CERTIFICATE - TOTAL UNITS** **16**  
**(A MINIMUM OF 8 UNITS MUST HAVE BEEN COMPLETED AT PIERCE COLLEGE)**

*\*If not used as a required course*

# Industrial Technology

## AUTOMOTIVE SERVICE TECHNOLOGY

### ■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

Faculty Advisor: T. H. Rosdahl

MAJOR - REQUIRED COURSES		UNITS
AST 1	Automotive Engines	5
AST 2	Suspension, Brakes and Power Systems	5
AST 3	Engine Diagnostics and Tune-Up	5
AST 4	Starting and Charging Systems/ Automotive Electrical Circuits	5
AST 5	Standard Transmissions, Clutches, Drive Lines and Differentials	3
AST 6	Automatic Transmission Electronic Diagnostics and Repair	5
AST 7	Air Conditioning	3
AST 20	Advanced Engine Diagnostics and Performance	4
AST 23	Enhanced Clean Air Car	4
AST 32	Automotive Service Technology Projects Laboratory – Chassis and Suspension Systems (1 unit)	1-3
	Or	
AST 52	Advanced Brakes Steering and Suspension systems (3 units)	
AST 34	Automotive Service Technology Projects Laboratory Electrical Circuits (2 units)	2-3
	Or	
AST 54	Advanced Electrical Systems (3 units)	
AST 36	Automotive Service Technology Laboratory Standard Transmissions, Clutches, Drive Lines and Differentials/Air Conditioning	1
<b>Select a minimum of 3 semester units from the following:</b>		<b>3</b>
AST 41	Precision Lower-End Engine Blueprinting and Assembly (3 units)	
AST 42	Performance Chassis and Suspension Systems (3 units)	
AST 43	Dyno Tuning for Performance (3 units)	
AST 44	Precision Upper-End Engine Assembly (3 units)	
AST 45	Chassis, Suspension and Interior Fabrication Techniques (3 units)	

**MAJOR - TOTAL UNITS 43-45**

## GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

Upon completion of this degree program, students will be able to:

- Analyze and synthesize the elements and principles of the automobile and service procedures of the automotive industry today.
- Demonstrate a comprehension of methods, skills and tools used in the service and repair of the complex automotive systems of today's vehicles.

## AUTOMOTIVE SERVICE TECHNOLOGY

### ■ Certificate of Achievement

For students who wish to complete a minimum of classes in one year to prepare for employment. A minimum of 44 units is required.

CERTIFICATE - REQUIRED COURSES		UNITS
AST 1	Automotive Engines	5
AST 2	Suspension, Brakes and Power Systems	5
AST 3	Engine Diagnostics and Tune-Up	5
AST 4	Starting and Charging Systems/ Automotive Electrical Circuits	5
AST 5	Standard Transmissions, Clutches, Drive Lines and Differentials	3
AST 6	Automatic Transmission Electronic Diagnostics and Repair	5
AST 7	Air Conditioning	3
AST 20	Advanced Engine Diagnostics and Performance	4
AST 23	Enhanced Clean Air Car	4
AST 32	Automotive Service Technology Projects Laboratory – Chassis and Suspension Systems (1 unit)	1-3
	Or	
AST 52	Advanced Brakes Steering and Suspension systems (3 units)	
AST 34	Automotive Service Technology Projects Laboratory Electrical Circuits (2 units)	2-3
	Or	
AST 54	Advanced Electrical Systems (3 units)	
AST 36	Automotive Service Technology Laboratory Standard Transmissions, Clutches, Drive Lines and Differentials/ Air Conditioning	1
<b>Select a minimum of 3 semester units from the following:</b>		<b>3</b>
AST 41	Precision Lower-End Engine Blueprinting and Assembly (3 units)	
AST 42	Performance Chassis and Suspension Systems (3 units)	
AST 43	Dyno Tuning for Performance (3 units)	
AST 44	Precision Upper-End Engine Assembly (3 units)	
AST 45	Chassis, Suspension and Interior Fabrication Techniques (units)	

**CERTIFICATE - TOTAL UNITS 46**

## AUTOMOTIVE ADVANCED LEVEL HYBRID DIAGNOSTIC TECHNICIAN

### Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate covers the electric and electric/hybrid vehicles used in the transportation industry today. Topics include the theory, design, operation, maintenance, repair and high voltage safety aspects of vehicles produced by the major automakers. The operation of hybrid components such as computerized management systems, motors, controllers, chargers, and regenerative braking systems are covered in detail. Electronic accessories, including air conditioning and, power steering systems as they pertain to the hybrid vehicle are discussed.

REQUIRED COURSES		UNITS
AST 3	Engine Diagnosis and Tune-Up	5
AST 4	Starting and Charging systems/ Automotive Electrical Circuits	5
AST 20	Advanced Engine Diagnostics and Performance	4
AST 55	Hybrid Service and Safety	3

**CERTIFICATE - TOTAL UNITS** 17

## AUTOMOTIVE ALTERNATIVE DIAGNOSTIC TECHNICIAN

### ■ Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This certificate will introduce and prepare the student to properly repair alternative fueled vehicles used in the transportation industry today. Various fuels will be looked at to include: Electric, Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG), Ethanol, Methanol and Bio-diesel. Topics include the theory, design and operation of systems in use today. Laboratory activities will include diagnosis, repair and conversion of Alternative fueled vehicles.

REQUIRED COURSES		UNITS
AST 3	Engine Diagnosis and Tune-Up	5
AST 20	Advanced Engine Diagnostics and Performance	4
AST 53	Introduction to Alternative Fuels	3

**CERTIFICATE - TOTAL UNITS** 12

## AUTOMOTIVE BASIC HYBRID SERVICE TECHNICIAN

### ■ Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

This course covers the electric and electric/hybrid vehicles used in the transportation industry today. Topics include the theory, design, operation, maintenance, repair and high voltage safety aspects of vehicles produced by the major automakers. The operation of hybrid components such as computerized management systems, motors, controllers, chargers, and regenerative braking systems are covered in detail. Electronic accessories, including air conditioning and, power steering systems as they pertain to the hybrid vehicle are discussed.

REQUIRED COURSES		UNITS
AST 25	Fundamentals of Auto Mechanics	4
AST 55	Hybrid Service and Safety	3

**CERTIFICATE - TOTAL UNITS** 7

## AUTOMOTIVE LIGHT SERVICE TECHNICIAN

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This certificate program prepares the student for employment in a service station, tire store, brake/front end shop, or a general service garage.

CERTIFICATE - REQUIRED COURSES		UNITS
AST 2	Suspension, Brakes and Power Systems	5
AST 4	Starting and Charging Systems/Automotive Electrical Circuits	5
AST 7	Air Conditioning	3

**CERTIFICATE - TOTAL UNITS** 13

## AUTOMOTIVE EMISSION SPECIALIST

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

This certificate program prepares the student to become a California Smog Check Technician.

CERTIFICATE - REQUIRED COURSES		UNITS
AST 3	Engine Diagnosis and Tune-Up	5
AST 4	Starting and Charging Systems/ Automotive Electrical Circuits	5
AST 20	Automotive Electronic Computer Control Systems	4
AST 23	Enhanced Area Clean Air Car Course	3

**CERTIFICATE - TOTAL UNITS** 17

## AUTOMOTIVE POWERTRAIN SPECIALIST

■ Certificate of Achievement

### PROGRAM INFORMATION

This certificate program prepares the student to become an Automotive Heavy Line Technician.

CERTIFICATE - REQUIRED COURSES		UNITS
AST 1	Automotive Engines	5
AST 5	Standard Transmissions, Clutches, Drive Lines, and Differentials	3
AST 6	Automatic Transmissions	5
<b>CERTIFICATE - TOTAL UNITS</b>		<b>13</b>

## AUTOMOTIVE PERFORMANCE APPLICATIONS

■ Certificate of Achievement

### PROGRAM INFORMATION

The Automotive Performance Application certificate is designed for students who desire advanced in-depth instruction in various aspects of the automobile.

This certificate helps students prepare for entrance and advancement in the automotive performance industry.

CERTIFICATE - REQUIRED COURSES		UNITS
AST 41	Precision Lower-End Engine Blueprinting and Assembly	3
AST 42	Performance Chassis and Suspension Systems	3
AST 43	Dyno Tuning For Performance	3
AST 44	Precision Upper-End Engine Assembly	3
AST 45	Chassis, Suspension and Interior Fabrication Techniques	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## DRAFTING - MECHANICAL

■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

Faculty Advisor: R. Smetzer

This associate degree prepares the student for entry level employment as a draftsman in engineering and manufacturing industries, as well as for positions existing with federal, state, and local government agencies. With the addition of practical industrial experience, draftsmen may eventually become designers in their chosen area of concentration.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

### MAJOR - REQUIRED COURSES

MAJOR - REQUIRED COURSES		UNITS
IND TEK 105	Industrial Print Reading	3
IND TEK 110	Mechanical Computer-Assisted Drafting I	3
IND TEK 115	Mechanical Computer-Assisted Drafting II	3
IND TEK 130	Technology of Metal Machining Process I	3
IND TEK 140	Fundamentals of CNC Technology	3
IND TEK 210	Mechanical Computer-Assisted Drafting III	3
IND TEK 215	Mechanical Computer-Assisted Drafting IV	3
IND TEK 310	Mechanical Computer-Assisted Drafting V	3
IND TEK 315	Mechanical Computer-Assisted Drafting VI	3
IND TEK 346	CAM Programming Using Surfcam	3
MATH 120	Plane Geometry	5
MATH 125	Intermediate Algebra or higher	3-5

**MAJOR - TOTAL UNITS 38-40**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## BASIC DRAFTING-MECHANICAL

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

### PROGRAM INFORMATION

The Basic Drafting-Mechanical certificate program provides the vocational student with training in the foundational aspects of mechanical computer-assisted drafting.

### CERTIFICATE - REQUIRED COURSES

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 105	Industrial Print Reading	3
IND TEK 110	Mechanical Computer-Assisted Drafting I	3
IND TEK 115	Mechanical Computer-Assisted Drafting II	3
IND TEK 210	Mechanical Computer-Assisted Drafting III	3
IND TEK 215	Mechanical Computer-Assisted Drafting IV	3

**CERTIFICATE - TOTAL UNITS 15**

## ADVANCED DRAFTING-MECHANICAL

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

The Advanced Drafting-Mechanical certificate program gives the occupational student training in the upper-level skills of mechanical computer-aided drafting.

### CERTIFICATE - REQUIRED COURSES

CERTIFICATE - REQUIRED COURSES		UNITS
MATH 120	Plane Geometry	5
IND TEK 310	Mechanical Computer-Assisted Drafting V	3
IND TEK 315	Mechanical Computer-Assisted Drafting VI	3
IND TEK Elective	choose from any IND TEK course	3

**CERTIFICATE - TOTAL UNITS 14**

## NUMERICAL CONTROL PROGRAMMING

### ■ Associate of Science Degree

#### PROGRAM INFORMATION

Numerical Control is a system (sometimes referred to as CAM - Computer-Aided Manufacturing) using specially prepared instructions, developed by the N/C Programmer, to control the operation of various manufacturing equipment such as machine tools, inspection machines, woodworking machines, laser machines, and robots. The following associate degree is offered at the suggestion of the Industry Advisory Committee for Numerical Control.

Courses may be taken in any sequence, but recommended preparation should be met. Students majoring in this area must meet each semester with Numerical Control Faculty Advisor R. D. Smetzer.

Completion of the following three courses, IND TEK 105, 130 and 140, may provide entry level employment opportunities.

*Faculty Advisor: R. Smetzer*

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

	UNITS
IND TEK 105 Industrial Print Reading	3
IND TEK 130 Technology of Metal Machining Processes I	3
IND TEK 140 Fundamentals of CNC Technology	3
IND TEK 230 Technology of Metal Machining Processes II	3
IND TEK 244 CNC Programming and Machine Operation - Lathe	3
IND TEK 248 CNC Programming and Machine Operation - Mill	3
IND TEK 330 Technology of Metal Machining Processes III	3
IND TEK 332 Projects Laboratory in Metal Machining Processes	3
IND TEK 346 CAM Programming using Surf CAM	3
IND TEK 444 CNC Lathe Projects	3
IND TEK 448 CNC Mill Projects	3
MATH 125 Intermediate Algebra or higher	3-5

#### MAJOR - TOTAL UNITS

**36-38**

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

<i>Plan A: NOT AVAILABLE WITH THIS MAJOR</i>	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## NUMERICAL CONTROL PROGRAMMING

### ■ Certificate of Achievement

#### PROGRAM INFORMATION

The Certificate Program is designed for students wishing to complete only the technical requirements of the Numerical Control Programming Associate Degree program, secure employment and possibly complete the Numerical Control Programming Associate Degree while employed and attending Pierce College part time. It is also designed to enable mechanical drafting, tool design, machine shop, and other majors to secure certification in Numerical Programming as a second area of expertise. The notes applying to the Associate Degree apply also to the certificate program. Courses may be taken in any sequence as long as the prerequisites and recommended preparation coursework are met. However, the first five courses listed provide a possible entry-level employment package. Students working on this certificate program must meet each semester with R. D. Smetzer, NC.

*Faculty Advisor: (R. Smetzer)*

#### CERTIFICATE - REQUIRED COURSES

	UNITS
IND TEK 105 Industrial Print Reading	3
IND TEK 130 Technology of Metal Machining Processes I	3
IND TEK 140 Fundamentals of CNC Technology	3
IND TEK 230 Technology of Metal Machining Processes II	3
IND TEK 244 CNC Programming and Machine Operation - Lathe	3
IND TEK 248 CNC Programming and Machine Operation - Mill	3
IND TEK 330 Technology of Metal Machining Processes III	3
IND TEK 332 Projects Laboratory in Metal Machining Processes	3
IND TEK 346 CAM Programming using Surf CAM	3
IND TEK 444 CNC Lathe Projects	3
IND TEK 448 CNC Mill Projects	3
MATH 125 Intermediate Algebra or higher	3-5

#### CERTIFICATE - TOTAL UNITS

**36-38**

## MACHINE SHOP TECHNOLOGY

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

For students who wish to complete technical coursework in the Machine Shop program and prepare for employment as a conventional machine tool operator. Courses may be completed in any order, but recommended preparation should be met.

#### CERTIFICATE - REQUIRED COURSES

	UNITS
IND TEK 105 Industrial Print Reading	3
IND TEK 130 Technology of Metal Machining Processes I	3
IND TEK 230 Technology of Metal Machining Processes II	3
IND TEK 330 Technology of Metal Machining Processes III	3
<b>Select a minimum of one course (3 semester units) from the following:</b>	<b>3</b>
IND TEK 140 Fundamentals of CNC Technology (3 units)	
IND TEK 332 Projects Laboratory in Metal Machining Processes I (3 units)	

#### CERTIFICATE - TOTAL UNITS

**15**

## CNC OPERATOR

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

For students who wish to complete technical coursework in the Machine Shop/CNC program and prepare for employment as a CNC machine tool operator. Courses may be completed in any order, but recommended preparation should be met.

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 105	Industrial Print Reading	3
IND TEK 130	Technology of Metal Machining Processes I	3
IND TEK 140	Fundamentals of CNC Technology	3
IND TEK 230	Technology of Metal Machining Processes II	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
IND TEK 244	CNC Programming and Machine Operation - Lathe (3 units)	
IND TEK 248	CNC Programming and Machine Operation - Mill (3 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## CNC PROGRAMMING

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

For students who wish to complete technical coursework in Numerical Control and prepare for entry-level employment as a CNC machine tool programmer. Courses may be completed in any order, but recommended preparation should be met.

#### CREDIT BY EXAMINATION

Students may enter the program at a level appropriate to their previous industrial experience and training. See Credit by Exam policies in this catalog.

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 244	CNC Programming and Machine Operation - Lathe	3
IND TEK 248	CNC Programming and Machine Operation - Mill	3
IND TEK 346	CAM Programming Using Surf CAM	3
<b>Select a minimum of two courses (6 semester units) from:</b>		<b>6</b>
IND TEK 444	Projects Laboratory - CNC Lathe Programming (3 units)	
IND TEK 448	Projects Laboratory - CNC Mill Programming (3 units)	
IND TEK 931 or 941	Cooperative Work Experience Education (3-4 units)	
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## WELDING

*Faculty Advisor: R. Smetzer*

The Welding program will provide intensive vocational training in all common types of welding. The student has the opportunity to learn oxy-acetylene, shielded metal arc, gas tungsten arc, and gas metal arc welding methods and can earn a Certificate of Achievement.

## BASIC WELDING

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

The Basic Welding certificate program provides the vocational student with training in the foundational skills of oxy-acetylene and shielded metal arc welding.

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 105	Industrial Print Reading	3
IND TEK 161	Oxy-Acetylene Welding I	3
IND TEK 162	Oxy-Acetylene Welding II	3
IND TEK 261	Arc Welding I	3
IND TEK 262	Arc Welding II	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>15</b>

## ADVANCED WELDING

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

The Advanced Welding certificate program gives the occupational student training in the skills of gas tungsten arc welding, gas metal arc welding, and flux core arc welding.

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 361	Inert Gas Arc Welding I	3
IND TEK 362	Inert Gas Arc Welding II	3
IND TEK 461	Advanced Arc Welding I	3
IND TEK 462	Advanced Arc Welding II	3
<b>CERTIFICATE - TOTAL UNITS</b>		<b>12</b>



# Italian

## ITALIAN

### ■ Associate of Arts Degree

#### PROGRAM INFORMATION

The main objective of the Italian program is to enable the students to acquire competence in understanding, speaking, reading and writing the Italian language. The objective of the program is also to develop an understanding and appreciation of the culture, history and literature of Italy.

Students are placed in Italian courses according to their previous study. In general one year of high-school Italian is equivalent to one semester at Pierce. Native speakers are encouraged to enroll in Italian 4, 5, or 6.

All Italian courses are taught primarily in the language. However, the instructor may choose to clarify certain concepts in English when necessary. By the end of the first year, students are able to use the basic structure of the language and the practical vocabulary learned to converse on everyday topics, as well as to read and write at an elementary level.

Italian 3 combines with Italian 8 (conversational Italian) to increase oral proficiency and also continues to raise the students ability to read and write.

In Italian 4, 5, 6, students gradually acquire more ease in expressing themselves orally and in writing. Combining a review of grammar with discussion and analysis of literary texts of increasing difficulty, these courses give students a broad overview of Italy and the Italian people and prepare students to live abroad.

#### INTERNATIONAL EDUCATION

Students are encouraged to participate in the International Education summer program of study in Florence offered by Pierce College.

#### CAREER OPPORTUNITIES

Italian will enhance careers in international business or trade, fashion, medical research, the gourmet food industry. Italian is especially desirable for students of classic or opera music, art and humanities.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

#### MAJOR - REQUIRED COURSES

		UNITS
ITALIAN 8	Conversational Italian	2
ITALIAN 10	Italian Conversation and Culture	3

Select a minimum of three courses from the following: **15**

ITALIAN 1	Elementary Italian I (5 units)
ITALIAN 2	Elementary Italian II (5 units)
ITALIAN 3	Intermediate Italian I (5 units)
ITALIAN 4	Intermediate Italian II (5 units)
ITALIAN 5	Advanced Italian I (5 units)
ITALIAN 6	Advanced Italian II (5 units)

#### MAJOR - TOTAL UNITS

**20**

#### MAJOR - RECOMMENDED ELECTIVES

**ANTHRO 102** (3 units); **ART 102** (3 units), **103** (3 units); **ENGLISH 203** (3 units), **204** (3 units); **HISTORY 50**; **HUMAN 12, 13**; **LING 1** (3 units).  
Also recommended: **INTBUS 1** (3 units).

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

# Journalism

## JOURNALISM

### ■ Associate of Arts Degree

*See also Photojournalism for a different AA degree option.*

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Journalism courses are taken by those planning careers in communications, i.e. reporting, broadcast news and public relations. Because of its emphasis on concise, clear writing, journalism is also one of the most popular majors for prelaw students.

Students will learn how to recognize news, conduct interviews and work on the college print and online publications. Special emphasis is placed on meeting deadlines, accuracy and fairness.

Jobs in the field of journalism almost always require a bachelor's degree, though it does not necessarily have to be in journalism.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
BRDCSTG 1	Fundamentals of Radio and Television Broadcasting	3
CO SCI 551	Introduction to the Internet and the World Wide Web (1 unit)	1
	Or	
LIB SCI 102	Internet Research Methods	1
JOURNAL 100	Social Values in Mass Communications	3
JOURNAL 101	Collecting and Writing News	3
JOURNAL 108	Article Writing (3 units)	3
	Or	
JOURNAL 220	Magazine Editing (3 units)	
JOURNAL 202	Advanced Newswriting	3
JOURNAL 218	Practical Editing	3
LIB SCI 102	Internet Research Methods (1 unit)	
PHOTO 10	Beginning Photography	3
PHOTO 20	Beginning Photojournalism (4 units)	3-4
	Or	
MULTIMD 801	Multimedia Storytelling (3 units)	

### MAJOR - ELECTIVE COURSES

Select a minimum of 6 semester units from the following: 6

**ART 500** Introduction to Design (3 units); **CO SCI 501** Introduction to Computers & Their Uses (3 units); **COOP ED** Cooperative Work Experience Education (3 units); **ENGLISH 101** College Reading and Composition I and/or (3 units); **ENGLISH 102** College Reading and Composition II (3 units); **GEOG 2** Cultural Elements of Geography (3 units); **JOURNAL 106** Mechanics of Expression (3 units); **JOURNAL 217** Publication Laboratory (2 units); **JOURNAL 219** Techniques for Staff Editors (1 unit); **PHOTO 11** Advanced Photography (4 units); **PHOTO 21** News Photography (4 units); **POL SCI 1** The Government of The United States (3 units); **POL SCI 7** Contemporary World Affairs (3 units); **PUB REL 1** Principles of Public Relations (3 units) or **MGMT 6** Public Relations (3 units)

**MAJOR - TOTAL UNITS** 31-32

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: NOT AVAILABLE WITH THIS MAJOR	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

Upon completion of this program, students will be able to:

- Demonstrate the ability to conduct research, gather information, write clearly and correctly, and present relevant news or persuasive information at a professional level.
- Think critically, creatively, and independently; evaluate their own work and the work of others for accuracy, fairness, clarity, style, and correctness.
- Demonstrate an understanding of the history of mass communications (journalism, cinema, broadcasting), the diversity of groups in a global society in relationship to communications, and the role of mass communications in society.
- Demonstrate an understanding of the ethical concepts, legal implications, considerations, and practices that guide the mass media professions.
- Demonstrate the ability to apply tools and technologies appropriate for the production, editing and presentation of visual, aural, textual, or other media content.

# Latin American Studies

## LATIN AMERICAN STUDIES

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### PROGRAM INFORMATION

*Faculty Advisor: Professor Fernando Oleas*

*Phone: 719-6452. Faculty Office: 3104.*

The considerable value of an understanding of Latin America is generally evident today. The Latin American Studies Program offers a broad and flexible interdisciplinary approach designed to provide a comprehensive understanding of Latin America. The curriculum leads to the Associate in Arts degree with a major in Latin American studies that transfers to private and public four-year colleges and universities.

This major can lead to careers in government, foreign service, law, international business, journalism and many other fields after obtaining the Bachelor of Arts and/or Master of Arts degrees.

The following areas of knowledge are central to the Associate's degree in Latin

American studies: knowledge and understanding of the major historical, cultural, social, political, and economic problems facing the Latin American community; knowledge of chief historical factors that gave rise to existing institutions and processes; an informed awareness of literature, art, and music in Latin America, including familiarity with the work of several recognized Latin American artists and authors.

In addition, students completing the degree in Latin American studies are expected to acquire reading and speaking ability in Spanish; the ability to engage in thoughtful dialogue about Latin America with educated Latin Americans; the ability to locate Latin American ideas, historical events, and cultural phenomena in the Latin American context from which they originate; and

In the ability to communicate competently in effective English prose.

### REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE

Satisfaction of the regular transfer and college requirements for the Associate Degree. Contact the Counseling Office for additional information.

1. Demonstrated proficiency in Spanish (successful completion of SPANISH 4 or higher, and SPANISH 27).
2. A total of 24 units from designated courses. Of these 24 units, 9 units must be in the area of social sciences (HISTORY 5 & 6 and SPANISH 10) and 6 units in the area of humanities (SPANISH 12, 15, 25, or 26) with the remaining 9 in Spanish proficiency courses.
3. In addition, students may elect to take some of the general education courses offered in the college including Anthropology 102 and Geography 2 or 10.
4. Latin American studies majors are strongly encouraged to include a study abroad semester or summer in their academic program. For further information concerning these programs abroad, contact Dean Paul Whalen in Academic Affairs at 719-6444.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
HISTORY 5	History of the Americas I	3
HISTORY 6	History of the Americas II	3
SPANISH 4	Intermediate Spanish II or higher	5
SPANISH 10	Latin-American Civilization	3
SPANISH 27	Cultural Awareness through Advanced Conversation (3 units) Or	2-3
SPANISH 8	Conversational Spanish (2 units)	
<b>Select a minimum of two courses (6 semester units) from the following:</b>		<b>6</b>
SPANISH 12	Contemporary Mexican Literature (3 units)	
SPANISH 15	Great Books of Latin American Literature (3 units)	
SPANISH 16	Mexican Civilization (3 units)	
SPANISH 25	Spanish American Short Story in Translation (3 units)	
SPANISH 26	Understanding Latin America through Film (3 units)	
SPANISH 65	Mexican Literature and Culture (3 units)	

**RECOMMENDED BREADTH ELECTIVES**

ANTHRO 102	Human Ways of Life: Cultural Anthropology (3 units)
GEOG 2	Cultural Elements of Geography (3 units)
GEOG 22	Introduction to Geography of Latin America (3 units)

**MAJOR - TOTAL UNITS** **22-23**

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**LATIN AMERICAN STUDIES**

## ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate offers students a broad background encompassing historical, cultural, linguistic, and geographic aspects of Latin America.

CERTIFICATE - REQUIRED COURSES		UNITS
SPANISH 4	Intermediate Spanish II	5
SPANISH 10	Latin American Civilization	3
SPANISH 15	Great Books of Latin America	3
SPANISH 26	Understanding Latin America Through Film	3
<b>Select a minimum of one course from the following:</b>		<b>2-3</b>
SPANISH 8	Conversational Spanish (2 units)	
SPANISH 12	Contemporary Mexican Literature (3 units)	
SPANISH 25	Spanish American Short Story in Translation (3 units)	

**CERTIFICATE - TOTAL UNITS** **16-17**

**MEXICAN STUDIES**

## ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate provides the student with the basic understanding of contemporary Mexico and its peoples, as well as an understanding of the major historical, cultural, social, political, and economic problems facing the Mexican community.

CERTIFICATE - REQUIRED COURSES		UNITS
SPANISH 4 or Higher	Intermediate Spanish II	5
SPANISH 12	Contemporary Mexican Literature	3
SPANISH 16	Mexican Civilization	3
SPANISH 26	Understanding Latin America Through Film	3
SPANISH 65	Mexican Literature and Culture	3

**CERTIFICATE - TOTAL UNITS** **17**

**Linguistics****LINGUISTICS**

## Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate is granted by the Department of Anthropological and Geographical Sciences to students who have completed a program of introductory courses in linguistics.

REQUIRED COURSES		UNITS
Anthro 104	Human Biological Evolution Or	3
Ling 1	Introduction to Language and Linguistics	3
Ling 2	Introduction to Sociolinguistics	3
Ling 3	Introduction to Psycholinguistics	3

**Select a minimum of 6 semester units from the following:**

Anthro 101	Human Biological Evolution	3
Anthro 102	Human Ways of Life: Cultural Anthropology	3
Anthro 109	Sex, Gender and Culture	3
Anthro 121	Anthropology of Religion, Magic & Witchcraft	3
Anthro 132	Native Peoples of North America	3
Anthro 141	Culture, Illness and Healing	3
English -	any 200 level course	

**CERTIFICATE - TOTAL UNITS** **15**

# Mathematics

## MATHEMATICS

■ Associate of Arts Degree

### PROGRAM INFORMATION:

A student may earn a Mathematics Associate Degree in Arts by satisfactory completion of at least 18 units in mathematics courses listed below, in addition to the Associate. At least 6 of those units must be from Math 263, Math 270, or Math 275.

### TRANSFER STUDENTS:

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

### MAJOR REQUIRED COURSES UNITS

A minimum of six semester units selected from the following:

MATH 263	Calculus III	5
MATH 270	Linear Algebra	3
MATH 275	Ordinary Differential Equations	3

A minimum of 12 semester units selected from the following:

MATH 227	Statistics	4
MATH 235	Finite Math	5
MATH 261	Calculus I	5
MATH 262	Calculus II	5

**MAJOR - TOTAL UNITS 18 MINIMUM**

### REQUIRED GENERAL EDUCATION COURSES

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: NOT AVAILABLE WITH THIS MAJOR	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

### Learning Outcomes

Upon completion of this degree program, students will be able to:

- Model and solve applied problems using derivatives, integrals, systems of equations, and/or differential equations as appropriate.
- Interpret values of functions and solutions of equations in an applied context.
- Interpret an echelon form of a matrix in terms of solutions to systems of linear equations and linear independence of a set of vectors.
- Evaluate derivatives, integrals, and solutions to differential equations whether the problem is given algebraically, graphically, numerically, or verbally.
- Employ technology to assist in computations and graphing.

# Meteorology

## METEOROLOGY

■ Department Skills Certificate

Department Skills Certificates will not appear on the students' official transcripts.

### REQUIRED COURSES UNITS

GEOG 3	Introduction to Weather and Climate	3
	Or	
METEOR 3	Introduction to Weather and Climate	3
GEOG 1	Physical Geography	3
GEOG 15	Physical Geography Laboratory	2

Select a minimum of 8 semester units from the following:

GEOLOGY 1	Physical Geology	3
GEOLOGY 6	Physical Geology Laboratory	2
OCEANO 1	Introduction to Oceanography	3
OCEANO 10	Physical Oceanography Laboratory	2
GEOG 31/GIS 31	Introduction to the Geographic Information Systems	3
GEOG 32/GIS 32	GIS Applications	3
GEOG 33/GIS 33	Intermediate GIS Applications	3

**CERTIFICATE – TOTAL UNITS 16**  
**(A MINIMUM OF 8 UNITS MUST BE COMPLETED AT PIERCE COLLEGE)**

# Music

## MUSIC

■ Associate of Arts Degree

### PROGRAM INFORMATION

This program is designed for students desiring the Associate in Arts Degree in Music. Students planning to transfer should consult with a counselor regarding the elective provisions. Non-transfer students should use the elective provisions to take related courses.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
MUSIC 201	Harmony I	3
MUSIC 211	Musicianship I	2
MUSIC 321	Elementary Piano I	2
MUSIC 121	Music History and Literature I (3 units) Or	
MUSIC 122	Music History and Literature II (3 units)	3
MUSIC 161	Introduction to Electronic Music	3
MUSIC 181	Applied Music I	.5
MUSIC 182	Applied Music II	.5
MUSIC 183	Applied Music III	.5
MUSIC 202	Harmony II	3
MUSIC 203	Harmony III	3
MUSIC 212	Musicianship II	2
MUSIC 213	Musicianship III	2
MUSIC 250	Music Performance Workshop	.5
<b>Performance Organization: Select a minimum of one course from the following:</b>		
MUSIC 501	(.5 units), 531 (.5 units), 721 (1 unit), 741 (1 unit), 745 (.5 units)	.5-1

**MAJOR - TOTAL UNITS** **25.5-26**

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## Nursing

### NURSING

#### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

Pierce College offers an Associate in Arts Degree Nursing Program accredited by the California Board of Registered Nursing and the National League for Nursing Accrediting Commission (see p. 4 for information on accrediting agencies). The graduate is prepared to function as an entry-level nurse. Upon completion of the prescribed curriculum, the graduate is qualified to apply for licensure as a registered nurse in the State of California.

Nursing students receive clinical experience concurrently with classroom instruction. Nursing faculty teach and supervise clinical experiences. Local hospitals and other community health care agencies provide the clinical facilities where students, under supervision, administer direct nursing care to patients. Students must provide their own transportation.

Students must first be admitted into the Nursing Program before they may take nursing courses. Details are available in the Counseling Office (818-719-6440) and the Nursing Department (818-719-6477).

The following programs may be available for qualified individuals seeking career mobility: LVN-to-RN, LVN 30 Unit Option, Transfer and Challenge options, and Foreign Nurse Graduate placement. These programs provide a certificate of completion or an Associate in Arts degree with a major in Nursing. See the Department of Nursing for detailed information.

Portions of completed coursework from this program may be applied toward the attainment of a bachelor's degree in nursing. See a counselor for advice and information on transfer and G.E. certification.

Students must complete all of the following Nursing Program prerequisites prior to entering the program.

The faculty strongly encourages the completion of a Certified Nursing Assistant (CNA) program to enhance learning experiences.

For further information concerning course planning contact the Counseling Department at (818) 719-6440 or the Nursing Department at (818) 719-6477.

#### REQUIREMENTS FOR ADMISSION

Students must complete all Nursing Program prerequisites with a grade of "C" or better prior to applying to the program. Also, students must be in good academic standing and not be on academic or progress probation.

Eligibility to be considered for the lottery is based upon state guidelines designed to increase the probability of student success. These guidelines reflect: A cumulative grade point average (GPA) of 2.5 for all college coursework taken; an overall grade point average of 2.5 for the Human anatomy, Human Physiology and Microbiology prerequisite courses with no grade less than C for each course and no more than one repetition of any of these courses; College level, transferable English, minimum of three (3) semester units with a grade no less than a C.

#### NURSING PROGRAM PREREQUISITES (LACCD E-10)

The following list represents courses offered throughout the LACCD. Not all course combinations in Anatomy and Physiology are offered on each campus.

Course	Minimum Requirements	District Courses	Units
Chemistry***	4 semester units	Chemistry 51	5
Anatomy	4 semester units with lab And	Anatomy 1 * or Physiology 8*	4
Physiology	4 semester units with lab Or	Physiology 1 * or Physiology 9*	4
Combined Anatomy & Physiology	8 semester units with lab	Biology 20	8
Microbiology	4 semester units	Microbiology 1 or Microbiology 20	5 4
General Psychology	3 semester units	Psychology 1	3
Life-Span Psychology **	3 semester units	Psychology 41	3
College Reading and Composition	3 semester units	English 101	3

**MAJOR PREP UNIT TOTAL** **26-27**

\*Student must take Anatomy 1 and Physiology 1, OR Physiology 8 and Physiology 9.

\*\*Nursing programs that did not require a Life Span Psychology course prior to the adoption of this regulation may exempt students from this requirement during the 1998 - 1999 school year.

\*\*\* Students who can demonstrate that they successfully completed one year of high school Chemistry (with lab) with a grade of C or better are exempt from this prerequisite.

*BIOLOGY 44 and CHEM 51 or PHYSIOL 1 or 8 are the prerequisites for MICRO 1 or 20 at LAPC. Courses meeting the program prerequisite requirements above may be taken at LAPC or at other institutions. To receive credit, course equivalency must be approved through the LAPC Counseling Department.*

**MATHEMATICS ADMISSION REQUIREMENT (LACCD E-10):**

Math 115 Beginning Algebra or higher (5 units). A higher level Mathematics course may be required for graduation from the Nursing Program. See a Pierce counselor for details.

One course in Mathematics, or appropriate placement level is a prerequisite to the program. This prerequisite must be validated in accordance with the provisions of Title 5, California Code of Regulations, section 55201 and The Los Angeles Community College District Policy on Prerequisites, Corequisites and Advisories. The mathematics course or placement level must be a prerequisite to at least one course in the Nursing Program.

**APPLICATION PROCEDURE**

Upon completion of prerequisite coursework application forms may be obtained at the Department of Nursing office. Applications are accepted once per year from January 15 to March 15.

**SELECTION PROCEDURE**

Eligible applicants are selected for the program by random lottery and will be notified by mail. Eligibility for random lottery selection is based upon state guidelines designed to increase the probability of student success. These guidelines reflect GPA in overall college courses, all English courses, Anatomy, Physiology and Microbiology. Repetition of Anatomy, Physiology, and Microbiology courses will also be taken into consideration.

MAJOR - REQUIRED COURSES		UNITS
NURSING 400	Adult Health Care I	4
NURSING 402	Pharmacology	1
NURSING 403	Adult Health Care II	5
NURSING 404	Maternal and Newborn Health Care	4
NURSING 405	Psychiatric Health Care	4
NURSING 406	Adult Health Care III	5
NURSING 407	Geriatric Health Care	3
NURSING 408	Psychosocial Aspects of Health Care	1
NURSING 414	Adult Health Care IV	5
NURSING 415	Pediatric Health Care	4
NURSING 441	History, Trends and Issues of Nursing	1
<b>MAJOR - TOTAL UNITS</b>		<b>37</b>

**ADDITIONAL GRADUATION REQUIREMENTS**

1. **General Education** - required courses.

**Students must complete one of the following General Education Plans:**

- Plan A: NOT AVAILABLE WITH THIS MAJOR
- \*Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

\*Nursing students who follow Plan B are exempt from AREA E1

2. **Reading & Written Expression and Math Competency:** Students will meet the Reading & Written Expression competency requirement by completing English 101. Students must meet with a Pierce counselor to determine Math competency satisfaction.

3. **Communication Skills:** One of the following Speech courses must be completed to graduate. The course may also be used to satisfy a general education requirement: Speech 101, 102, 104, 121

**NURSING DEPARTMENT POLICIES**

**All nursing and GENERAL EDUCATION - REQUIRED COURSES must be completed with a grade of "C" or better.**

Specific program policies governing grading, withdrawal, readmission, probation and dismissal are available in the Nursing Student Handbook and from the Department of Nursing.

The California Board of Registered Nursing may deny a license regulated by the Business and Professional Code, Section 480, on such grounds as: being convicted of a crime, acts of dishonesty; fraud or deceit, etc. Applicants who have questions regarding limitations related to licensure should contact the California Board of Registered Nursing ([www.rn.ca.gov](http://www.rn.ca.gov)).

# Photojournalism

## PHOTOJOURNALISM

■ Associate of Arts Degree *(An option under Journalism)*

*Also see Journalism for a different AA degree option.*

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

The photo program at Pierce has switched to digital cameras and processing. Darkrooms with chemicals for developing film and printing pictures are no longer used. We now have a state-of-the-art digital photo lab where students can use Mac computers for image processing and printing, as is currently done in the industry.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
BRDCSTG 1	Fundamentals of Radio and Television Broadcasting	3
JOURNAL 100	Social Values in Mass Communications	3
JOURNAL 101	Collecting and Writing News	3
JOURNAL 202	Advanced Newswriting	3
PHOTO 10	Beginning Photography	3
PHOTO 11	Advanced Photography	4
PHOTO 20	Beginning Photojournalism	4
PHOTO 21	News Photography	4
PHOTO 49	Advanced Photographic Digital Imaging (6 units)	3-6
	Or	
MULTIMD 801	Multimedia Storytelling (3 units)	

**MAJOR - ELECTIVE COURSES**

Select a minimum of 9 semester units from the following: 9

ART 500	Introduction to Design (3 units)
ART 502	Beginning Two-Dimensional Design (3 units)
CINEMA 3	History of Motion Pictures and Television (3 units)
CINEMA 104	History of Documentary Films (3 units)
CINEMA 107	Understanding Motion Pictures (3 units)
CO SCI 501	Introduction to Computers and Their Uses (3 units)
COOP ED	Cooperative Work Experience Education (3 units)
ENGLISH 101	College Reading and Composition I (3 units)
JOURNAL 217	Publication Laboratory (2 units)
JOURNAL 218	Practical Editing (3 units)
JOURNAL 220	Magazine Editing (3 units)
PHOTO 16	Commercial Photography (3 units)
PUB REL 1	Principles of Public Relations (3 units)
	Or
MGMT 6	Public Relations (3 units)

**MAJOR - TOTAL UNITS** 39-42

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR	
Plan B: Pierce Career and Technical GE plan	18 units
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**Learning Outcomes**

Upon completion of this program, students will be able to:

- Demonstrate the ability to conduct research, gather information, write clearly and correctly, and present relevant news or persuasive information at a professional level.
- Think critically, creatively, and independently; evaluate their own work and the work of others for accuracy, fairness, clarity, style, and correctness.
- Demonstrate an understanding of the history of mass communications (journalism, cinema, broadcasting), the diversity of groups in a global society in relationship to communications, and the role of mass communications in society.
- Demonstrate an understanding of the ethical concepts, legal implications, considerations, and practices that guide the mass media professions.
- Demonstrate the ability to apply tools and technologies appropriate for the production, editing and presentation of visual, aural, textual, or other media content.

**PHOTOJOURNALISM**

## ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

Completion of this certificate provides a student with the basics of photography and photojournalism, including shooting and developing black and white film, the functions of the mass media, the fundamentals of gathering news and the history and aesthetics of photography. Students will also be introduced to PhotoShop, the computer program by which film is scanned and prepared for publication, and will have an opportunity to take photos for publication in the school newspaper.

**CERTIFICATE - REQUIRED COURSES**

	UNITS	
JOURNAL 100	Social Values in Mass Communication	3
JOURNAL 101	Collecting and Writing News	3
PHOTO 10	Beginning Photography	3
PHOTO 20	Beginning Photojournalism	4

Select a minimum of one course from the following: 3-4

PHOTO 11	Advanced Photography (4 units)
PHOTO 17	Introduction to Color Photography (3 units)
PHOTO 21	News Photography (4 units)

**CERTIFICATE - TOTAL UNITS**

16-17

**Political Science****POLITICAL SCIENCE**

## ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**TRANSFER STUDENTS:**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**MAJOR REQUIRED COURSES**

	UNITS	
POL SCI 1	The Government of the United States	3
POL SCI 2	Modern World Governments	3
POL SCI 5	The History of Western Political Thought	3
POL SCI 7	Contemporary World Affairs	3
STAT 1	Elementary Statistics I	3

**MAJOR ELECTIVE COURSES:**

Select a minimum of two courses (6 semester units) from the following: 6  
**ECON** 1 (3 units), 2 (3 units); **HISTORY** 1 (3 units), 2 (3 units), 11 (3 units), 12 (3 units)

**MAJOR - TOTAL UNITS** 21

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: General Studies general education plan 30 units
- Plan B: *NOT AVAILABLE WITH THIS MAJOR*
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

# Pre-Engineering

## PRE-ENGINEERING

■ Associate of Science Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

This degree is designed for the student planning to transfer to a four year college or university as an engineering major. Just taking any 36 units, however, will not qualify one for admission to upper division Engineering. Students are urged to see a counselor for qualifying courses.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**MAJOR - REQUIRED COURSES**

Select a minimum of 36 semester units from the following.  
 A minimum of one course must be selected from each group:

- GROUP 1: CHEM** 101 General Chemistry I (5 units), **CHEM** 102 General Chemistry II (5 units)
- GROUP 2: CO SCI** 515, **CO SCI** 516 Beginning Computer Architecture and Organization (3 units), **CO SCI** 539 Programming in C (3 units)
- GROUP 3: MATH** 261 Calculus I (5 units), **MATH** 262 Calculus II (5 units), **MATH** 263 Calculus III (5 units), **MATH** 270 Linear Algebra (3 units), **MATH** 275 Ordinary Differential Equation (3 units)
- GROUP 4: PHYSICS** 101 Physics for Engineers and Scientists I (5 units), **PHYSICS** 102 Physics for Engineers and Scientists II (5 units), **PHYSICS** 103 Physics for Engineers and Scientists III (5 units)
- GROUP 5: PHILOS** 9 Symbolic Logic I (3 units)

**MAJOR - TOTAL UNITS** 36

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

- Plan A: *NOT AVAILABLE WITH THIS MAJOR*
- Plan B: Pierce Career and Technical GE plan 18 units
- Plan C: CSU GE Breadth Certification Plan 39 units
- Plan D: IGETC 34-39 units

# Sign Language

## SIGN LANGUAGE

See *American Sign Language*

# Spanish

## SPANISH

■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

**PROGRAM INFORMATION**

The main objectives of the program in Spanish are to develop competence in the ability to understand, speak, read, and write Spanish, and to provide through the knowledge of Spanish an understanding and appreciation of the language and culture.

Students are placed in Spanish courses according to their years of previous study. In general, one year of high school Spanish is equated to one semester of Pierce College work. Thus recent high school graduates with one, two, three, or four years of high school Spanish will enroll in Spanish 2, 3, 4, or 5 respectively. Exceptions to this basic placement formula may be made after consultation with the Spanish Faculty. Proficient native speakers should enroll in Spanish 4, 5, or 6.

All courses in Spanish, unless specifically stated, are taught in the foreign language. By the end of the first year, students attain mastery of the basic structure of the language and ability to converse on everyday topics as well as read and write on an elementary level.

In the second year, Spanish 3 and 4, emphasis is put on gradually raising the student's ability to speak, read, and write. Spanish 27, Cultural Awareness

Through Advanced Conversation, combines with Spanish 4 to increase oral proficiency and prepares a student to live in a foreign country.

Spanish 5 and 6 stress composition and analysis and appreciation of many short literary selections, short stories, and films.

The courses taught in English, including Latin American Civilization, Understanding Latin America Through Film, Contemporary Mexican Literature, Great Books of Latin America, Mexican Literature and Culture, The Spanish American Short Story, and Mexican Civilization combine a panoramic overview with a close look at a specific country or topic.

Students are encouraged to participate in programs of study abroad during the summer or semester abroad program.

**CAREER OPPORTUNITIES**

Spanish is particularly useful in international business or trade, community or social service, and in foreign service. Majoring in Spanish is excellent preparation for graduate and professional study in law, medicine, government, social welfare, international relations, journalism, or education.

**TRANSFER STUDENTS**

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

**MAJOR - REQUIRED COURSES**

		UNITS
SPANISH 4	Intermediate Spanish I or higher	5
SPANISH 10	Latin-American Civilization	3
SPANISH 27	Cultural Awareness through Advanced Conversation (3 units) Or	2-3
SPANISH 8	Conversational Spanish (2 units)	

Select a minimum of two courses (6 semester units) from the following: 6

SPANISH 12	Contemporary Mexican Literature (3 units)
SPANISH 15	Great Books of Latin America (3 units)
SPANISH 16	Mexican Civilization (3 units)
SPANISH 25	Spanish American Short Story (3 units)
SPANISH 26	Understanding Latin America Through Film (3 units)
SPANISH 65	Mexican Literature and Culture (3 units)

**MAJOR - ELECTIVE COURSES**

ANTHRO 102	Human Ways of Life: Cultural Anthropology (3 units)
HISTORY 5	History of the Americas I (3 units)
HISTORY 6	History of the Americas II (3 units)
LING 1	Introduction to Language and Linguistics (3 units)

**MAJOR - TOTAL UNITS** 16-17

**GENERAL EDUCATION - REQUIRED COURSES**

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: NOT AVAILABLE WITH THIS MAJOR	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

**Learning Outcomes**

Upon completion of this degree program, students will be able to:

- Reach an oral proficiency level of Intermediate High to Advanced Low as measured by the ACTFL Oral Proficiency Interview (by the conclusion of Spanish 3).
- Write 2-3 page essays in grammatically correct Spanish on a wide variety of topics (by the conclusion of Spanish 4);
- Read and understand short, literary texts in Spanish from several Spanish-speaking countries and demonstrate analytical and critical skills when discussing those texts;
- Engage in discussions, presentations, and debates on cultural, social and political issues relevant to Spanish-speaking countries;
- Demonstrate cultural sensitivity and awareness of the challenges facing Latinos in the United States.

**SPANISH****Department Skills Certificate**

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate provides the student with a reading and speaking ability in Spanish; the ability to engage in thoughtful dialogue about Latin America; the ability to locate Latin American ideas, historical events, and cultural phenomena in the Latin American context from which they originate.

**CERTIFICATE - REQUIRED COURSES**

		UNITS
SPANISH 4	Intermediate Spanish II or higher	5
SPANISH 10	Latin American Civilization	3
SPANISH 16	Mexican Civilization (3 units) Or	3
SPANISH 65	Mexican Literature and Culture (3 units)	
SPANISH 26	Understanding Latin America Through Film	3
<b>Select a minimum of one course (3 semester units) from the following:</b>		<b>3</b>
SPANISH 12	Contemporary Mexican Literature (3 units)	
SPANISH 15	Great Books of Latin American Literature (3 units)	
SPANISH 25	Spanish American Short Story in Translation (3 units)	

**CERTIFICATE - TOTAL UNITS**

**17**

**HISPANIC STUDIES****Department Skills Certificate**

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate provides the student with a reading and speaking proficiency in Spanish; the ability to engage in thoughtful dialogue about Spain; the ability to locate Spanish ideas, historical events, and cultural phenomena in the Spanish context from which they originate.

**CERTIFICATE - REQUIRED COURSES**

		UNITS
SPANISH 5	Advanced Spanish I	5
SPANISH 8	Conversational Spanish	2
SPANISH 9	Hispanic Civilization	3
SPANISH 11	Great Books of Spanish Literature	3
SPANISH 48	Introduction to Spanish Translation I	3

**CERTIFICATE - TOTAL UNITS**

**16**

**SPANISH TRANSLATION****Department Skills Certificate**

Department skills certificates will not appear on the students' official transcripts.

**PROGRAM INFORMATION**

This certificate program provides the student with an academic grounding in translation theory and practice. The emphasis of this program is on translation into English. Students interested in obtaining further translation credentials are encouraged to discuss their options with the faculty translation advisor.

**CERTIFICATE - REQUIRED COURSES**

		UNITS
SPANISH 5	Advanced Spanish I or higher	5
SPANISH 8	Conversational Spanish	2
SPANISH 9	Hispanic Civilization (3 units) Or	3
SPANISH 10	Latin American Civilization and Culture (3 units)	
SPANISH 48	Introduction to Spanish Translation I	3
SPANISH 49	Introduction to Spanish Translation II	3

**CERTIFICATE - TOTAL UNITS**

**16**

# Speech Communication

## COMMUNICATION STUDIES

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

#### PROGRAM INFORMATION

A department skills certificate in Communication Studies prepares students for greater success in academic and professional settings. Courses from Speech Communication and related disciplines provide students a broader perspective of communication. Communication courses provide greater understanding of, as well as skill development in the area of communication.

CERTIFICATE - REQUIRED COURSES		UNITS
SPEECH 101	Oral Communication I	3
<b>Select a minimum of three courses (9 semester units) from the following:</b>		<b>9</b>
CAOT 32	Business Communications (3 units)	
BRDCSTG 1	Fundamentals of Radio and Television Broadcasting (3 units)	
MULTIMD 110	Visual Communication (3 units)	
SPEECH 104	Argumentation (3 units)	
SPEECH 121	Interpersonal Communication (3 units)	
SPEECH 122	Communication Across Cultures (3 units)	
<b>MAJOR - TOTAL UNITS</b>		<b>12</b>

### Learning Outcomes

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

- Identify the appropriate communication context – interpersonal, public speaking, intercultural - and apply oral communication strategies to facilitate individual or group interactions that lead to understanding and conflict resolution.
- Develop expertise in public speaking applicable to a variety of social, professional and political contexts.
- Apply visual and broadcast media techniques to supplement or replace message content in traditional spoken communication

# Theater Arts

## THEATER ARTS

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### PROGRAM INFORMATION

This program is designed to meet the requirements of the Associate in Arts Degree and to provide instruction in theater history, literature, acting, and technical stage work. Public performances of plays are given with opportunities for practical experience. Second semester students may participate in drama

productions by enrolling in THEATER 232, Play Production or THEATER 250, Children's Theater. Students who have taken or are concurrently enrolled in THEATER 270, Beginning Acting, may participate in theater productions. Theater majors must also have taken or are concurrently enrolled in THEATER 342, Technical Stage Production, or THEATER 411, Costuming.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
THEATER 100	Introduction to the Theater	3
THEATER 240	Voice and Articulation for the Theater	3
THEATER 270	Beginning Acting	3
THEATER 232	Play Production (2 units)	2
	Or	
THEATER 250	Children's Theater Production (2 units)	
	Or	
THEATER 292	Rehearsals and Performances (2 units)	
THEATER 271	Intermediate Acting	2
<sup>2</sup> THEATER 342	Technical Stage Production (2 units)	2-3
	Or	
THEATER 411	Costuming for the Theater (3 units)	
<b>MAJOR - TOTAL UNITS</b>		<b>15-16</b>

<sup>2</sup>Prerequisite for THEATER 232 - Play Production

<sup>3</sup>Recommended one semester THEATER 342 followed by one semester of any costume class.

#### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: NOT AVAILABLE WITH THIS MAJOR	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## THEATER - COSTUME OPTION

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

#### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
THEATER 100	Introduction to Theater	3
THEATER 270	Beginning Acting	3
THEATER 300	Introduction to Stage Craft	3
THEATER 315	Introduction to Theatrical Scenic Design	3
THEATER 411	Costuming for the Theater	2
THEATER 450	Beginning Stage Make-up	2

**MAJOR - TOTAL UNITS** 16

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## TECHNICAL THEATER OPTION

### ■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

### TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 42 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
THEATER 100	Introduction to the Theater	3
THEATER 270	Beginning Acting	3
THEATER 300	Introduction to Stage Craft	3
THEATER 315	Introduction to Theatrical Scenic Design	3
THEATER 342	Technical Stage Production	2
THEATER 450	Beginning Stage Make-up	2

Select a minimum of one course (2 semester units) from the following: 2-3

SPEECH 101	Oral Communication I (3 units)
THEATER 310	Introduction to Theatrical Lighting (3 units)
THEATER 342	Technical Stage Production (2 units)
THEATER 411	Costuming for the Theater (3 units)

**MAJOR - TOTAL UNITS** 18-19

### GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: General Studies general education plan	30 units
Plan B: <i>NOT AVAILABLE WITH THIS MAJOR</i>	
Plan C: CSU GE Breadth Certification Plan	39 units
Plan D: IGETC	34-39 units

## TECHNICAL THEATER

### ■ Certificate of Achievement

### PROGRAM INFORMATION

This is a two year program in Technical Theater that provides in-depth course work and hands-on experience and training in several areas of current technical theater production. There is detailed instruction and experience in stage management, computer-aided drafting and design, intelligent lighting systems design and programming, scenery and prop construction, scenic painting, the use of stage equipment and machinery, costume-making and design. This certificate will provide employment opportunities for students at entry level positions in the entertainment industry depending upon the current and projected job market. Such positions include intelligent light programmers, operators and technicians, theater, film and television electricians, costume makers, scenic shop technicians, scenic artists, stage managers and front of house positions for theaters, and various positions in the theater, film, and television vendor supply industry.

Students will be required to show proficiency in computer skills, basic reading, math and writing skills, and display problem solving ability.

CERTIFICATE - REQUIRED COURSES		UNITS
THEATER 300	Introduction to Stagecraft	3
THEATER 310	Introduction to Theatrical Lighting	3
THEATER 315	Introduction to Theatrical Scenic Design	3
THEATER 320	Computer-aided Drafting and Design for Theater	3
THEATER 340	Theater Management-On and Off Stage (2 units)	2-3
	Or	
THEATER 411	Costuming for Theater (3 units)	
	Or	
THEATER 450	Theatrical Stage Makeup (2 units)	
THEATER 342	Technical Stage Production	2

**CERTIFICATE - TOTAL UNITS** 16-17

## Women's Studies

## WOMEN'S STUDIES

### ■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcripts.

### PROGRAM INFORMATION

The Women's Studies certificate program is designed to enable students to integrate courses in several disciplines and achieve a broad understanding of the complex roles of women in American society, past, present, and future.

CERTIFICATE - REQUIRED COURSES		UNITS
ANTHRO 109	Gender, Sex and Culture	3
ENGLISH 239	Women in Literature	3
HISTORY 52	The Role of Women in the History of the U.S.	3
PSYCH 32	Psychology of Women	3
Select a minimum of one course (3 semester units) from the following:		3
ENGLISH 252	The English Bible as Literature (3 units)	
HEALTH 8	Women's Personal Health (3 units)	
POL SCI 19	Women in Politics (3 units)	
PSYCH 16	Intimacy, Marriage, and Family Relationships (3 units)	
PSYCH 52	Psychological Aspects of Human Sexuality (3 units)	

**CERTIFICATE - TOTAL UNITS**

15

# Major Codes

## Major Codes – 2-Year Associate Degree Programs

Major Code	Title
050200	Accounting
210440	Addiction Studies
210500	Administration of Justice
011200	Agriculture - Business
010100	Agriculture - General
085010	American Sign Language/Interpreting Program
095700	Architecture - Construction Technology
020100	Architecture Technology
100200	Art
490311	Arts & Humanities
094800	Automotive Service Technology
050500	Business Administration
100230	Ceramic Design
130500	Child Development - A
070810	Computer and Network Technology
051401	Computer Applications & Office Technologies: Gen A
095340	Drafting - Mechanical
100210	Drawing
093400	Electronics
010920	Floral Design and Management
110200	French
103000	Graphic Design
010900	Greenhouse and Nursery Industry
126000	Health Science
010240	Horse Science
110400	Italian
010910	Landscape Installation and Maintenance Industry
010911	Landscape Planning and Design
010913	Landscape Technician - Advanced
220300	Latin American Studies
051410	Legal Office Procedures
490100	Liberal Arts and Science, General
050630	Management and Supervision
050900	Marketing
170100	Mathematics
100910	Metal Jewelry Design
100400	Music
011500	Natural Resources Management
095630	Numerical Control Programming
123010	Nursing - R.N.
051400	Office Admin-General Administration
100211	Painting
060200	Photojournalism
220700	Political Science
090100	Pre-Engineering
010210	Pre-Veterinary Medicine
100201	Printmaking
070710	Programming for Business
070710	Programming for Computer Science
051100	Real Estate
490201	Science, Technology, Engineering & Mathematics
100220	Sculpture
490103	Social & Behavioral Sciences
110500	Spanish
100700	Theater
100601	Theater - Costume
100600	Theater - Technical
010211	Veterinary Technology

## Major Codes – Certificates of Achievement

Major Code	Title
050200	Accounting
050202	Accounting: Tax Preparation
210440	Addiction Studies
051400	Administrative Professional
010100	Agriculture - General
095700	Architecture - Construction Technology
020100	Architecture Technology
094800	Automotive Service Technology
094800	Automotive Emission Specialist
094801	Automotive Light Service Technician
094803	Automotive Performance Applications
094802	Automotive Powertrain Specialist
051404	Basic Computer Applications
050201	Basic Computerized Accounting
079909	Basic Internet
130500	Child Development - Associate Teacher
051408	Computer Applications & Office Technologies: Gen Ad
051409	Desktop Publishing
061451	Desktop Publishing
130514	Director, Preschool (Cert B)
095340	Drafting - Mechanical
093401	Electronics - Analog
093402	Electronics - Communication
093403	Electronics - Digital
010920	Floral Design and Management
010900	Gardening - Advanced
010901	Gardening - Professional
103000	Graphic Design
079908	Graphic Design for The Web
010240	Horse Science
094500	Industrial Technology - General
095250	Industrial Technology- Woodworking
130515	Infant Care Teacher (Cert C)
050801	International Business
050800	International Trade
060200	Journalism
010912	Landscape Technician - Advanced
051401	Legal Office Skills
095630	Machine Shop Technology
050630	Management and Supervision
050900	Marketing
050901	Marketing
070810	Microcomputer Service Technology
070200	Microcomputers and Small Business Systems
109900	Multimedia Studies
079900	Network Technology
095631	Numerical Control Programming
051403	Office Admin-Advanced Computer Applications
051401	Office Admin-General Administration
051407	Office Clerical
051405	Office Communications
070102	Personal Computer Service Technology
060201	Photojournalism
130517	Preschool (Cert A)
130540	Preschool Teacher

# Major Codes

070710	Programming for Business
070710	Programming for Computer Science
051100	Real Estate
050650	Retail Management (WAFC)
130516	School Age Programs Teacher, Day Care (Cert D)
490110	Transfer - CSU GE Breadth
490111	Transfer - IGETC
079907	Web Development and Administration
079906	Web Document Design and Development
070900	Web Site Construction & Maintenance
061430	Website Development, Programming and Scripting
095650	Welding
051402	Word Processing, Basic-Microsoft Word for Windows
051403	Word Processing, Basic-WordPerfect

## Major Codes – Skills Certificates

Major Code	Title
050203	Accounting: Payroll Accounting
050204	Accounting: Small Business
095301	Advanced Draftg-Mech.
095651	Advanced Welding
095300	Basic Drafting-Mechanical Program
095650	Basic Welding Program
050101	Business - General
06100	Cinema
095631	CNC Operator
095632	CNC Programming
150601	Communication Studies
493081	English As A Second Language
050401	Finance
010901	Gardening - Basic
079901	Geographic Information Systems (GIS)
110510	Hispanic Studies Major
220211	Latin American Studies
095630	Machine Shop Technology
050601	Management
050602	Management: Small Business Entrepreneur
170101	Mathematics
220212	Mexican Studies
070103	Personal Computer Application Specialist
070104	Personal Computer Programming Specialist
060202	Photojournalism
079902	Routing Technology
000300	Undecided
100810	Visual and Performing Arts Through Dance
220101	Women's Studies

## Major Codes – Transfer Majors

Major Code	Title
990100	Agriculture & Natural Sciences - Transfer
992202	Anthropology - Transfer
990200	Architecture - Transfer
991002	Art - Transfer
990401	Biological Sciences - Transfer
990501	Business - Transfer
993000	Commercial Services - Transfer
990601	Communications - Transfer
990701	Computer & Information Sciences - Transfer
991300	Consumer Education & Home Economics - Transfer
992204	Economics - Transfer
990801	Education - Transfer
990901	Engineering & Related Industrial Tech - Transfer
991501	English - Transfer
991101	Foreign Language - Transfer
992206	Geography - Transfer
991201	Health - Transfer
992205	History - Transfer
991599	Humanities - Transfer
991401	Law - Transfer
994901	Liberal Arts - Transfer
991601	Library Science - Transfer
991701	Mathematics - Transfer
991004	Music - Transfer
991509	Philosophy - Transfer
991901	Physical Sciences - Transfer
992207	Political Science - Transfer
992001	Psychology - Transfer
992100	Public Affairs & Services - Transfer
992200	Social Sciences - Transfer
992208	Sociology - Transfer
991007	Theater - Transfer

### Educational Goals

1. Prepare for a new career (acquire new job skills)
2. Advance in current job/career (update job skills)
3. Discover/develop career interests, plans and goals
4. Obtain a two-year vocational degree without transfer
5. Obtain a two-year Associate's degree without transfer
6. Obtain a vocational certificate without transfer
7. Obtain a Bachelor's degree after completing an Associate's degree
8. Obtain a Bachelor's degree without completing an Associate's degree
9. Maintain certificate or license (e.g., Nursing, Real Estate)
10. Improve basic skills in English, reading or math
11. Complete credits for high school diploma or GED
12. Personal development (intellectual, cultural)
13. Undecided on goal



# Course Descriptions

## 2010-2011

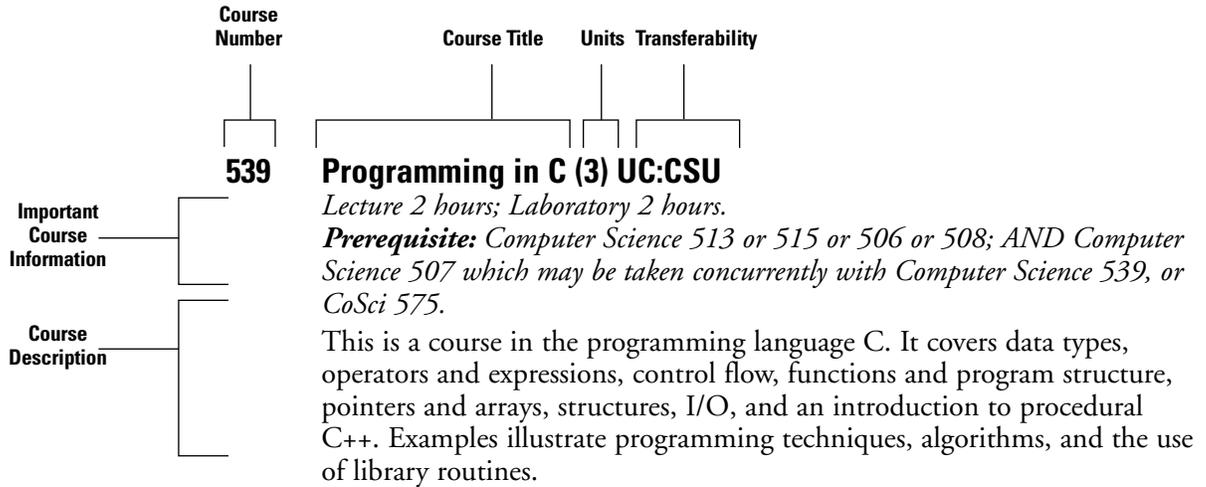


**Pierce College**



# How to Read the Course Descriptions

SAMPLE COURSE DESCRIPTION



## Key To Transfer Credit Codes

- UC** This course is acceptable for credit at all branches of the University of California.
- †UC** The granting of transfer credit by a UC campus for fieldwork or directed study courses is contingent upon a review of the course outline after transfer. A UC student must submit a petition to initiate this process.  
  
A UC campus will accept a maximum of 3 semester units of directed study or field work in any one semester and a total of 6 units maximum in any and all appropriate subject areas combined.  
  
For further clarification, please consult a counselor.
- CSU** This course is acceptable for credit at all branches of the California State University System.
- NDA** Non-Degree Applicable. Some courses which are offered for college credit, but which cannot be applied toward graduation requirements for the Associate Degree are designated by the code NDA.

## Accuracy Statement

The Los Angeles Community College District and Pierce College have made every effort to make this catalog accurate and may, without notice, change general information, courses, or programs offered. The reasons for change may include student enrollment, level of funding, or other issues decided by the district or college. The district and college also reserve the right to add to, change, or cancel any rules, regulations, policies and procedures as provided by law.



# Accounting

## 1 Introductory Accounting I (5) UC:CSU

Lecture 5 hours.

Introduces the fundamental principles and concepts of accounting as a basis for financial communication in business. This includes the procedures in maintaining records of business transactions and the preparation of financial statements for the sole proprietorship in a service and merchandising firm. Problems in control, deferrals and accruals, inventory, plant assets and accounts receivable, accounts payable and payroll are included.

## 2 Introductory Accounting II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** Accounting 1 with a grade of "C" or better.

Continues the introductory phase of accounting. Topics covered include: Corporations, Partnerships, Income Tax, Bonds, Cash Flow, Statement Analysis, Managerial Accounting, Process Cost Systems, Cost Behavior, Budgeting, Performance Evaluation, Product Pricing, Capital Investment Analysis.

## 15 Tax Accounting I (3) CSU

Lecture 3 hours.

**Prerequisite:** Accounting 1 with a grade of "C" or better.

This course covers tax laws, accounting procedures, and preparation of individual Federal income tax returns.

## 17 Payroll Accounting (2)

Lecture 2 hours.

**Prerequisite:** Accounting 1 with a grade of "C" or better.

Methods and procedures in accounting for payroll. Preparation of federal and state payroll tax returns. Includes social security benefits and state and federal laws relating to payment of wages and salary.

911-941

## Cooperative Work Experience Education (1-4) CSU

See Business - Cooperative Work Experience Education.

# Accounting - Computerized

See course listings under **Computer Applications and Office Technologies**

# Addiction Studies

## 1 Understanding Addiction and Counseling (3)

Lecture 3 hours.

Overview of community prevention, education, outreach and referral. A study of the nature of alcoholism/chemical dependency, including intervention, treatment and recovery and counseling chemically dependent persons.

## 2 Drugs In Perspective (3)

Lecture 3 hours.

Pharmacology and physiology of alcohol and other drugs. The fundamental principles of the action of alcohol and other drugs. Pharmacological and physiological implications of tolerance, habituation, and excessive consumption of alcohol and other drugs. The psychophysical, cultural, and social implications will be presented.

## 4 Addiction Counselor Training (3)

Lecture 3 hours.

Participants will be trained in the listening and responding skills, learning to apply eight basic communication skills in one-on-one interactions with clients/patients, as well as learning counseling skills in the areas of empathy, values, and attitude exploration, and problem solving, with distinct applications to chemical dependency.

## 5 Group Skills For Addiction Counselors (3)

Lecture 3 hours.

A course to train participants in the skills and principles fundamental to facilitating a group, including group process, establishing goals, curative factors, starting a counseling group, observing a group, and making interventions, with special emphasis upon chemical dependency-specific issues in a group setting.

## 6 Management Skills For Addiction Program Administrators (3)

Lecture 3 hours.

Deals with law and ethics, community prevention, education, outreach and referral, and personal and professional growth. Provides training in the basic managerial skills and principles necessary to function effectively at supervisory, administrative, or managerial levels in chemical dependency programs, health care settings, and agencies.

## 7 Addiction Treatment And Recovery (3)

Lecture 3 hours.

Intervention, treatment and recovery, including assessment, case management, orientation, treatment planning, relapse prevention, and after care planning. The therapeutic dynamics of Alcoholics Anonymous are compared to a number of different schools of psychology and programs of transformation, growth and development.

## 8 Special Issues In Addiction (3)

Lecture 3 hours.

Prevention, education, outreach and referral. Incorporating three issues in the field of chemical dependency: services for chemically dependent women; youth and prevention; and the initial visit.

## 9 Field Work For Addiction Personnel (3)

Lecture 1 hour; Laboratory 5 hours.

**Prerequisites:** Addiction Studies 1 or 2.

Supervised practicum, internship. Participants must be already knowledgeable about chemical dependency. An opportunity to document at least 160 hours working at an agency or in some situation directly in the field of chemical dependency, in addition to the classroom hours. Those seeking CAADAC certification will want to document a minimum of 255 fieldwork hours in addition to the 45 semester hours during the semester.

**10 Addiction And The Family (3)**

Lecture 3 hours.

A course on chemical dependency as a family disease, to include many theoretical and practical issues including: assessment, treatment, and recovery of the chemically dependent family, interventions, family counseling, family systems and theory, domestic violence, children of alcoholics, et al.

**11 Drinking Driver Programs Personnel Training (3)**

Lecture 2 hours; Laboratory 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

This course will provide present and prospective employees of Drinking Driver Programs with identified specific knowledge and skills necessary to function effectively and efficiently in a drinking driver program.

**13 Addictive Diseases & Lifestyle Disorders (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

Examines the pathology and nature of, and the intervention, treatment, and recovery processes involved in, a wide range of addictive diseases and lifestyle disorders: chemical dependency, including nicotine; sexual addiction; gambling addiction; eating disorders (including anorexia and bulimia); compulsive spending; workaholicism and type "A" behavior; violence addiction battering, child abuse, and incest, including forms of state sanctioned violence.

**14 Addiction And Theories Of Human Development (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

Focuses on developmental stages of body, mind, emotion, spirit (values and morals), and relationships, as they are effected by the disease process of chemical dependency, and positively enhanced by the health process of recovery. Theorists include Piaget, Freud, Erikson, Kohlberg, Fowler, Keene, Maslow and Frankl. Readings include biographies.

**15 Sociological Aspects Of Addiction (3) CSU**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

The basic principles and concepts of sociology with special emphasis upon the social phenomenon of chemical dependency, as it effects the family, and large sociological groups such as women, senior citizens, ethnic minorities, et al.

**16 Continuing Recovery: Strategies And Basic Skills (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

This course covers applied methodology and "counseling skills" with respect to chemical dependency and other addictive disorders. Course contents may include: role play, case studies, interventions demonstrations, 12 Step Model of Recovery, Reality Therapy, Rational Emotive Behavioral Therapy, family systems analysis, relapse prevention theory and techniques.

**17 Women And Addiction (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

A comparative analysis of women who become addicted. Relates to those unique factors that contribute to addictive disorders in women and the implication for treatment. Those addictions include alcohol, other drugs, overeating, smoking, and addictive relationships.

**18 Addiction And Eating Disorders (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

To work effectively in the field of chemical dependency an understanding of eating disorders, such as bulimia, bulimia nervosa, and anorexia, is necessary, recognizing that their presence is a crucial issue in chemical dependency recovery.

**19 Alcohol And Drug Education And Prevention (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

The study of prevention strategies in the field of alcohol and drug addictions stressing a positive and practical approach to the immediate reduction and eventual elimination of alcohol and drug abuse, and the disease of addiction.

**20 Domestic Violence Counselor Training (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

Explores the nature of domestic violence; its signs and symptoms and its impact upon individuals, families, and society. Training in cultural and ethnic issues, counseling victims and families, intervention, treatment, and recovery processes for those affected by domestic violence. Prevention, education, and social policy issues are addressed.

**21 Problem Gambling Counselor Training (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

Explores the nature of addiction and problem gambling and its impact upon individuals, families, and society. Cultural and ethnic issues are studied. Provides "advanced counseling skills" training in the intervention and recovery processes involved in treating addiction and problem gambling.

**22 Prevention Specialist Training (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

An alcohol and drug abuse core prevention course to provide the basic knowledge and skills necessary for prospective prevention specialists to work effectively in prevention at the individual, social, and community levels, including learning prevention history, current strategies and recent developments.

**23 Batterers' Intervention Facilitator Training (3)**

Lecture 3 hours.

**Note:** This course provides 54 hours of continuing education for CADC I & II, NCAC/MAC, CATC and MFT/LCSW; also through an officially approved provider number for licenses and certificates.

Designed to meet the standards contained in California Penal Code 1203.098 for Probation Department approved batterers' intervention facilitators. Provides basic knowledge and skills necessary to facilitate batterers' rehabilitation groups. Examines co-morbidity factors between domestic violence, substance abuse and addictions. Presents lesson plans and explanations for their use in a California "approved" 52-week intervention program for batterers.

**91 Field Work for Addiction Personnel (3)**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Addiction Studies 9

Supervised practicum, internship served at an addiction treatment and recovery facility to acquire, during the semester, 150 of the 300 hours required by the California Office of Alcohol and Drug Programs, and the California Association of Alcohol and Drug Educators (CAADE).



# Administration of Justice (Criminal Justice)

## 1 Introduction to Administration of Justice (3) UC:CSU

*May be offered as an honors section.*

*Lecture 3 hours.*

Philosophy, history, and theories of the criminal justice system, including the origins and evolution of criminal law and due process, the roles and functions of the local, state, and federal jurisdictions, and the interrelationships among criminal justice agencies: law enforcement, courts, and corrections; crime causation, analysis and the social impact of crime. The conceptual approach utilized in this course recognizes that criminal justice is itself a distinct academic discipline rather than an interdisciplinary course of study.

## 2 Concepts of Criminal Law (3) UC:CSU

*Lecture 3 hours.*

An introduction to the historical development, philosophy, and basic legal concepts of criminal law. The course includes an examination of constitutional provisions, legal research, legal analysis, and the functioning of criminal law as a social force. It also includes a detailed examination of legal definitions, classifications of law, penalties, corpus delicti, criminal intent, parties to a crime, defenses to crime, and a brief introduction to laws of arrest and judicial procedure.

## 3 Legal Aspects of Evidence (3) CSU

*Offered as Administration of Justice 99UA in Fall 2006.*

*Lecture 3 hours.*

Origin, development, philosophy and constitutional basis of evidence, constitutional procedural considerations affecting arrest, search and seizure; kinds of and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

## 4 Principles and Procedures of the Justice System (3) UC:CSU

*Lecture 3 hours.*

A detailed study of the role and responsibilities of the American court system and its purpose; an examination of the philosophy, history, structure, operation, concepts and services related to the judiciary; a study of case law methodology and case research and their impact on society; an examination of the legal process from pre-arrest through trial, sentencing options and correctional procedures.

## 5 Criminal Investigation (3) CSU

*Offered as Administration of Justice 99UB in Fall 2006.*

*Lecture 3 hours.*

Fundamentals of the theories, concepts, and methodology of criminal investigation. This course will look at the investigative procedures from the crime scene to the courtroom, inclusive of legal constraints, ethics, and types of evidence; techniques and procedures for basic interview and interrogation procedures; identification of proper crime scene management, follow-up, case preparation and organization.

## 8 Juvenile Procedures (3) CSU

*Lecture 3 hours.*

This course covers the juvenile justice system and related juvenile justice issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, history, theories, methodology, and special areas and laws unique to juveniles.

## 49 Narcotics and Vice Control (3) CSU

*Lecture 3 hours.*

The interrelations of organized crime to the community; the impact of covert criminal activities upon the social structure; theories of crime causation explored; symptoms of organized crime activity; narcotics and white collar crime; political influences in the legal system; management of crime control units. Book making and prostitution are also discussed.

## 67 Community Relations and Diversity (3) UC:CSU

*Lecture 3 hours.*

Examination of the complex relationship between the community and the justice system with emphasis on the challenges of dealing with the role of race, ethnicity, gender relations, sexual orientation, social class, language, and culture in shaping these relations.

## 75 Introduction to Corrections (3) CSU

*Lecture 3 hours.*

This course is designed to provide the student with an overview of the historical development, current concepts and practice, and explanations of criminal behavior; functions and objectives of the criminal justice system concerned with institutionalization and trends of adult and juvenile corrections, including probation and parole. It will focus on the legal issues, specific laws, and general operation of correctional institutions. The relationship between corrections and other components of the judicial system will also be examined.

## 160 Police Organization and Administration (3) CSU

*Lecture 3 hours.*

This course was determined to be a lower division requirement for the Criminal Justice major at CSULA. The target population will be students who are seeking transfer to a four-year university and seeking careers in the field of criminal justice. Topics will include the effect of the organizational structure and administrative procedure on the implementation of law enforcement functions; history, theories, and methodologies of criminal justice organizations; assessment of the recruitment and hiring processes, career advancement and leadership; organizational structure and management strategies; administrative problems of staffing and morale as a law enforcement employer.

## 319 Research Methods & Statistics in Criminal Justice (3) CSU

*Lecture 3 hours.*

Introduction to research methodologies used in the social sciences with a special emphasis on those methods most often used in the study of crime and criminal behavior, police/court systems, and correctional institutions, policies, and programs. Students will acquire the knowledge to conceptualize a research problem and develop a number of complementary design, measurement, and data collection approaches to bring evidence to bear on the problem. Topics include the roles of theory and ethics in research, hypothesis testing, and research design.

## 383 Applications in Crime Analysis (3) CSU

*Lecture 3 hours.*

This course will introduce students to the functions of a crime analyst within the criminal justice system, including using quantitative methods and the five-step data analysis process to forecast future crime occurrences. The students, through the use of tactical, strategic and administrative analysis, will identify and differentiate between crime patterns, series and trends, as well as learn to communicate the findings to law enforcement personnel.

## 185 Directed Study – Administration of Justice (1) CSU

## 285 Directed Study – Administration of Justice (2) CSU

## 385 Directed Study – Administration of Justice (3) CSU

*Conference 1 hour per unit.*

## 911-941

### Cooperative Work Experience Education – Administration of Justice (1-4)

*See Cooperative Work Experience Education.*

# Agriculture

**AGRICULTURE** courses are listed under **ANIMAL SCIENCE, EQUINE SCIENCE (Mule Handling)** and **PLANT SCIENCE**, and subject matter is organized as follows:

## Animal Science

Agriculture-General	Animal Science 100-199
Veterinary Technology (RVT)	Animal Science 400-499
Animal Science	Animal Science 500-599
Horse Science	Animal Science 600-679

## Equine Science

Mule Handling	Equine Science 680-699
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## Plant Science

Agriculture-General	Plant Science 100-199
Horticulture and Landscaping	Plant Science 700-899
Natural Resource Management	Plant Science 900-999

911, 921, 971, 981

## Cooperative Work Experience Education - Agriculture (1-4) CSU

See Cooperative Work Experience Education.

# American Sign Language

## 1 American Sign Language I (4) UC:CSU

Lecture 4 hours.

**Recommended:** Concurrent enrollment in ASL 101A.

Normally offered in the Fall semester only.

Develops basic vocabulary and grammar of American Sign Language. Emphasis is placed on comprehension skills. Incorporates vital aspects of the Deaf culture and community. [Overview of topics include: pronouns, colors, interrogatives, negations, school, people, homes, family relationships, work, life events, daily activities, transportation, time/calendar, numbers, fingerspelling, opposites, food, places, sports, feelings/opinions. Functional/notional discourse behaviors are developed, including: conversational openers, greeting, identifying, introducing, asking/requesting, responding, comparing/contrasting.]

## 2 American Sign Language II (4) UC:CSU

Lecture 4 hours.

**Prerequisite:** American Sign Language 1 with a grade of "C" or better or equivalent.

**Recommended:** Concurrent enrollment in ASL 101B.

Normally offered in the Spring semester only.

Completes the study of elementary vocabulary and grammar. Increased development of inflectional and non-manual behavior patterns. Incorporation of selected aspects of Deaf culture and community within receptive and expressive conversations. [Overview of topics include: grammatical features, such as, syntax, pronominalization, verb aspect/modulation, tense, number incorporation, adverbials, adjectivals, topicalization, spatialization; interactive behaviors, such as, requests, turn-taking, making suggestions, giving feedback, interrupting; and cultural topics, such as, myths, social and political organizations, signaling devices, and technology within the Deaf community.]

## 3 American Sign Language III (4) UC:CSU

Lecture 4 hours.

**Prerequisite:** American Sign Language 2 with a grade of "C" or better or equivalent.

**Corequisite:** Required concurrent enrollment in ASL101C for Interpreting Program students (Interpreting majors).

**Recommended:** Concurrent enrollment in ASL 101C for students not in the Interpreting Program (not Interpreting majors).

Normally offered in the Fall semester only.

Continued development of American Sign Language grammar, with special emphasis on idiomatic constructions. Provides further development of conversational techniques focusing on expressive skills. Expanded study of Deaf cultural issues. [Overview of topics include: language functions, such as, giving reasons, making requests, asking where, giving specific directions, correcting and confirming information, complaining, making suggestions, asking for permission, expressing concern, declining/explaining, asking for/giving definitions, describing objects, describing weekend activities, telling about disrupted plans; grammatical structures, such as, topic-comment, weak hand referencing, locatives, temporal aspect modulations, verb inflections, role shifting, conditional sentences, contrastive structure, classifier types, non-manual markers, number functions; discourse structures, such as, presenting informative speeches (ASL).]

## 4 American Sign Language IV (4) UC:CSU

Lecture 4 hours.

**Prerequisite:** American Sign Language 3 with a grade of "C" or better.

**Corequisite:** Required concurrent enrollment in ASL101D required.

Normally offered in the Spring semester only.

Advanced study of American Sign Language vocabulary and grammar. Further development and refinement of American Sign Language skills and fluency. Accentuates aspects of Deaf culture and community through spontaneously generated conversations. [Overview of topics include: an ASL transcription symbol system, history and development of ASL (linguistic evolution), selected sign types, sentence types and associated non-manual grammar, time signs and associated modulations, pronominalization and associated spatial/referential grammar, verb types and associated inflection/modulation processes (i.e. temporal aspect distributional aspect modulations), classifier types and associated modulations, locative processes, and pluralization processes.]

## 5 Introduction to Interpreting (3) CSU

Lecture 3 hours.

**Prerequisite:** American Sign Language 3 with a grade of "C" or better.

Suggested concurrent enrollment in American Sign Language 4.

Normally offered in the Spring semester only.

Surveys basic theories, principles, and practices of interpreting/transliterating including basic ethical considerations. Includes an historical overview of the interpreting profession, discusses the professional role of the interpreter, and begins the development of interpreting/transliterating processing skills.

## 6 English to Sign Interpreting/Transliterating (4) CSU

Lecture 4 hours.

**Prerequisite:** American Sign Language 4 and 5 with a grade of "C" or better.

**Corequisite:** Concurrent enrollment in ASL 101E required.

Suggested concurrent enrollment in American Sign Language 10.

Normally offered in the Fall semester only.

Development of English-to-Sign interpreting/transliterating skills on a beginning level.

**10 Sign to English Interpreting/Transliterating (4) CSU**

Lecture 4 hours.

**Prerequisite:** American Sign Language 4 and 5 with a grade of "C" or better. Suggested concurrent enrollment in American Sign Language 6. Normally offered in the Fall semester only.

Development of Sign-to-English interpreting/transliterating techniques and principles on a beginning level including such tasks as increasing receptive sign skills and English vocabulary/idioms fluency, develop discourse analysis skills, and vocal control to successfully convey intent of signers.

**15 Linguistics of ASL (3) CSU**

Lecture 3 hours.

**Prerequisite:** American Sign Language 2; and Anthropology 104 or Linguistics 1 or equivalent.

Provides the student with information and research concerning the phonetic, morphological, syntactic, and semantic properties of American Sign Language. Covers neurolinguistics, psycholinguistics, and sociolinguistics, as well as comparative studies of natural signed languages.

**16 Creative Signing (2) CSU**

Lecture 2 hours.

**Prerequisite:** American Sign Language 2. Suggested concurrent enrollment in American Sign Language 3. Normally offered in the Fall semester only.

Studies the application of pantomime, visualization, facial expression and body language to the use of ASL. Includes techniques used in ASL storytelling and poetry.

**22 Professional Issues and Practice I (2) CSU**

Lecture 2 hours.

**Prerequisite:** American Sign Language 5 with a grade of "C" or better, or equivalent.

**Recommended:** Concurrent enrollment in American Sign Language 6 and 10. Normally offered in the Fall semester only.

Introduces students to theoretical and practical issues related to various community-based interpreting settings requiring specialized language and/or techniques. Development of vocabulary appropriate for a variety of community-based settings, analysis of the RID-NAD Code of Professional Conduct, and development of professional decision-making and problem-solving skills. [Overview of topics include: role, rights, responsibilities of interpreters and stakeholders; protocol and professional behavior; application of the RID-NAD Code of Professional Conduct; assessment of situations, settings, and clients; assessment of interpreter's skills and knowledge; time management; stress management; vocabulary related to specific community-based settings, such as: Medical, Counseling, Mental Health, Religion.]

**23 Professional Issues and Practice II (2) CSU**

Lecture 2 hours.

**Prerequisite:** American Sign Language 5 with a grade of "C" or better, or equivalent.

**Recommended:** Concurrent enrollment in American Sign Language 55 and 65. Normally offered in the Spring semester only.

Introduces students to theoretical and practical issues related to various educational interpreting settings (K - post-secondary levels) requiring specialized language and/or techniques. Continued development of vocabulary appropriate for a variety of topics/settings, analysis of the RID-NAD Code of Professional Conduct, and continued development of professional decision-making and problem-solving skills. [Overview of topics include: roles, rights responsibilities of interpreters and stakeholders in the educational setting; protocol and professional behavior; application of the RID-NAD Code of Professional Conduct; assessment of situations, settings, and clients; assessment of interpreter's skills and knowledge; vocabulary related to specific educational-based topics/settings, such as: English, history, science, math.]

**25 Conversational American Sign Language (2) CSU - RPT 3**

Lecture 2 hours.

**Prerequisite:** American Sign Language 1 with a grade of "C" or better, or equivalent.

Provides opportunities for practical conversation on everyday topics, cultural material, and expansion of vocabulary according to student interest or need.

**30 Fingerspelling I (1) CSU**

Laboratory 2 hours.

**Prerequisite:** American Sign Language 1 or equivalent. Normally offered in the Fall semester only.

Develops skills in expressive and receptive use of the Manual Alphabet. Deals with specific individual problems and techniques for corrections. [Overview of topics include: hand positioning (location and angle), handshapes, rhythm, fluency, spelling, and numbers; reception of fingerspelled handshapes, patterns and pauses/transitions.]

**31 Fingerspelling II (1) CSU**

Laboratory 2 hours.

**Prerequisite:** American Sign Language 30 with a grade of "C" or better or equivalent.

Normally offered in the Spring semester only.

Continued development of expressive and receptive Manual Alphabet skills. Emphasis on techniques to improve receptive skills. Attention given to expressive fluency and accuracy.

**40 Introduction to Deaf Culture (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** American Sign Language 1 with a grade of "C" or better or equivalent.

Normally offered in the Fall semester only.

Topics include historical, philosophical, educational, psychological and social aspects of the Deaf Culture

**55 Interpreting (4) CSU**

Lecture 4 hours.

**Prerequisite:** American Sign Language 6 and 10 with a grade of "C" or better, or equivalent; English 101 or CAOT 32.

**Recommended:** Concurrent enrollment in American Sign Language 23 and 65.

Normally offered in the Spring semester only.

Development of interpreting (spoken English to ASL and ASL to spoken English).

**65 Transliterating (4) CSU**

Lecture 4 hours.

**Prerequisite:** American Sign Language 6 and 10 with a grade of "C" or better, or equivalent; English 101 or CAOT 32.

**Recommended:** Concurrent enrollment in American Sign Language 23 and 55.

Normally offered in the Spring semester only.

Development of transliterating skills (spoken English to signed English and signed English to spoken English).

**101 American Sign Language Laboratory (5) CSU**

Lab 5 hours.

**Note:** This class is taught in 1-unit modules. No credit for repeated modules

**Prerequisite/Corequisite:**

101A: Completion of American Sign Language 1 or concurrent enrollment in ASL 1.

101B: Completion of American Sign Language 1 or concurrent enrollment in ASL 2.

101C: Completion of American Sign Language 2 or concurrent enrollment in ASL 3.

101D: Completion of American Sign Language 3 or concurrent enrollment in ASL 4

101E: Completion of American Sign Language 4 and 5 or concurrent enrollment in ASL 6.

This laboratory uses multi-media (videos, CDs, and computers) to enhance instruction. This is a credit-no credit course. Students receive credit by spending at least 36 hours in the laboratory and handing in required Lab assignments to the instructor. ASL 101A is intended to supplement the ASL 1 class material and to enhance students' learning experience by increasing students' exposure to ASL.

**185 Directed Study - American Sign Language (1) - RPT 2****285 Directed Study - American Sign Language (2)**

**385 Directed Study - American Sign Language (3)***Conference 1 hour per unit.***Prerequisite:** American Sign Language 1 or equivalent

Allows students to pursue Directed Study in American Sign Language on a contract basis under the direction of a supervising instructor.

# Anatomy

**1 Introduction to Human Anatomy (4) UC:CSU***Lecture 3 hours; Laboratory 3 hours.***Advisory:** Completion of Biology 3, 4, or 44

Provides a basic course in human anatomy. Includes lectures and demonstrations on human organs and organ systems. Requires each student to dissect mammalian organs that are comparable in structure to the human organs, and to work with a dissected human cadaver.

# Animal Science

<b>Agriculture - General</b>	<b>Animal Science 100-199</b>
<b>Veterinary Technology (RVT)</b>	<b>Animal Science 400-499</b>
<b>Animal Science</b>	<b>Animal Science 500-599</b>
<b>Horse Science</b>	<b>Animal Science 600-699</b>

**120 Ethical Issues of Using Animals (3) CSU***Lecture 3 hours.*

Considers the ethical issues of using animals in research, education, for food production and as companions. Class discussions include the animal welfare/rights movements, the use of IACUCS, and the Animal Welfare Act.

**180 Animal Care Experience (2)***Lecture 1 hour; Laboratory 2 hours.*

This course is designed to provide veterinary science students with knowledge, skills, and abilities in animal care. Areas of study will include sanitation, housing, nutrition, grooming, restraint, training, and environmental enrichment requirements for both livestock and companion animals.

**181 Field Work (10)***Laboratory 30 hours.*

Supervised job experience extending occupational learning in the classroom at an on-the-job learning station related to the students' occupational goals.

**302 Veterinary Receptionist Training Program (2) - RPT 1***Lecture 2 hours.*

This program is designed to train individuals to work as a receptionist in a veterinary hospital. Students who complete this program will be issued a certificate of completion and will be ready to enter the job market.

**320 Basic Dog Grooming (3)***Lecture 2 hours; Laboratory 2 hours.*

An introductory course which covers the fundamentals of dog grooming, including terminology, safety, anatomy, breeds, grooming equipment, products and basic skills. Course will blend classroom learning activities with hands-on experience.

**321 Intermediate Dog Grooming (3)***Lecture 2 hours; Laboratory 2 hours***Advisory:** Completion of Animal Science 320

This course is designed to provide additional skills and knowledge to students pursuing a career as a groomer. Lecture topics include, diseases of the integumentary system, behavior, nutrition, and tools of the trade. Hands on training includes specific breed grooming, scissoring, and pattern application special needs animals and cats. Career building and self marketing will also be covered.

**401 Orientation to Veterinary Science (1) CSU***Lecture 1 hour.*

Directs student exploration of Animal Health Technology and Veterinary Medicine as a career choice. Includes job tasks, job market possibilities, preview of current legislation and medical terminology.

**402 Topics in Veterinary Technology (2) CSU***Lecture 2 hours.***Prerequisite:** Animal Science 401.*Normally offered in the Fall semester only*

Orients students into the Animal Health Technology Program. Includes medical terminology, veterinary ethics and discussion of the role of the technician in veterinary medicine.

**410 Animal Nursing I (2) CSU***Lecture 2 hours.***Prerequisite:** Approval to enter Animal Health Technology Program.

Studies the symptoms and treatments of diseases affecting small animals, vaccination protocol, pharmacology, first aid procedures, and veterinary dentistry.

**411 Animal Nursing I Laboratory (1) CSU***Laboratory 2 hours.***Corequisite:** Animal Science 410.

Provides for practical experience in performing specific skills involved with animal nursing.

**412 Animal Nursing II (2) CSU***Lecture 2 hours.***Prerequisite:** Animal Science 410.

Studies emergency procedures, care of critically ill patients, and an introductory study of birds and reptiles.

**413 Animal Nursing II Laboratory (1) CSU***Laboratory 2 hours.***Corequisite:** Animal Science 412.

Continues Animal Nursing I Laboratory in providing practical experience in performing new technical skills involved in animal nursing.

**420 Clinical Procedures in Animal Care I (2) CSU***Lecture 2 hours.***Prerequisite:** Approval to enter the Animal Health Technology Program.*Offered Fall semesters only.*

Prepares the student to perform common clinical procedures in the animal hospital or laboratory under the supervision of a veterinarian.

**421 Clinical Procedures in Animal Care I Laboratory (1) CSU**

Laboratory 2 hours.

**Corequisite:** Animal Science 420.

Offered Fall semesters only.

Provides for practical experience in various clinical procedures needed by the animal health technician.

**422 Clinical Procedures in Animal Care II (2) CSU**

Lecture 2 hours.

**Prerequisite:** Animal Science 420 and 421.

Offered Spring semesters only.

Prepares the student to perform additional clinical procedures with emphasis on surgery and anesthetics.

**423 Clinical Procedures in Animal Care II Laboratory (1) CSU**

Laboratory 2 hours.

**Corequisite:** Animal Science 422.

Offered Spring semesters only.

Provides for practical experience in anesthesiology, surgical assistance and other aspects of clinical procedures.

**430 Veterinary Clinical Pathology (2) CSU**

Lecture 2 hours.

**Prerequisite:** Approval to enter Animal Health Technology program.

Offered Fall semesters only.

Provides a comprehensive introduction to modern practical methods in veterinary clinical laboratory analysis. Includes blood, urine, feces and skin scrapings tests with emphasis on small animal species.

**431 Veterinary Clinical Pathology Laboratory (1) CSU**

Laboratory 2 hours.

**Corequisite:** Animal Science 430.

Offered Fall semesters only.

Provides practical experience in performing various clinical analysis examinations and procedures.

**435 Veterinary Radiography (2) CSU**

Lecture 2 hours.

**Prerequisite:** Approval to enter the Animal Health Technology program.

Offered Fall semesters only.

Considers radiological terms, safety, and techniques needed by the animal health technician to assist the veterinarian.

**436 Veterinary Radiography Laboratory (1) CSU**

Laboratory 2 hours.

**Corequisite:** Animal Science 435.

Offered Fall semesters only.

Provides practice in radiological techniques and film developing as well as safe use of equipment.

**441 Large Animal Nursing Laboratory (2) CSU - RPT 1**

Laboratory 4 hours.

**Prerequisite:** Approval to enter Animal Health Technology program.

Offered Spring semesters only.

Provides hands-on practical experience in performing procedures and husbandry practices common to large and laboratory animal species. Extensive practice in handling and restraint also provided.

**460 First Aid for Companion Animals (2)**

Lecture 2 hours.

Presents an overview of first aid situations and their treatments in dogs and cats, relative to animal facility employees and/or pet owners.

**466 Avian Care and Husbandry (1)**

Lecture 1 hour.

This course provides the students with information and practical training about pet birds. Topics include basic management principles such as housing and diet, common avian ailments, breeding techniques and behavior. Included will be aspects of aviary set-up and management.

**470 Laboratory Animal Care (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Approval to enter Veterinary Technology Program.

Presents an introduction to laboratory animal care and husbandry. Topics include care and restraint of rabbits, guinea pigs, rodents and other pocket pets. Career opportunities will also be addressed.

**480 Clinical Experience for Animal Technicians (3) CSU - RPT 2**

Laboratory 9 hours.

**Prerequisite:** Animal Science 420 and/or Animal Science 422 with a grade of "C" or better.

Provides a broad perspective of livestock management problems and decisions that must be made in livestock production. Covers the following class of livestock: beef cattle, dairy cattle, sheep, swine, horses, poultry, llamas, rabbits and ostriches. Topics include breeds, feeding, and reproduction, livestock observation assignment, as well as other management activities.

**501 Principles of Animal Science (3) UC:CSU**

Lecture 3 hours.

Provides a broad perspective of livestock management problems and decisions that must be made in livestock production. Covers the following class of livestock: beef cattle, dairy cattle, sheep, swine, horses, poultry, llamas, rabbits and ostriches. Topics include breeds, feeding, and reproduction, livestock observation assignment, as well as other management activities.

**505 Animal Nutrition (3) CSU**

Lecture 3 hours.

Includes a general study of the constituents of feed (carbohydrates, proteins, fats, minerals, vitamins and water), their utilization by the animal body, the digestive system, the processes of digestion and assimilation of the various feed constituents. Course includes ration balancing and feed identification.

**506 Urban Farm Animal Health and Nursing Techniques (2)**

Lecture 1 hour; Laboratory 2 hours.

Provides practical aspects of urban animal health and related care of farm livestock. Course encompasses the various preventative health programs, as well as nursing techniques for back-yard producers. Provides "hands-on" experience in performing husbandry practices common to each species.

**508 Exotic Animal Health Care and Wellness (2)**

Lecture 2 hours.

**Advisory:** completion of Animal Science 180 and Animal Science 506

Introduces the student to the basic clinical skills and related theory needed to perform veterinary care and provide husbandry to companion exotic animal species. Blends lecture based classes with hands-on experiences. Examines captive husbandry practices, nutrition and common health problems of avian, small mammal and reptile species. Provides hands-on training in veterinary nursing skills, diagnostic sampling techniques, and anesthesia. Previous animal experience is highly recommended.

**510 Animal Health and Disease Control (3) CSU**

Lecture 3 hours.

Relates the physiology of animals to animal health. Includes common animal diseases, their causes, prevention and control, the treatment of wounds and the relation of sanitation to disease prevention.

**511 Anatomy and Physiology of Animals (3) CSU**

Lecture 3 hours.

Provides a basic study of the facts and principles of animal life. Includes detailed reference to the anatomy and physiology of domestic animals. Comparative anatomy and physiology is included.

**512 Anatomy and Physiology of Animals Laboratory (1) CSU**

Laboratory 3 hours.

**Corequisite:** Animal Science 511.

Provides practical experience discovering principles and structures associated with the anatomy and physiology of animals. Microscope work and dissection of the cat are included.

**515 Artificial Insemination (2)**

Lecture 2 hours.

Considers techniques in the collection, evaluation, processing, storage, and shipment of semen. Studies insemination procedures and practices, and fertility problems. Field trips to selected locations will be required.

Acceptable for DR 330, CPSLO.

**516 Artificial Insemination Laboratory (1)**

**Prerequisite:** Concurrent enrollment or completion of Animal Science 515. Laboratory 2 hours.

Involves on-hands experience in the rectovaginal cervical fixation method of artificial insemination of cattle. Heat detection and other management skills needed in artificial insemination.

**530 Poultry Production (2)**

Lecture 2 hours.

Studies economic, managerial aspects of the commercial poultry operation. Covers the particulars of breeding, care and housing of growing and laying stock, culling, and record keeping. Field trips to commercial poultry plants in the area.

**531 Poultry Production Laboratory (2)**

**Prerequisite:** Animal Science 530 or concurrent enrollment. Laboratory 3 hours.

A laboratory emphasizing the practical aspects of poultry production. Students will experience manipulation skills commonly practiced in poultry production.

**596 Agricultural Enterprise Projects (10)**

Laboratory 30 hours.

**Prerequisite:** Animal Science 540.

Involves the planning, development and completion of an individual or group animal science or crop production project under the guidance of a faculty advisor on the College farm. Usually the project will involve purchase of animals or crops, associated production costs, and eventual profit at time of sale.

**601 Horse Production (3) UC:CSU**

Lecture 3 hours.

Examines the history of the horse, including anatomy, conformation, predisposing factors to unsoundness, selecting, housing, and use.

**602 Horse Husbandry (3) CSU**

Lecture 3 hours.

Offered Spring semesters only.

Presents in advanced and detailed form breeding, mare and stallion selection, foaling of the mare, feeding and management of light horses, diseases, sanitation, and prevention of disease.

**603 Equine Management Techniques (10)**

Lecture 5 hours; Laboratory 10 hours.

Practical application of the management aspects of the horse industry, including participation in the management decisions associated with the College herd and facilities.

**611 Farrier Science (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Animal Science 601 and 602.

Offered Spring semesters only.

Anatomy, physiology, and conformation of the horse's feet and legs. Basic principles of conformation and gait analysis in relation to hoof balance. Fundamentals of trimming, fitting and applying shoes.

**615 Introduction to Rodeo (1)**

Lecture 1 hour.

Familiarizes the student with the fundamentals of the sport of rodeo and changes occurring in the sport. Surveys the opportunities for a professional career.

**616 Horse Show Activities (2) - RPT 3**

Lecture 1 hour; Laboratory 2 hours.

Introduces and familiarizes students with the development of show horses. Organization and management of horse shows. Skills required for a professional career in the field of performance horses.

**617 Intercollegiate Rodeo Activities (2) CSU - RPT 3**

Activity: 10 hours.

Trains students for competition intercollegiate rodeo. Provides intensive practice in the various intercollegiate rodeo events. Familiarizes the student with fundamental rodeo arena procedures. Develops the physical dexterity and coordination necessary for participation in the sport of rodeo at college level. Students from this course will be selected to represent Pierce College at intercollegiate competitions.

**620 Basic Equitation (1) CSU**

Lecture 1 hour.

**Corequisite:** Animal Science 621.

Provides instruction for those interested in training to ride and handle horses. Includes grooming, saddling, bridling, parts and care of the equipment of horses, and riding techniques.

**621 Horseback Riding Laboratory (1) CSU - RPT 3**

Laboratory 2 hours.

**Prerequisite:** Animal Science 620 or con-current enrollment in Animal Science 620.

Beginning, intermediate, and advanced levels offered, but not necessarily every semester. Fundamental class in western and English riding designed to teach horseback riding to students with varying degrees of experience.

**630 Beginning Equine Training (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Animal Science 601 and 602.

Offered Fall semesters only.

Beginning equine training in the schooling and training of young horses for riding. Emphasis will be placed on controlling and conditioning the young horse in a manner safe for the student and the horse.

**631 Advanced Equine Training (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Animal Science 630.

Offered Spring semesters only.

Expands the concepts learned in Animal Science 630. Emphasis will be placed on horse and rider as a team.

**640 Horse Show Organization and Management (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Animal Science 601.

A comprehensive study of horse show organization and management, with particular emphasis on accounting, insurance, labor management, marketing and advertising. Emphasizes adequate planning and preparation for success.

**645 Equine Issues (5)**

Lecture 5 hours.

Provides students opportunity to gain specific knowledge about horses and their care through short-term lectures, field trips, distance learning college-based seminars. Taught in 1-unit modules which vary in length but which provide 16 hours of instruction.

**650 Equine Health and First Aid (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Animal Science 601.

Creates an awareness among horse owners, trainers, and stable managers of a healthy or sick animal; studies the cause and control measures which may be practiced. Helps the horse owner and the veterinary scientist communicate.

**185 Directed Study - Agriculture (1) CSU - RPT 2****285 Directed Study - Agriculture (2) CSU****385 Directed Study -Agriculture (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in Agriculture on a contract basis under the direction of a supervising instructor.

# Anthropology

**101 Human Biological Evolution (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

Explores the field of physical anthropology emphasizing the evolution of the human species. Topics include human heredity, mechanisms of evolutionary change, human variation, and the reconstruction of human evolutionary history through the study of the fossil record and the study of our closest biological relatives, the living monkeys and apes. The philosophy of science and scientific method serve as foundations for this course.

**102 Human Ways of Life: Cultural Anthropology (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

Presents a broad survey of human culture including the study of human society, language, religion, political and economic organization, with examples drawn from contemporary preliterate, peasant, and urban societies.

**104 Human Language and Communication (3) UC:CSU**

*Lecture 3 hours.*

*Same as Linguistics 1. Credit not given for both courses.*

*May be offered as an honors section.*

Surveys the great variety of ways humans communicate, both verbally and non-verbally. The course focuses on the structure, function, and history of language, with selections on the sociology and psychology of language, language learning, and the origins and evolution of language.

**105 Prehistoric Peoples (3) UC:CSU**

*Lecture 3 hours.*

Surveys world prehistory from the appearance of anatomically modern humans to the development of urbanization. Traces the process and sequence of human cultural development around the globe, including Europe, the Americas, the South Pacific, Africa, and Asia.

**106 Introduction to Archaeology (4) UC:CSU**

*Lecture 3 hours; Laboratory 2 hours.*

Introduces students to the field of modern scientific archaeology. Lecture outlines methods traditionally used by archaeologists and critiques these in light of current archaeological objectives. Techniques for describing and classifying artifacts are discussed, as are strategies for explaining culture change. Laboratory exercises focus on analysis and interpretation of maps, soils, remote sensing imagery, and actual archaeological remains.

**109 Gender, Sex and Culture (3) UC:CSU**

*Lecture 3 hours.*

This course provides a world-wide comparison of sexuality and gender as viewed from various perspectives, including the biological/evolutionary, the cultural, the psychological, the historic, and the prehistoric, especially as they relate to the experiences of males and females in contemporary Western society.

**111 Laboratory in Human Biological Evolution (2) UC:CSU**

*Lecture 1 hour; Laboratory 2 hours.*

**Prerequisite:** *Anthropology 101, or concurrent enrollment.*

Offers laboratory exploration of selected topics in biological anthropology including genetics, human variation, the living primates, and human paleontology.

**113 Field Archaeology (3) CSU - RPT 1**

*Lecture 1 hour; Laboratory 6 hours.*

*Normally offered in the Spring semester only.*

Introduces students to the strategies and skills required to scientifically discover and process archaeological data in the field. Students learn how to locate, survey, map and excavate portions of a real archaeological site. Emphasis is on the systematic recovery of cultural remains, including detailed recording of artifact context and provenience.

**115 Prehistoric Technology (2) CSU**

*Lecture 1 hour; Laboratory 2 hours.*

Surveys prehistoric manufacturing techniques using replicative experimentation as the primary investigative strategy. Students research specific material objects and reproduce these using traditional materials and techniques. Topics such as the differential survival rate of modified materials in the archaeological record and the interplay of technology and environment in human cultural development are explored.

**119 Introduction to Forensic Anthropology (2) CSU**

*Lecture 1 hour; Laboratory 2 hours.*

Offers laboratory exploration of selected topics in Forensic Anthropology, including identification from bones and teeth, of age, sex, stature, ancestry, pathology, diet, demographics, and manner and cause of death.

**121 Anthropology of Religion, Magic, and Witchcraft (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

Presents an anthropological examination of the phenomenon of religion in tribal, peasant, and industrialized societies, and how religion is integrated into culture. Topics include religious symbolism, ritual, magic, divination, witchcraft, and syncretism.

**132 Native Peoples of North America (3) UC:CSU**

*Lecture 3 hours.*

Examines the indigenous inhabitants of North America from prehistoric times until the present. Archaeology, cultural ecology, linguistics, ethnohistory, and ethnography provide evidence for the unique cultures which have flourished in this region of the continent since the end of the Pleistocene. Contemporary issues in Native American studies, such as the ownership and repatriation of archaeological remains and Indian gaming, will also be explored.

**141 Culture, Illness and Healing (3) CSU**

*Lecture 3 hours.*

This course offers a cross-cultural approach to the study of health, disease, illness, suffering, childbirth, healing, and death. Healing systems in hunter-gatherer, tribal, peasant, and industrialized societies are contrasted. Several theoretical perspectives are invoked while analyzing these systems, including ethnomedical, biocultural, interpretive, and political economical. Students examine not only what people do, whom they consult and where they go when they become sick, but how they ultimately comprehend and accept illness and misfortune in their world.

**150 Current Topics in Anthropology (3) CSU**

*Lecture 3 hours.*

*Course may be offered as 1 unit modules, 150A, B, C.*

Discusses selected topics of current interest in the fields of Physical Anthropology; Cultural Anthropology; Archaeology; and Linguistics.

**161 Introduction to Language and Linguistics (3) UC:CSU**

*Lecture 3 hours.*

*Same as Anthropology 104 and Linguistics 1. Credit given for one course.*

Surveys the great variety of ways humans communicate, both verbally and nonverbally. The course focuses on the structure, function, and history of language, with emphasis on the sociology and psychology of language, language learning, and the origins and evolution of language.

**162 Introduction to Sociolinguistics (3) UC:CSU***Lecture 3 hours**Same as Linguistics 2. Credit given for one course.*

This course examines how societies create, maintain, and change languages. Students will study the history of the varieties of language and their relationship to geography, cultural identity, and gender. Students will gain an understanding of language as a tool of communication, symbolism, and education in society.

**163 Introduction to Psycholinguistics (3) UC:CSU***Lecture 3 hours**Same as Linguistics 3. Credit given for one course.*

This course is a general introduction to psycholinguistics, which will focus on speech, perception, language processing, language production, and language acquisition. Students will study the relationship between the theories proposed by linguistics, and data as observed in everyday life. The course will touch on related areas, such as processes of reading, language and the brain, and language and thought.

**185 Directed Study - Anthropology (1) CSU - RPT 2****285 Directed Study - Anthropology (2) CSU****385 Directed Study - Anthropology (3) CSU***Conference 1 hour per unit.**Prerequisite: Any two of the following courses: Anthropology 101, 102, 104, 106.*

Allows students to pursue Directed Study in Anthropology on a contract basis under the direction of a supervising instructor.

# Architecture

**UC Credit Limit: Maximum of 17 units.**

**110 Introduction to Architecture (1) UC:CSU - RPT 1***Lecture 1 hour.**UC Credit Limit: Maximum one unit.*

Introductory course exploring the fields of architecture and construction technology. Students will gain an understanding of architecture and construction technology programs. Visits to architects' offices, building sites, advanced schools of architecture, and lectures.

**111 Methods of Construction (2) CSU***Lecture 2 hours.*

Emphasizes methods of construction in wood, steel and concrete.

**121 Freehand Drawing I (2) UC:CSU - RPT 1***Lecture 2 hours; Laboratory 3 hours.*

Drawing ability as developed primarily by pencil, ink, and watercolor. Study is made of composition, form, value, and scale, and centers mainly on drawing development employing architectural forms.

**151 Materials of Construction (3) CSU***Lecture 3 hours.**Prerequisite: Architecture 172 and 111.*

Studies the nature and characteristics of materials, along with their history, manufacturing, fabrication and appropriate uses for given construction purposes.

**152 Equipment of Buildings (3) CSU***Lecture 3 hours.**Prerequisite: Architecture 172 and 111.*

Applies the basic principles of design, selection and operation of equipment in buildings to water, plumbing, heating, air conditioning, lighting and acoustics.

**162 Computer Aided Design and Drafting (3) CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Architecture 172 and 173.*

An introduction to computer design and drafting for architecture. Provides a survey of current CAD systems plus hands-on experience.

**172 Architectural Drawing I (3) CSU***Lecture 1 hour; Laboratory 5 hours.*

Teaches the techniques of architectural construction drawings, their conventions and symbols through the preparation of simple construction details and drawings. Surveys the scope and personal requirements of the architectural profession and related building trades.

**173 Architectural Drawing II (3) CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Architecture 172 with a grade of "C" or better.*

Develops construction drawing skill and fundamental understanding of building by preparing plans with necessary details for wood frame construction.

**201 Basic Architectural Design I (3) UC:CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Architecture 172 and Environmental Design 101.*

Explores the nature and limitations of materials using two-dimensional studies of form and composition in black and white and color.

**202 Basic Architectural Design II (3) UC:CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Environmental Design 101 or Architecture 201.*

Extends the theory of color and the use of various materials in three-dimensional compositions.

**210 Construction Estimating (3) CSU***Lecture 3 hours.*

Studies methods used in determining quantities and costs of labor and materials as related to construction.

**221 Architectural Rendering (2) CSU***Lecture 1 hour; Laboratory 3 hours.**Prerequisite: Architecture 121.*

Teaches the techniques of graphic rendering using various media. Stresses both freehand drawing and drafting board methods.

**271 Architectural Drawing III (3) CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Architecture 172 or 173.*

Offers a study of construction methods, materials, and building ordinances. Requires students to prepare construction drawings for commercial buildings in concrete and steel or similar problems.

**272 Architectural Drawing IV (3) CSU***Lecture 1 hour; Laboratory 5 hours.**Prerequisite: Architecture 173 or 271.*

Offers a study of construction methods, materials, and building ordinances. Requires students to prepare design and preliminary drawings for small commercial-type building or similar problems.

**291 Strength of Architectural Materials I (3) CSU***Lecture 3 hours.*

Includes material relative to the strength, mechanical principles and design (stresses, tension, compression, shear, and bending) of building materials, and their uses in foundations, floors, walls, columns, and roofs.

**185 Directed Study - Architecture (1) CSU - RPT 2****285 Directed Study -Architecture (2) CSU****385 Directed Study - Architecture (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Architecture on a contract basis under the direction of a supervising instructor.



- 911-941**  
**Cooperative Work Experience Education - Architecture (1-4)**  
*See Cooperative Work Experience Education.*

# Art

**92 Introduction to Museum Studies (3) CSU**

*Lecture 3 hours.*

This course will provide a broad introduction to the field of museum work. Topics included will be the history and philosophy of museums; the social, economic, and political trends that shape museums; the staffing, management, and financing of museums; and the multiple functions of museums, such as the collection and care of objects, exhibition design and interpretation, education programs, research activities, library collections, and public relations. Students will personally engage with museum professionals, including: department directors, curators, conservators, collection managers, educators, and exhibit designers. The course will draw students from all nine colleges.

**101 Survey of Art History I (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

A survey of architecture, sculpture, and painting from the prehistoric, ancient, classical and medieval periods of Western Europe.

**102 Survey of Art History II (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

**Note:** Art 101 is not a prerequisite for 102.

A survey of painting, sculpture, and architecture of the Western tradition from the fourteenth century to the twenty-first century. Attention is given to style, iconography, and the social, political, and economic context that accompanies a work of art.

**103 Art Appreciation I (3) UC:CSU**

*Lecture 3 hours.*

*Recommended for non-Art majors. Recommended but not required or Art majors.*

Further the understanding and appreciation of the visual arts. Works of art may be presented through field trips to museums and galleries.

**105 History of Asian Art (3) UC:CSU**

*Lecture 3 hours.*

A survey covering paintings, sculpture and architecture of Japan, China, and India.

**107 Mexican Art-Modern (3) CSU**

*Lecture 3 hours.*

A survey of the rich cultural production of Mexico, beginning with the Mesoamerican period but focusing primarily on the 19th-21st centuries. The course is organized according to the major historical moments including the pre-Hispanic civilizations, Spanish Conquest, the Colonial Period, War of Independence, and the Mexican Revolution and thereafter. It will examine the social, economic, political and religious context of the production and use of the works of art considered. Topics covered will include Mesoamerican art as dynastic legitimator; the role of the pre-Hispanic civilizations on modern art and culture (the reappropriation of the past); the use of art as propaganda (for example, the connections between art and ideologies of Conquest); the construction of national and hybrid identity; the role of public art; symbolism in religious imagery; portraiture, history painting, and landscape; and theories of colonialism and hybridity. The course will look at work in a variety of media, including painting (especially easel paintings and murals), sculpture, architecture, installations, prints, and photography.

**109 The Art of Africa, Oceania and Ancient America I (3) UC:CSU**

*Lecture 3 hours.*

This course will consider selected topics in the history of Non-Western art from the indigenous cultures of Africa, the islands of the South Pacific (Oceania), and pre-European contact North America and Mesoamerica. The course will examine the social, economic, political and religious context of the production and use of the works of art considered. Students will learn about different art historical methodological approaches to the analysis of the material considered. Students will master art historical and artistic vocabulary, and will learn to perform visual analysis of compositions of painting, sculpture, architecture, arts of the body and other media.

**111 History of Contemporary Art (3) UC:CSU**

*Lecture 3 hours.*

Covers major trends in art from c.1900 to the present day. Works of art are presented through slide presentations, class discussion and visits to museums, galleries and artists' studios.

**119 Theories of Art (3) UC:CSU**

*Lecture 3 hours.*

G geared to both studio and art history students. We will analyze artistic and aesthetic theories from ancient times to postmodernism and will examine various methodologies in order to understand movements and ideas which have played a crucial role in shaping the study of art.

**137 Architectural History I: Prehistory to the Middle Ages (3) UC:CSU**

*Lecture 3 hours.*

Covers the history of architecture from prehistory to the Middle Ages. Stresses development of typology as well as an examination of the influence of social cultural, religious, political, and economic conditions that influenced changes in form and style.

**138 Architectural History II: Late Middle Ages to Modern (3) UC:CSU**

*Lecture 3 hours.*

Covers the history of architecture from the late Middle Ages to the Modern period. Focuses on changing types, as well as on technological advancements in building materials. Literary movements as well as social, economic, religious, and political influences will be stressed.

**139 Architectural History III: Modern Architecture (3) UC:CSU**

*Lecture 3 hours.*

Covers the modern period of architecture, examining the changing range of architectural types, the impact of technology, the influence of Bauhaus, the theoretical schools, and the sociopolitical impact on the look of buildings.

**201 Drawing I (3) UC:CSU**

*Lecture 2 hours; Laboratory 2 hours.*

Involves a variety of media, emphasizing visual perception, critical analysis, art fundamentals, and cultural history of drawing.

**202 Drawing II (3) UC:CSU**

*Lecture 2 hours; Laboratory 2 hours.*

**Prerequisite:** Art 201.

Extends the experiences of basic drawing with special emphasis upon pictorial organization. Stresses historical cultural evolution of drawing.

**203 Drawing III (3) UC:CSU**

*Lecture 2 hours; Laboratory 2 hours.*

**Prerequisite:** Art 202.

Extends the experiences of basic drawing with special emphasis in various color media. Stresses individual artistic development.

**204 Life Drawing I (3) UC:CSU**

*Lecture 2 hours; Laboratory 2 hours.*

**Prerequisite:** Art 201.

Studies construction of and composition with the human figure. Stresses critical analysis of the use of the figure in historical context.

**205 Life Drawing II (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 204.

Continuation of Life Drawing I, emphasizing figure construction and composition applying a variety of media and concepts.

**206 Life Drawing III (3) UC:CSU**

**Prerequisite:** Art 205.

Lecture 2 hours; Laboratory 2 hours.

Continuation of figure construction and composition applying a variety of media concepts.

**207 Life Drawing IV (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 206.

Continuation of figure construction and composition applying a variety of tools and techniques. Independent projects are stressed.

**209 Perspective Drawing I (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Develops the understanding and manual skills necessary in the making of drawings which accurately represent three-dimensional forms in one-, two- and three-point perspective, with multiple secondary vanishing points.

**300 Introduction to Painting (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Cultural awareness and historic foundations are integrated with classroom explorations of the potentials of painting. Through class assignments students develop a variety of painting techniques and a greater understanding of the medium.

**301 Watercolor Painting I (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Offers experience in a variety of techniques. Emphasis on cultural history and criticism in the field of watercolor painting.

**302 Watercolor Painting II (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 301.

Continuation of Watercolor I. Emphasis on composition through perceptual and conceptual approaches. Theory, history, and criticism in field of watercolor painting.

**304 Acrylic Painting I (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 300 with a grade of "C" or better.

Continuation of Art 300.

**305 Acrylic Painting II (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 304.

Continuation of Art 304.

**306 Acrylic Painting III (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 305.

Continuation of Art 305.

**307 Oil Painting I (3) UC:CSU**

Laboratory 6 hours.

Stresses skills and techniques in the medium. Both traditional and contemporary approaches to ideas and materials are explored as a means of developing personal and/or professional expression.

**308 Oil Painting II (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 307.

In this course, students will expand skills and techniques in oil painting. Emphasis will be on composition and color exploration in the service of communicating individual ideas.

**309 Oil Painting III (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 308.

This course furthers the student's expertise in oil painting. The student develops an individual approach to technique and the creative expression of a personal vision. Research into contemporary and/or historical movements in art is expected to inform the student's work.

**400 Introduction to Printmaking (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Art 201, Art 501

This fine art studio course introduces the student to historical, technical and creative processes of basic printmaking.

**501 Beginning Two-Dimensional Design (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Introduces the elements and principles of two-dimensional design common to the visual arts. Integrates the theory of design with historical and cultural foundations. Applies basic design techniques to problems in visual perception and critical analysis.

**502 Beginning Three-Dimensional Design (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Introduces the principles of three-dimensional design utilizing a variety of techniques and materials. Design theory is integrated with historical and cultural foundation. Students develop analytical visual skills and critical awareness.

**503 Intermediate Design (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 501.

**Advisory:** Completion of Art 201

This course examines the practical applications of design in a more focused manner as it relates to the concepts of two-dimensional design. Emphasis will be placed on several color theory models as well as the different systems of structuring a composition. Line, shape, texture, value, color, movement, scale, balance, unity and variety, focal point, subject, content.

**519 Display Techniques (3) CSU**

Lecture 2 hours; Laboratory 4 hours.

Provides practical application of design concepts as they relate to exhibitions, environments, displays and art portfolios. Students will gain a working knowledge of successful commercial and college galleries. Exhibition preparation, installation, funding, gallery visits, and guest lectures will be part of the curriculum.

**603 Typography (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

This is a fundamental course and an introduction to basic composition and principles of typography. The course includes a survey of type from its origins to current technology and an introduction to typographic nomenclature and type specifications. Using hand skills and the computer, projects focus on typographic design, resonance and composition. Students develop skills regarding visually interesting letterforms and their uses in typographic design with a focus on appropriate solutions, visual interest and craftsmanship.

**604 Graphic Design I (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Advisory:** Completion of Art 501

Introductory graphic design: the field, its terminology; tools and working methods. The problem/projects consist of graphic design assignments for selected media. Introduction to graphics on the computer. Primary software for this course is Illustrator and Freehand.

**605 Graphic Design II (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 604.

**Advisory:** Completion of Art 201

A continuation of the principles of Art 604. Projects in advertising, publication design, packaging and corporate identity. Continuation of graphics on the computer. Primary software for this course is QuarkXpress, Illustrator and Photoshop.

**606 Graphic Design III (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 605.

Continuation of principles of Art 605. Graphic design workshop including computer graphics. Emphasis on corporate identity (logos, letterheads and promotional communications.) Portfolio preparation and evaluation. Primary software for this course is QuarkXpress, Illustrator and Photoshop.

**615 Graphic Communications II (4)**

Lecture 2 hours; Laboratory 4 hours.

**Prerequisite:** Art 604.

Continues Art 614 with greater emphasis upon graphic design skills and knowledge of contemporary processes in layout, preparation of artwork, and printing processes as they relate to the work of the advertising designer. Further refining of computer skills. Primary software for this course is InDesign, Illustrator and Photoshop.

**616 Graphic Communications III (4)**

Lecture 2 hours; Laboratory 4 hours.

**Prerequisite:** Art 615 or Art 605.

Continues studies in advertising, graphic design and layout, illustration, photography, and the operation of a graphic computer workstation that would be used in a job situation. Primary software for this course is InDesign, Illustrator and Photoshop.

**617 Graphic Communications IV (4)**

Lecture 2 hours; Laboratory 4 hours.

**Prerequisite:** Art 616 or Art 606.

Reviews and extends the factual material and practical skills included in previous courses. Includes preparation of a portfolio of student's work for use in obtaining employment. Primary software for this course is InDesign, Illustrator and Photoshop.

**620 Illustration I (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 201.

Applies basic drawing techniques and design principles to problems in advertising and editorial illustration. Students will explore a variety of media and approaches oriented to contemporary demands in the field.

**621 Illustration II (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 620.

Continues Art 620 with additional emphasis on the use of markers for the production of full color comprehensive drawings and illustrations.

**622 Illustration for the Graphic Artist (3)**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 621.

Extends basic principles and practices of advertising illustration to problems in graphic design and layout. Projects include the coordination of illustration with photography and other visual media.

**635 Desktop Publishing Design (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Advisory:** Completion of Art 604

An introductory course to desk top publishing design. The course is designed for graphic design majors, fine artists, journalism majors, and computer graphics novices. Emphasis will be on computer layout and composition. Basic concepts relating to the fonts, type styles, page design, readability, and final printing production will be explored.

**650 Graphic Design for the World Wide Web (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 604.

This is a fundamental course in the application of the principles of design to building websites. Students will use a web interface design they have created to build and publish a third and fourth generation web site. Introduction to web creation software, Dreamweaver, Flash, and Fireworks.

**651 Animation for the Web (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Art 650 or consent of Instructor.

This is a course in the application of animation or moving images for the web. It also furthers skills in building and design in building websites. Students will create images that they have constructed and apply movement to them to create an effective, fast downloading, browser and user-friendly site. Primary software is Flash.

**700 Introduction to Sculpture (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

Provides experiences in designing and executing sculptural form; technical experiences include modeling, casting and fabricating with sculptural media. Historical and cultural antecedents are discussed with emphasis on developing sculptural awareness.

**701 Sculpture I (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 700 with a grade of "C" or better

Continues Art 700.

**702 Sculpture II (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 701 with "C" or better.

Continuation of Art 701.

**703 Sculpture III (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 702 with "C" or better.

Continuation of Art 702.

**708 Introduction to Ceramics (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours

Presents basic ceramic design and construction techniques including wheel forming, handbuilding, surface enrichment, glazing, and firing. Emphasis on design and craftsmanship. Surveys the historical significance of ceramic art.

**709 Ceramics I (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 708.

Continuation of introduction to ceramics with increasing emphasis on wheel forming, glaze formulation, and kiln management. Stresses further the concepts of design.

**710 Ceramics II (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 709.

Continuation of Art 709 with an increased emphasis on individually planned projects as well as assigned work.

**711 Ceramics III (3) UC:CSU**

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Art 710.

Continuation of Art 710 with an increased emphasis on individually planned projects.

**185 Directed Study - Art Honors (1) CSU - RPT 2****285 Directed Study - Art Honors (2) CSU****385 Directed Study - Art Honors (3) CSU**

Conference 1 hour per unit

Allows students to pursue Directed Study in Art on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Art (1-4) CSU**

See Cooperative Work Experience Education.

# Astronomy

## 1 Elementary Astronomy (3) UC:CSU

Lecture 3 hours.

Astronomy 1 with 2 same as Astronomy 3.

Surveys the material contents and workings of the universe at an introductory level designed to satisfy the general education science requirement, primarily for non-science majors. Emphasizes the physical principles essential to fundamental understanding in astronomy. Discusses philosophical and historical foundations, the tools of the astronomer, the solar system, stars and stellar evolution, galaxies and deep space, cosmology, and extraterrestrial life.

## 2 Elementary Astronomy Laboratory (1) UC:CSU - RPT 1

Laboratory and discussion, 3 hours.

Astronomy 1 with 2 same as Astronomy 3

**Corequisite:** Astronomy 1.

Supplements the material of Astronomy 1. Includes use of astronomical instruments, motions of the sky, the celestial sphere, star charts, constellation study, lunar and planetary motions, and classification of galaxies. Applies simple algebra and simple graphical methods to study of astronomical phenomena. Telescopic observations will be made whenever possible. May include occasional field trips to nearby astronomy facilities.

## 3 Introductory Astronomy (4) UC:CSU

Lecture 3 hours; Laboratory 3 hours.

Same as Astronomy 1 with 2.

Combines lecture and laboratory content of Astronomy 1 and Astronomy 2. For further information see course descriptions of Astronomy 1 and Astronomy 2.

## 185 Directed Study - Astronomy (1) CSU - RPT 2

## 285 Directed Study - Astronomy (2) CSU

## 385 Directed Study - Astronomy (3) CSU

Conference 1 hour per unit.

Allows students to pursue Directed Study in Astronomy on a contract basis under the direction of a supervising instructor.

# Automotive Service Technology

## 1 Automotive Engines (5) CSU

Lecture 3 hours; Laboratory 5 hours.

Presents a study of automotive engines. Encompasses cooling and lubrication systems. Students overhaul engines in the laboratory, including boring, pin-fitting, measurement, valve seat replacement, valve grinding and other engine rebuilding procedures.

## 2 Suspension Brakes and Power Systems (5)

Lecture 3 hours; Laboratory 5 hours.

Introduces wheel, brake, and suspension systems and service, including instruction on power brakes, power steering systems, and anti lock braking systems. Provides training and supervised repair on automobiles under actual shop conditions.

## 3 Engine Diagnosis and Tune-Up (5)

Lecture 3 hours; Laboratory 5 hours.

Deals with the theory and maintenance of engines including engine diagnosis and engine performance tune-ups. Provides a working understanding of automotive fuel systems, ignition systems, starting systems, charging systems, and emission control systems. Laboratory work will include understanding, diagnosing, and repairing engines and related electrical, fuel, and emission systems to improve engine performance. Includes practice with the latest diagnostic equipment.

## 4 Starting and Charging Systems / Automotive Electrical Circuits (5)

Lecture 3 hours; Laboratory 5 hours.

Deals with the theory and maintenance of charging and starting systems. Provides a working understanding of the electrical systems used on automotive machinery. Lab work includes repair work on starters, alternators, and trouble shooting components of the electrical system. Includes practice with the latest diagnostic equipment.

## 5 Standard Transmissions, Clutches, Drive Lines and Differentials (3)

Lecture 2 hours; Laboratory 2 hours.

Examines manual shift transmissions/Transaxles of various types and sizes used in FWD, RWD, 4WD and AWD automotive applications. Discusses drive line problems including clutch, differential and axle systems. Laboratory practice includes the removal and installation of a clutch, overhaul of a manual transmission and transaxle, overhaul of a differential, servicing universal joints and troubleshooting drive line problems.

## 6 Automatic Transmission Electronic Diagnostics and Repair (5)

Lecture 3 hours; Laboratory 5 hours.

Emphasizes the design, construction, operation and servicing of several types of automatic transmissions in use today.

## 7 Air Conditioning (3)

Lecture 2 hours; Laboratory 2 hours.

Provide theory and operation of HVAC systems used on the modern automobile. Presents the latest information on automotive air conditioning and heating systems, to include diagnosis, service and repair. Has shop practice in testing and proper handling of refrigerants, evacuation, recovery/recycling and recharging of air conditioning systems.

## 20 Advanced Engine Diagnostics and Performance (4) - RPT 3

Lecture 3 hours; Laboratory 3 hours.

The theory, operation and repair of automotive electronic computer control and fuel injection systems. The course also covers the use on automotive scan tools, data interpretation and diagnostic repair procedures.

## 21 Computer-Controlled Electronic Fuel Injection Systems (3)

Lecture 3 hours.

The theory, operation, and repair of computer controlled electronic fuel injection systems.

## 23 Enhanced Clean Air Car (4)

Lecture 3 hours; Laboratory 3 hours.

A State of California mandated course covering operation and repair of emission systems. Upon satisfactory completion of the course, students may be granted permission to take the state licensing exam. **Note:** The Pierce College Automotive Service Program is a California State Bureau of Automotive Repair Approved Training Institution.

**24 Smog Check BAR Update Course (1) - \*RPT 3**

Lecture 1 hour.

*\*Additional repeats allowed by petition.*

This short course is designed for automotive professionals who need to meet current smog check licensing requirements.

**25 Fundamentals of Auto Mechanics (4)**

Lecture 3 hours; Laboratory 3 hours.

May be offered as 1-unit modules: 25A (Lubrication and Inspection Procedures), 25B (Cooling and Ignition Systems), 25C (Tires and Braking Systems), and 25D (Electrical Systems).

Provides a comprehensive introduction to the design, operation, and repair of various automotive systems. Emphasis is placed on owner-operator vehicle maintenance.

**32 Automotive Service Technology Projects Laboratory: Chassis and Suspension Systems (1)**

Laboratory 3 hours.

*Prerequisite:* Automotive Service Technology 2.

Provides increased laboratory experience in the diagnosis and repair of automotive chassis and suspension systems.

**34 Automotive Service Technology Projects Laboratory: Electrical Circuits (2)**

Laboratory 6 hours.

*Prerequisite:* Automotive Service Technology 4.

Provides increased laboratory experience in the diagnosis and repair of automotive electrical circuits.

**36 Automotive Service Technology Projects Laboratory: Standard Transmissions, Clutches, Drive Lines and Differentials / Air Conditioning (1)**

Laboratory 3 hours.

*Prerequisite:* Automotive Service Technology 5.

Provides increased laboratory experience in the diagnosis and repair of standard transmissions, clutches, drive lines and differentials/air conditioning.

**41 Precision Lower-End Engine Blueprinting and Assembly (3)**

Lecture 2 hours; Laboratory 2 hours.

This course provides a comprehensive understanding of automotive performance oriented lower end engine machining and assembly techniques. It discusses engine blueprinting for performance applications. Machining engine blocks, crankshafts, connecting rods and other related components are covered. Modifications to short block assemblies for performance applications are discussed.

**42 Performance Chassis and Suspension Systems (3)**

Lecture 2 hours; Laboratory 2 hours.

This course provides a comprehensive understanding of automotive performance oriented chassis and suspension system upgrades. It discusses the effect springs, shocks and swaybars have on a performance vehicle. The effect of caster, camber and toe settings on a performance vehicle are covered. Modifications to a vehicle's steering and suspension systems are discussed for road course, oval and straight-line racing situations.

**43 Dyno Tuning For Performance (3)**

Lecture 2 hours; Laboratory 2 hours.

This course provides a comprehensive understanding of automotive performance tuning on a chassis dynamometer. It discusses performance upgrades to timing and fuel curves on both non-computer and computer controlled systems. Bolt-on performance upgrades such as forced injection systems, improvements to intake systems and exhaust upgrades are also discussed.

**44 Precision Upper End Engine Assembly (3)**

Lecture 2 hours; Laboratory 2 hours.

This course provides a comprehensive understanding of automotive performance oriented upgrades to an engine upper-end to include cylinder heads, valve train, intake systems and exhaust systems. It discusses the effect intake flow and exhaust flow have on a performance vehicle. Machining cylinder heads, valves and related components are covered. Modifications to cylinder head combustion chambers, ports, valve size, valve spring set-up, rocker arm geometry and push rod lengths are discussed for various racing situations.

**45 Chassis, Suspension and Interior Fabrication Techniques (3)**

Lecture 2 hours; Laboratory 2 hours.

This course provides a comprehensive understanding of automotive performance oriented chassis, suspension and interior modifications, which enhance a vehicles safety and performance ability. It discusses fabrication and modification of various chassis and suspension systems for performance use. How to fabricate and/or install from kit form safety equipment such as roll bars and roll cages are covered. Fabrication and installation of interior tin are discussed and practiced.

**48 Automotive Service Writing (3)**

Lecture 3 hours.

This course provides a comprehensive understanding of automotive service writing. It discusses the rules and regulations required by the State of California. How to sell and price automotive repair procedures while keeping the customer satisfied will be thoroughly covered.

**52 Advanced Brakes Steering and Suspension Systems (3)**

Lecture 2 hours; Laboratory 2 hours.

This course is part of the Ford Motor Company MLR (Maintenance and Light Repair) technician training program. The course prepares students for employment at local Ford or Lincoln/Mercury dealerships as well as upgrade training of current Ford technicians. The brake system diagnosis and repair along with the base steering and suspension class includes classroom instruction, hands on laboratory projects, and web based training on current Ford Motor Company vehicles.

**53 Introduction to Alternative Fuels (3)**

Lecture 2 hours; Laboratory 2 hours.

This course is an introductory course on alternative fuel vehicles in the automotive industry. Various alternative fuels will be compared, such as Electric, Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG), Ethanol, Methanol, Bio-diesel, electric vehicles, and hybrid electric vehicles. Topics will include alternative fuel theory, design, operation, and safety. Learning strategies include: multimedia presentations, discussions, research, and lab practice. Laboratory activities will include vehicle diagnosis, vehicle maintenance, and vehicle repair.

**54 Advanced Electrical Systems (3)**

Lecture 2 hours; Laboratory 2 hours.

This course is part of the Ford Motor Company MLR (Maintenance and Light Repair) technician training program. The course prepares students for employment at local Ford or Lincoln/Mercury dealerships as well as upgrade training of current Ford technicians. The basic electrical diagnostic course includes classroom instruction, hands on laboratory projects, and web based training on current Ford Motor Company vehicles.

**55 Hybrid Service and Safety (3)**

Lecture 2 hours; Laboratory 2 hours.

This course is an introductory course on Servicing and Safety Issues on Hybrid-Electric Vehicles. Topics will include the various Hybrid-Electric designs, operation, service and safety of vehicles currently in production as well as those being developed for the future. Learning strategies include: multimedia presentations, discussions, research, and lab practice. Laboratory activities will include vehicle safety practices, diagnosis, maintenance, repair, and service procedures.

**185 Directed Study - Automotive Service Technology (1) - RPT 2****285 Directed Study - Automotive Service Technology (2)****385 Directed Study - Automotive Service Technology (3)**

Allows students to pursue Directed Study in Automotive Service Technology on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Automotive Service Technology (1-4)**

See Cooperative Work Experience Education.

# Biology

See also **Anatomy, Microbiology, Oceanography, and Physiology.**

## 3 Introduction to Biology (4) UC:CSU

Lecture 3 hours; Laboratory 3 hours.

Closed to students who have completed Biology 6.

This course presents a comprehensive study of the major principles of biology. It covers topics such as cell structure and physiology; bioenergetics, development, genetics, basic ecology, population biology and evolution. This course meets the general education laboratory experience requirement. This course is not intended for life science, biology; or pre-professional (medical, dental) majors.

## 6 General Biology I (5) UC:CSU

Lecture 3 hours; Laboratory 6 hours.

**Prerequisite or Corequisite:** Chemistry 101.

**Note:** This class meets off campus several times during the semester.

Biology 6 represents half of a one-year course designed for Life Science majors and those preparing for careers in medicine, pharmacy, and dentistry. The lecture focuses on the fundamental processes associated with living organisms, particularly those at the cellular and molecular levels of organization. The laboratory explores the biology of plants, protists, and invertebrate animals.

## 7 General Biology II (5) UC:CSU

Lecture 3 hours; Laboratory 6 hours.

**Prerequisite or Corequisite:** Chemistry 101.

**Note:** Biology 6 is not a prerequisite for Biology 7.

**Note:** This class meets off campus several times during the semester.

This course is designed to complete the study of the basic principles of biology. The course includes a comparative study of the structure and physiology of vertebrate organ systems, the basic concepts of evolution, and the evolution of the vertebrates. The course also examines basic ecological concepts and populations and their relationships to biological communities.

## 10 Natural History I (4) UC:CSU

Lecture 3 hours; Laboratory 3 hours.

**Note:** Surveys of the local ecosystems are done during off-campus field trips.

Biological principles including evolution, adaptation and scientific methods are examined using the local environment. Includes the role of climate in the distribution of plant and animal species and a systematic survey of the common local plants, invertebrates, birds and mammals.

## 11 Natural History II (3) \*\*UC:CSU

Lecture 2 hours; Laboratory 2 hours.

**Note:** This course is taught in 1-unit modules. No credit for repeated modules.

Deals with the biology of the environment and the interrelationship of climate, animals, plants, and humans. Course will include an in-depth ecological and systematic survey of a few selected ecosystems of the world.

## 12 Natural History and Field Biology I (3) CSU

Lecture 2 hours; Laboratory 2 hours.

**Note:** This course is taught in 1-unit modules. No credit for repeated modules.

Deals with the biology of the environment and the interrelationship of climate, animals, plants, and humans. Course will include an in-depth ecological and systematic survey of a few selected ecosystems of the world.

## 44 Foundations in Biology for the Health Sciences (2) CSU

Lecture 1 hour; Laboratory 2 hours.

This course is designed to present the theories and laboratory skills needed to succeed in Human Physiology and Microbiology. The overall breadth of course material is more narrow than Biology 3, but coverage of chemistry and genetics is more detailed.

## 110 Biology - General Biology - Genetic Analysis and Biotechnology (4) UC:CSU

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Biology 6.

This course is designed for Life Science majors as a continuance of their general biology studies. This course provides a comprehensive introduction to genetic analysis, examining topics such as chromosome analysis, population genetics, and genomics. This course also provides a comprehensive introduction to the science of biotechnology by providing both the theory and hands-on experience with current laboratory procedures.

## 121 Lectures in Marine Biology (3) UC:CSU

Lecture 3 hours.

Formerly Oceanography 12. Credit not given for both courses.

Introduction to the biology of the marine environment. A brief introduction to the physical conditions of the oceans is followed by a comprehensive examination of marine organisms. A strong emphasis is placed on understanding the biology of groups of organisms including morphology, feeding, reproduction, adaptations and ecology. A survey of marine communities involves developing an understanding of the fundamentals of community analysis and application of knowledge of the biology of individual organisms as members of communities. Communities examined include kelp forests, coral reefs, deep sea, hydrothermal vents, mangroves, the rocky intertidal zone, sandy subtidal and Antarctica. Environmental issues of fisheries management and pollution are discussed.

## 122 Marine Biology Laboratory (2) UC:CSU

**Prerequisite or Corequisite:** Biology 121 (formerly Oceanography 12)

Laboratory 4 hours.

Formerly Oceanography 14. Credit not given for both courses.

A laboratory and field course introducing students to the Southern California nearshore marine environment. Marine plants and invertebrates and fishes are examined with respect to morphology, physiological ecology, classification and ecology. A strong field emphasis includes studies of the rocky intertidal zone, wetlands, sandy beach and nearshore pelagic and benthic communities. Students design and execute a written community analysis project requiring them to pose hypotheses, formulate a sampling design, and to analyze, plot and interpret data. Students also participate in oceanographic research cruises and experience all aspects of shipboard sampling.

## 123 Introduction to Marine Biology (3) UC:CSU

Lecture 2 hours; Laboratory 3 hours.

Formerly Oceanography 2. Credit not given for both courses.

This course is designed to be taught at a marine biology field station in the Sea of Cortez and maximizes the opportunities afforded by field study. The lecture, laboratory and field study are integrated to examine the physical attributes of the Gulf of California nearshore ecosystem as it influences the biology of the marine plants and animals of the region. Emphasis is placed on the interactions among species which determine their distributions and the organization of communities. The biology of plants, invertebrates, fish, birds, marine mammals and marine reptiles are examined. Experimental and observational studies of fish form and function, invertebrate and fish behavior, as well as marine mammal and fish behavior and ecology are done primarily while in the water snorkeling. Issues relating to fisheries and resource utilization, and future management and/or exploitation by 3rd world countries are examined in the microcosm of the Bahia de los Angeles area of the Sea of Cortez.

## 185 Directed Study - Biology (1) CSU RPT - 2

## 285 Directed Study - Biology (2) CSU

## 385 Directed Study - Biology (3) CSU

Conference 1 hour per unit.

Allows students to pursue Directed Study in Biology on a contract basis under the direction of a supervising instructor.

## 911-941

### Cooperative Work Experience Education - Biology (1-4) CSU

See Cooperative Work Experience Education.

**\*\*UC Credit Limit:** UC transferable only if all three modules (3 units) are completed.



# Broadcasting

## 1 Fundamentals of Radio and Television Broadcasting (3) UC:CSU

Lecture 3 hours.

*Advisory: Journalism 100, 101*

Overview of the Radio-TV industry, including its emergence, roles of the networks, governmental regulation, social effects, legal and ethical aspects, programming and employment practices.

## 10 Radio Programming and Production (3) CSU

Lecture 2 hours; Laboratory 3 hours.

Introduction, by means of working on a campus radio station, to all aspects of radio station programming and production. Included are instruction and experience in the roles of disc jockey, sportscaster, commercial announcer and news broadcaster.

## 103 Voice and Diction for Radio and Television (3) CSU

Lecture 2 hours. Laboratory 2 hours.

Training in the presentation of broadcast, podcast and Webcast material. Fundamentals of good speech are combined with techniques for handling the problems unique to broadcasting, such as microphone techniques, reading for the camera, interviewing techniques, preparing continuity and transitions for commercial copy, promotional and public service announcements, news copy, weather and sports announcing. An opportunity may be provided to create programming for the campus radio station or Internet radio station.

## 114 Sound Design for Digital Film/Video/Radio (3)

Lecture 2 hours. Laboratory 2 hours

*Same as Cinema 114 and Multimedia 114. Credit given for one course.*

Intermediate course dealing with all aspects of digital media including film/video/radio sound recording, mixing, and editing from theory to application, centering on learning the basic parts and functions of professional motion picture and digital video/radio sound equipment, as well as sound techniques and aesthetics with an emphasis on editing and post-production for digital media.

# Business Administration

Business Administration courses are listed separately under the following headings:

**Accounting**  
**Business**  
**Insurance**  
**International Business**  
**Management**  
**Marketing**  
**Real Estate**  
**Supervision**

# Business

## 1 Introduction to Business (3) UC:CSU

Lecture 3 hours.

Designed to introduce or review the basic areas of business. This is a survey course. Topics covered include: Accounting, International Business, Finance, Marketing, Management, Business Law, Business Organization, and Careers.

## 5 Business Law I (3) UC:CSU

Lecture 3 hours.

This course includes an overview of Law and Society and specifically stresses the Court System, the Law of Contracts, Torts, Negligence, Crimes, Personal Property and Bailments, and Real Property.

## 10 Fundamentals of Tax Return Preparation (3) - RPT 3

Lecture 3 hours.

Introduces the fundamentals of Federal and California income tax procedures. This class is associated with the Voluntary Income Tax Preparation program (VITA) that allows students to practice preparing tax returns for residents in the community.

## 185 Directed Study - Business (1) CSU - RPT 2

## 285 Directed Study - Business (2) CSU

## 385 Directed Study - Business (3) CSU

Conference 1 hour per unit.

Allows students to pursue Directed Study in Business on a contract basis under the direction of a supervising instructor.

## 911-941

### Cooperative Work Experience Education - Business (1-4) CSU

*See Cooperative Work Experience Education.*

# Business Communications

See course listings under **Computer Applications and Office Technologies**

# Business Computer Applications

See course listings under **Computer Applications and Office Technologies**

# Business English

See course listings under **Computer Applications and Office Technologies**

# Chemistry

*Students whose native language is other than English are recommended to be enrolled in ESL 87 before enrolling in Chemistry laboratory courses. Chemistry courses require good reading and writing skills. It is recommended that students be enrolled in or eligible for English 28 before enrolling in any Chemistry course.*

## 51 Fundamentals of Chemistry I (5) CSU

*Lecture 3 hours; Laboratory 4 hours.*

**Prerequisite:** Mathematics 115 with a grade of "C" or better, or equivalent skill level demonstrated through the mathematics placement process.

**Recommendation:** Eligibility for English 28.

This course offers a basic introduction to concepts in inorganic chemistry with a brief overview of organic chemistry. It is designed for those students whose interests are in nursing, animal health technology, home economics, physical therapy, elementary education and for liberal arts students in need of a laboratory course in physical science. It is **not** intended for students planning to take Chemistry 101.

## 60 Introduction to General Chemistry (5) <sup>Δ</sup>UC:CSU

<sup>Δ</sup>No Credit if taken after Chemistry 101.

*Lecture 3 hours; Laboratory 4 hours.*

*This class may be offered periodically as an Internet-based class with an on-campus laboratory. This course is typically offered in both the winter and summer intersession.*

**Prerequisite:** Mathematics 115 with a grade of "C" or better, or equivalent skill level demonstrated through the mathematics placement process.

**Recommendation:** Eligibility for English 28.

The course consists of a theoretical and mathematical treatment of some of the fundamental principles in general chemistry. One focus is on developing a student's problem-solving skills- enabling them to find algebraic solutions to word problems. This will include a review of important mathematical concepts. A second major emphasis is on development of a basic vocabulary related to chemical concepts, including chemical nomenclature. The composition and structure of different types of matter, and changes that it undergoes will be highlighted. Several types of simple inorganic reactions will be presented and the significance of the Periodic Table of the elements will be explained. The laboratory work is intended to develop skills in measurement, observation, use of simple chemical glassware and equipment, and in making deductions from observations and communicating them in a written report. This course serves to prepare students for entering general chemistry (Chemistry 101).

## CHEMISTRY 101 READINESS TEST

It is recommended that all students planning to enroll in Chemistry 101 as their first chemistry course at Pierce College take the Chemistry 101 Readiness Test at the Assessment Center located in the Campus Center. Contact the Assessment Center at (818) 719-6499 for an appointment and an information sheet. Prerequisite courses taken at other accredited colleges or universities must be presented to the Assessment Center to be substituted for the Pierce Chemistry 101 Readiness Test. Results from the test are intended to assist students in enrolling in the class where they are most likely to succeed. Upon completing the test, students are advised of their placement and given their authorization to enroll. Students must pass the test within one year of when they register to enroll in Chemistry 101. A student who passes the test may take the exam more than once to maintain this recency requirement, but a student who fails may not repeat the test. Students who wish to challenge the recommendation of the readiness test should consult the Chemistry Department Advisor, Dr. Izzy Goodman, at (818) 719-6464 or goodmai@piercecollege.edu.

## 101 General Chemistry I (5) UC:CSU

*Lecture 3 hours; Laboratory and discussion 6 hours.*

*This class may be offered periodically as an Internet-based class with an on-campus laboratory. This course is typically offered in both the winter and summer intersession.*

**Prerequisites:**

1. Chemistry 60 or equivalent with a grade of "C" or better, or passing the Chemistry 101 Readiness Test.
2. Mathematics 125 with a grade of "C" or better, or equivalent skill level demonstrated through the mathematics placement process.

Presents the principles and laws of chemistry as related to the structure of matter. Topics covered include a comparison of the states of matter; atomic structure and the periodic table; stoichiometry; thermochemistry and introductory thermodynamics; chemical bonding; solutions; solubility; acids and bases; introductory chemical equilibrium; phase changes; and an introduction to Molecular Orbital Theory. The laboratory work is intended to develop skills in observation, use of chemical glassware and equipment, making deductions from observations, analyzing results and communicating them in a written laboratory report.

## 102 General Chemistry II (5) UC:CSU

*Lecture 3 hours; Laboratory and discussion 6 hours.*

*This class may be offered periodically as an Internet-based class with an on-campus laboratory. This course is usually offered in the summer intersession.*

**Prerequisite:** Chemistry 101 or its equivalent with a grade of "C" or better.

A continuation of Chemistry 101. Topics covered include a detailed study of chemical equilibrium as applied to analytical chemistry including solubility, complex ion, and redox equilibria, pH, buffers, weak acids, weak bases, monoprotic and polyprotic systems; thermodynamics; electrochemistry; the solid state; the relationship between structure and properties; kinetics; coordination chemistry and ligand field theory; visible spectroscopy; and the chemistry of selected metals and nonmetals. The laboratory work continues to develop skills in observation, the use of chemical glassware and equipment, making deductions from observations, analyzing results and communicating them in a written laboratory report.

**211 Organic Chemistry for Science Majors I (5) UC:CSU**

Lecture 3 hours; Laboratory and discussion 6 hours.

**Prerequisite:** Chemistry 102 or its equivalent with a grade of "C" or better.

This is the first part of a two-course sequence presenting the structure, nomenclature, stereochemistry, preparation and mechanisms of reactions of aliphatic and aromatic hydrocarbons and their derivatives. A mechanistic approach to reactions and a focus on multistep synthesis will be emphasized throughout the course. The laboratory presents the techniques of preparation, isolation and analysis of organic compounds employing standard and modern instrumental methods.

**212 Organic Chemistry for Science Majors II (5) UC:CSU**

Lecture 3 hours; Laboratory and discussion 6 hours.

**Prerequisite:** Chemistry 211 or its equivalent with a grade of "C" or better.

This course will complete the study begun in Chemistry 211 of the organic functional groups of alcohols, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives and amines. It will also cover more specialized topics including the following: carbohydrates, amino acids and peptides, fatty acids and polymers; difunctional compounds, polycyclic benzenoid hydrocarbons, heterocyclic compounds, mass spectroscopy, NMR techniques and strategies in modern organic synthesis. A mechanistic approach to reactions and a focus on multistep synthesis will be emphasized throughout the course. The laboratory presents more techniques of preparation, isolation and analysis of organic compounds employing modern instrumental analysis.

**221 Biochemistry for Science Majors (5) UC:CSU**

Lecture 3 hours; Laboratory and discussion 6 hours.

**Prerequisite:** Chemistry 211 or its equivalent with a grade of "C" or better. Normally offered in the Spring semester only.

The course is designed to provide a thorough introduction to the principles, concepts and terminology of biochemistry, with an emphasis on the structure and function of biomolecules, the role of intermediary metabolism in energy production and common biochemical laboratory techniques. Topics include the chemistry and properties of three groups of biological macromolecules (proteins, carbohydrates and lipids) and their building blocks, protein structure and function, enzyme catalysis, and the details of the central metabolic pathways (glycolysis, glycogenolysis, the citric acid cycle, electron transport, and oxidative phosphorylation) including their regulation and integration. Throughout the course the organizing principles of biochemistry and the distinctive characteristics of the living state will be emphasized. The laboratory exposes the students to a variety of biochemical techniques and how they are used to evaluate biomolecules and systems. These techniques include spectrophotometry, fractional distillation, various types of chromatography including paper, thin layer, and molecular exclusion and enzyme assays.

**185 Directed Study - Chemistry (1) CSU - RPT 2****285 Directed Study - Chemistry (2) CSU****385 Directed Study - Chemistry (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Chemistry on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Chemistry (1-4) CSU**

See Cooperative Work Experience Education.



## Chicano Studies

**2 The Mexican-American in Contemporary Society (3) UC:CSU**

Lecture 3 hours.

Examines current U.S. cultural and social issues relevant to the Chicano Community, advances in political organization and efficacy, and social problems remaining unresolved in Chicano communities in the United States with an emphasis on California and the Southwestern United States.

**80 Chicano Politics (3) UC:CSU**

Lecture 3 hours.

Examines U.S. history and political issues relevant to the Mexican-American Community, the strategies of Latino political activism in the United States, and social change movements, issue, and problems that are relevant to the Hispanic Community.

## Child Development

**1 Child Growth and Development (3) UC:CSU**

Lecture 3 hours.

Equivalent to Psychology 11. Credit not given for both courses.

Department of Social Services DS1.

Required for all Child Development majors and certificates.

May be offered as an honors section.

An introductory Child Development course which covers the theory of human development focusing on growth from conception through adolescence. The physical, cognitive, and social-emotional domains, and ways in which biological and diverse environments influence growth, will be studied. Students identify typical and atypical development and apply strategies to promote healthy child development in their personal and professional lives.

**2 Early Childhood: Principles and Practices (3) CSU**

Lecture 3 hours.

Department of Social Services DS3.

Required for all Child Development majors.

A survey of Early Childhood Programs including philosophies and components of a quality program. Developmentally appropriate practices will be discussed in depth. The role of the teacher will be emphasized in relation to attitudes, goals, values and the total development of the child.

**3 Creative Experiences for Children I (3) CSU**

Lecture 3 hours.

Department of Social Services DS3.

The creative approach to program planning in areas of art, dramatic play, blocks, music and movement will be explored. Emphasis will be on the development of creative teaching strategies and the values of these curriculum areas.

**4 Creative Experiences for Children II (3) CSU**

Lecture 3 hours.

Department of Social Services DS3.

The creative approach to program planning in language arts, mathematics, social studies, science, perceptual motor and cooking will be explored. Emphasis will be on methods of presentation, values and evaluation of the child's experience.

**10 Child Health (3) CSU***Lecture 3 hours.*

This course will take an in depth look at the health, safety, and nutrition standards as they relate to young children, their families and the community. This class will be taught from the teacher's perspective, and focus specifically on important issues pertaining to the young child. First Aid and CPR certificates will be earned.

**11 Home, School and Community Relations (3) CSU***Lecture 3 hours.**Department of Social Services DS2.**Required for all Child Development majors.*

This course focuses on the processes and results of the child's integration into the social world of home, school, and community. Emphasis is on socialization as a reciprocal and interactive process in which individuals are shaped by cultural forces, relationships, and experiences, while at the same time they influence their own culture, relationships, and experiences. It includes child behavior and development along with understanding cultural and developmental diversity in society and their impact on teaching, parenting, and family relations.

**22 Practicum In Child Development I (4) CSU***Lecture 2 hours; Laboratory 6 hours.***Prerequisites:** *Child Development 1, 2, 3, and 4; health exam, TB test and consent of instructor.*

Supervised practicum experience in an early childhood setting. The student will relate all previous theory courses to the practical application in the classroom. Students are assigned to a practicum site under the supervision of a CECMP Mentor Teacher or a master teacher to reinforce theory and to develop teaching techniques by working directly with children and staff.

**23 Practicum In Child Development II (4) CSU***Lecture 2 hours; Laboratory 6 hours.***Prerequisite:** *Child Development 22; health exam, TB test and consent of instructor.*

This is the second semester of supervised practicum teaching experience to be done in a different setting than the first semester. This course provides advanced practical application of theories covered in prerequisite courses.

**30 Infant and Toddler Studies I (3) CSU***Lecture 3 hours.*

Reviews physical, social-emotional, language and cognitive development during the period of infancy/toddlerhood. Focuses on infant/toddler group care and reviews the California Infant Care Regulations as they relate to this period. Addresses the role of the infant/toddler caregiver, importance of environment and play, and importance of relationships, security and separation. Infant/toddler diversity and varying philosophies are explored

**31 Infant and Toddler Studies II (3) CSU***Lecture 3 hours.*

A study of infant and toddler development and its relation to curriculum, designing environments, assessment, and intervention. Curriculum development and direct observation in infant and toddler programs are a requirement of the course.

**34 Observing and Recording Children's Behavior (3) CSU***Lecture 3 hours*

Students observe, record and interpret children's behavior in a variety of settings using appropriate observational methods. Students will apply this information to adapt the environment, curriculum, and teaching strategies to meet the individual needs of children within an early childhood program.

**38 Administration and Supervision of Early Childhood Programs I (3) CSU***Lecture 3 hours.**Department of Social Services DS6.*

This course is an examination into administration and supervisory principles and practices necessary for the operation of an early childhood program. Topics include: licensing regulations, leadership skills, budget preparation and analyst, personnel management, parent involvement and local community resources.

**39 Administration and Supervision of Early Childhood Programs II (3) CSU***Lecture 3 hours.***Prerequisite:** *Child Development 38.**Department of Social Services DS6.*

This course will contain an in-depth study of the administration of an Early Childhood program. It will include updating of licensing regulations, budget preparation and analysis, staff relations, professional development, parent involvement and conferencing, working with governing boards and supervising agencies, an introduction to proposal and grant writing, and current research in the field.

**42 The Child in a Diverse Society (3) CSU***Lecture 3 hours.*

This course includes the philosophy, principles and methods related to working with young children from diverse backgrounds. Materials and experiences will be explored relating to diversity, including cultural, ethnic, ability, gender, social class and generation differences. Curriculum development, problem solving techniques and environmental designs will be studied from an inclusive perspective.

**44 Programs for Children with Special Needs I (3) CSU***Lecture 3 hours.*

This course is designed for students interested in specializing in or working with children with special needs. Instruction focuses on accommodating and adapting the physical environment, instructional strategies and curriculum to meet the needs of differently abled children preschool aged and younger, and their families.

**45 Programs for Children with Special Needs II (3) CSU***Lecture 3 hours.*

A study of programs for children with special education needs. A review of the characteristics of different types of exceptionalities and the educational implications will be discussed. Students will become familiar with strategies and techniques to adapt environments and curriculum to make accommodations for children with special needs across the continuum of instructional settings.

**46 School Age Programs I (3) CSU***Lecture 3 hours.**Department of Social Services DS4.*

Students will be introduced to school age care programs designed for those planning to work in before and after school programs. Topics to be covered include the developmental issues of school age children, program models, creating environments, and designing appropriate and effective experiences and curriculum.

**47 School Age Programs II (3) CSU***Lecture 3 hours.*

Students will be introduced to school age care programs. Course is designed for those planning to work in before and after school programs. Topics to be covered will be guidance of children, behavior, the child in the context of the family and community, and administration of programs.

**65 Adult Supervision and Early Childhood Mentoring (2)***Lecture 2 hours.*

This course satisfies the adult supervision requirement for the Master Teacher level on the Child Development Permit. It is designed for students who currently, or will supervise adults in an early childhood program. Students compare methods and principles of supervision and mentoring as well as how to develop positive team relationships and utilize conflict resolution techniques. Additional emphasis is placed on advocacy and professional development as well as special issues effecting ECE supervision. This course is required for eligibility to apply to become a California Early Childhood Mentor Teacher.

**172 Introduction to Careers in Child Development (1)***Lecture 1 hour.*

This course introduces students to a variety of career options available to Child Development majors. It explores career opportunities, qualifications required, resources available, as well as academic and professional support systems.



# Cinema

## 3 History of Motion Pictures (3) UC:CSU

Lecture 2 hours; Laboratory 2 hours.  
May be offered as an honors section.

Examines television and film as communicative art forms. Analyzes representative films and television programs as to formats, aesthetics, societal impact, and evolution as entertainment media.

## 5 Introduction to Screenwriting (3) CSU

Lecture 2 hours; Laboratory 2 hours.

**Advisory:** Completion of Cinema 3, 104, 107; English 240; Phil 42

This course will introduce students to the aesthetic and technical elements of screenwriting. Students who complete this course will have a thorough understanding of the process and language used to create a first draft script for both television and motion pictures.

## 104 History of Documentary Films (3) UC:CSU

Lecture 3 hours.

An historical overview of the art and craft of documentary and non-fiction films from the silent era to contemporary times, both American and foreign, with an emphasis on the "classics", propaganda, educational, docudrama and avant-garde.

## 107 Understanding Motion Pictures (3) UC:CSU

Lecture 3 hours.

Replaces Cinema 18. Students should not take both Cinema 18 and 107.  
May be offered as honors section.

Analytical critical survey of motion pictures as communication medium via screenings, lectures, readings about "classic" and contemporary films, American and foreign, theatrical and non-theatrical.

## 108 Beginning Digital Film/Video Production Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.

Same as Multimedia 108. Credit given for one course.

Comprehensive overview of all aspects of digital film/video production from script concept to finished project, centering on basic theory and its application via exams, demonstrations, and hands-on experiences with digital media exercises.

## 109 Beginning Documentary Production Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.

Same as Multimedia 109. Credit given for one course.

Comprehensive overview of all aspects of documentary digital film/video production from concept to finished project, centering on basic theory and its application via exams, demonstrations, and hands-on experiences with digital media documentary production exercises.

## 114 Sound Design for Digital Film/Video/Radio (3)

Lecture 2 hours. Laboratory 2 hours

Same as Broadcasting 114 and Multimedia 114. Credit given for one course.

Intermediate course dealing with all aspects of digital media including film/video/radio sound recording, mixing, and editing from theory to application, centering on learning the basic parts and functions of professional motion picture and digital video/radio sound equipment, as well as sound techniques and aesthetics with an emphasis on editing and post-production for digital media.

# Computer Applications and Office Technologies

## 1 Computer Keyboarding I (3)

Lecture 2 hours; Laboratory 3 hours.

**Note:** Course may be presented in short-term modules - CAOT 1F; CAOT 1G, or CAOT 1H. Computer Applications and Office Technologies majors must take all three modules.

Develops fundamental skills in the operation of a computer keyboard. Permits students to learn to key business documents and to achieve a typing speed of at least 30 gross words a minute for 3 minutes with no more than 3 errors.

## 2 Computer Keyboarding II (3) CSU

Lecture 2 hours; Laboratory 3 hours.

**Prerequisite:** CAOT 1 or 9 with a grade of "C" or better OR the ability to key 30 words a minute for three minutes with three or fewer errors.

Continues to develop basic keyboarding skills and emphasizes formatting various kinds of business documents.

## 9 Computer Keyboarding Improvement (1) - RPT 2

Laboratory 3 hours.

**Prerequisite:** CAOT 1 or 9 with a grade of "C" or better OR the ability to key 30 words a minute for three minutes with three or fewer errors.

Improves typing techniques, speed, and accuracy through timed writings, corrective drills, and production problems. Students may enroll for two semesters, but the semesters may not be consecutive. This course may be taken concurrently with CAOT 2 if the student needs additional speed and/or accuracy building.

## 23 Legal Procedures 1 (5)

Lecture 5 hours.

**Recommended:** Ability to key 40 words a minute and use Microsoft Word to prepare documents.

**Note:** Course may be presented in modules CAOT 23F and CAOT 23G.

Presents an overview of the law office and duties of the legal office assistant. Provides instruction on preparing legal correspondence. Covers the court structure, filing court documents, and litigation procedures. Emphasizes vocabulary and document preparation in family law; wills, trust agreements, and probate; business law; real estate law; and criminal law. Introduces students to legal research.

## 31 Business English (3)

Lecture 3 hours.

**Prerequisite:** Students must be eligible for English 21.

Concurrent enrollment in CAOT 34 is recommended.

Provides instruction in fundamental English language skills as they relate to written and oral communication in business. Emphasizes parts of speech; noun plurals and possessives; verb tenses, voices, and agreement; pronoun usage; comparative and superlative forms of adjectives; capitalization; punctuation; and other related topics. Covers sentence structure and paragraph writing. After successful completion of this course, students will be prepared for CAOT 32, Business Communications.

**32 Business Communications (3) CSU**

Lecture 3 hours.

**Prerequisite:** CAOT 31 or English 28 or English 101 with a grade of "C" or better.

Develops the ability to write effective business memorandums, letters, e-mail messages, employment documents, and short reports. Stresses the problem-solving approach to create messages that inform, persuade, and convey negative news. Emphasizes the concepts of effective writing style such as organization, coherence, and unity as well as principles of grammar and punctuation of written business documents. Ability to type is recommended.

**34 Business Terminology (2)**

Lecture 2 hours.

Develops the ability to use the dictionary (printed and online) to locate the spelling, pronunciation, and definition of words. Emphasizes the spelling and definition of words that sound alike but are spelled differently and have different meanings. Develops an understanding of common business, computer, and Internet terms. Stresses vocabulary development and expansion.

**39 Word Processing: Keyboarding and Operations (3) - RPT 2**

Lecture 2 hours; Laboratory 3 hours.

**Advisory:** CAOT 100 or CAOT 82, or equivalent competencies and ability to keyboard at least 30 wpm.

Prepares students to become proficient in the use of word processing software on Windows-based computers. Emphasizes the beginning and the intermediate operations of Microsoft Word 2007 as students create, format, and edit business documents.

**55 Career Skills for the Workplace 2000 (3)**

Lecture 3 hours.

**Note:** Course may be presented in short-term modules - CAOT 55A, CAOT 55B, or CAOT 55C. Computer Applications and Office Technologies majors must take all three modules.

Focuses on the important skills needed to survive in today's work force. Emphasizes specific skills such as telephone techniques, customer service, records management, and job search techniques. Stresses proper attitude, appropriate dress, and business etiquette.

**64 Office Administration Laboratory (1) - RPT 2**

Laboratory 2 hours.

**Prerequisite:** Concurrent enrollment in or completion of CAOT 1, 2, 9, 23, 39, 55, 66, 67, 71, 77, 78, 79, 82, 85, 86, 88, 92, 94, 95, 96, 97, 100, 107, 108, 109, 113, 114, or 120.

Develops competency in the fundamentals and mechanics of all the microcomputer applications classes taught in the Computer Applications and Office Technologies Department. Gives the needed practice to apply the principles learned to create business documents and those documents required in nonbusiness classes. Open entry-open exit. A credit/no credit class.

**66 Voice-Recognition Software for Computer Input (1) - RPT 2**

Laboratory 2 hours.

**Note:** Uses Dragon NaturallySpeaking Preferred 9.5 or Vista Speech Recognition.

Uses voice-recognition software (Dragon NaturallySpeaking 9.5 or Vista Speech Recognition) to input information into the computer by voice rather than by keyboard. Focuses on learning dictation commands and techniques for continuous voice dictation. Covers voice commands for formatting and editing documents as well as for all menu and keyboard manipulations.

**67 Microsoft Outlook for the Office (1) - RPT 2**

Laboratory 2 hours.

Covers addressing, composing, sending, and customizing e-mail using Microsoft Outlook 2007. Includes managing contacts and mail. Provides instruction in using (1) Outlook's Calendar for scheduling appointments, planning meetings, and scheduling events; (2) Outlook's Tasks feature; and (3) Outlook's Notes feature. Emphasizes integrating Outlook's features. Reviews basic Windows commands and file management procedures.

**71 Voice-Recognition Software With Document Applications (3) CSU - RPT 2**

Lecture 2 hours; Laboratory 3 hours.

**Prerequisite:** CAOT 31 and 34, or equivalent.

Offered in the Fall semester only.

**Note:** Uses Dragon NaturallySpeaking Preferred 9.5 or Vista Speech Recognition.

Uses voice-recognition software—Dragon NaturallySpeaking or Vista speech recognition—in place of the computer keyboard to create documents. Covers dictation procedures and voice commands to input text, access program features, and activate keyboard commands. Uses voice dictation to create e-mail messages, memorandums, letters, and other business documents. Reviews punctuation, capitalization, number-usage, and word-usage principles in the context of creating business documents by voice.

**74 Excel Concepts for Business Applications (2) - RPT 2**

Lecture 1 hour; Laboratory 2 hour

**Advisory:** Basic knowledge of computer operations and ability to keyboard.

Develops competencies in the fundamentals of Microsoft Excel. Students will use MS Excel 2007 to create and format workbooks, construct basic formulas, use functions, and create charts. Students will also prepare financial spreadsheets and pivot tables. The course is designed to familiarize students with Microsoft Excel and its applications in the business world.

**77 Microcomputer Accounting for the Electronic Office (3)**

Lecture 3 hours.

Develops competency in the fundamentals and mechanics of bookkeeping theory as a basis for an understanding of microcomputer programs and applications in the electronic office. Includes acquaintance with accounting terminology, procedures, financial statements, merchandise inventory, and payroll. Introduces students to accounting software and concepts of microcomputer usage.

**78 Microcomputer Accounting Applications for the Electronic Office (3) CSU - RPT 2**

Lecture 1 hour; Laboratory 4 hours.

**Prerequisite:** CAOT 77 or Accounting 1.

**Note:** Uses QuickBooks Pro 2008.

Acquaints students with the use of the microcomputer for bookkeeping and accounting applications in the electronic office. Students receive hands-on experience in analyzing business transactions, keeping records, preparing financial statements, and generating financial management reports using the QuickBooks 2008 microcomputer software package.

**79 Word Processing Applications (3) - RPT 2**

Lecture 2 hours; Laboratory 3 hours.

Offered in the Spring semester only.

Introduces advanced techniques using Microsoft Word for Windows 2007. Develops competency in the expert features of desktop publishing, electronic forms, mail merge, tables, charts, outlines, indexes, tables of contents, comments, revision marks, and integration of other Microsoft Office programs. Emphasizes use of good judgment and personal style in determining formats, layout, and design.

**82 Microcomputer Software Survey in the Office (3) CSU - RPT 2**

Lecture 2 hours; Laboratory 3 hours.

Introduces students to the use of the personal computer and commercially available software (Microsoft Office 2007) that is used universally—in business, in education, in government, and for personal applications. Course provides hands-on introduction to personal computers and Windows as well as word processing, database, spreadsheet, graphics, and presentation software. Student gains basic knowledge necessary to interact with the computer. No previous computer operating experience required, although ability to type is recommended.



- 85 Microcomputer Office Applications: Spreadsheet (3) CSU - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
 Designed for learning spreadsheet applications using a Windows-based computer and Microsoft Excel 2007. Develops competency in creating, editing, formatting, and printing worksheets and charts. Emphasizes analyzing data; using formulas and functions; preparing pie, bar, column, and line charts; creating, sorting, subtotaling, filtering, and summarizing databases; and linking worksheets. Stresses accounting applications and simplifying accounting procedures.
- 86 Microcomputer Office Applications: Database (3) CSU - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
 Provides instruction in office database applications using a relational database program, MS Access 2007. Covers records design, file creation and maintenance, and data manipulation and presentation. Emphasizes office applications such as records for personnel, inventory, and sales. Integrates a word processing program to produce automated mailings.
- 88 Microcomputer Office Applications: Desktop Publishing (3) CSU - RPT 2**  
*Prerequisite: CAOT 39 or 84 and CAOT 2, or equivalent.*  
*Note: Uses Adobe InDesign CS4 software.*  
*Lecture 2 hours, Laboratory 3 hours.*  
 Provides instruction and hands-on training in desktop publishing using Adobe InDesign software with Windows-based desktop computers, laser printers, scanners, and other software programs. Includes preparing advertisements, flyers, business forms, reports, newsletters, and presentations.
- 92 Computer Windows Applications (2) CSU - RPT 2**  
*Lecture 1 hour; Laboratory 2 hours.*  
*Note: Uses Windows XP software.*  
 Presents a brief look at computer hardware and software, with an in-depth study of a graphical user interface — Windows. Topics covered include examining and manipulating Windows, using Explorer, and applying file management techniques.
- 94 Microsoft Word Review for MOS Certification Examination (1) -RPT 2**  
*Laboratory 2 hours.*  
 Provides a review of Microsoft Word concepts needed to pass the Microsoft Office Specialist (MOS) examination for the Core Level. Emphasizes the objectives specified by Microsoft to attain certification. Offers also a comprehensive, up-to-date review for Word users who wish to refresh their skills and knowledge in using Word but do not wish certification.
- 95 Microsoft Excel Review for MOS Certification Examination (1) - RPT 2**  
*Laboratory 2 hours.*  
 Provides a review of Microsoft Excel concepts needed to pass the Microsoft Office Specialist (MOS) examination for the Core Level. Emphasizes the objectives specified by Microsoft to attain certification. Offers also a comprehensive, up-to-date review for Excel users who wish to refresh their skills and knowledge in using Excel but do not wish certification.
- 96 Adobe Creative Suite Survey for the Office and the Web (3) – RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
*Note: Uses Adobe Creative Suite CS4*  
 Introduces Adobe InDesign, Adobe Photoshop, and Adobe Illustrator as they apply to use in business offices. Provides hands-on instruction on a wide variety of tools and techniques for creating highly professional documents that include text, images, and graphics. Covers the basic vocabulary specific to these programs. Students should have basic keyboarding skills and computer knowledge.
- 97 Introduction to the Internet for CAOT (3) - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
 Develops the ability to access and use information from the Internet. Focuses on using browsers, Internet Explorer and Firefox, to explore resources on the World Wide Web. Provides instruction on using e-mail, obtaining information through search sites, capturing text and information from Web pages, and developing a Web site using Microsoft Word. Explores business, career, government, news, reference, travel, and entertainment sites.
- 100 Windows-Based Computer Applications (3) - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
*Note: Course may be presented in short-term modules - CAOT 100D, CAOT 100E, or CAOT 100F. Computer Applications and Office Technologies majors must take all three modules.*  
 Provides a hands-on introduction to software applications in a Windows environment for the computer novice. Includes hardware basics, operating systems, basic Windows operations, applications software, document creation with word processing (Microsoft Word 2007), spreadsheet applications (Microsoft Excel 2007), and basic Internet applications.
- 107 Microcomputer Office Applications: Web Design for the Office (3) CSU - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
*Prerequisite: CAOT 97 or equivalent.*  
 Develops skill in evaluating and constructing Web sites using Web page design software. Focuses on Web page design concepts. Provides instruction to incorporate text, graphics, animation, and multimedia into Web pages. Discusses publishing and managing a Web site.
- 108 Presentation Design for the Office (2) CSU - RPT 2**  
*Lecture 1 hour; Laboratory 2 hours.*  
*Advisory: Ability to keyboard 30 words a minute and CAOT 39 or 84.*  
*Basic knowledge of Microsoft Word.*  
 Provides an overview of presentation design principles. Uses PowerPoint software to create presentations incorporating PowerPoint 2007 templates, fonts, graphics, transitions, sound, and animation. Students will learn to outline presentations, create dynamic slides, and develop slide shows based on business topics.
- 109 Web Multimedia for the Office (3) CSU - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
*Prerequisite: CAOT 97 or equivalent knowledge of the Internet.*  
 Provides hands-on experiences using multimedia Web tools to create and maintain Web sites. Students will develop multipage Web sites for the high-tech office environment that incorporate links, graphics, animation, and multimedia features using Adobe Creative Suite CS4 (Dreamweaver and Flash).
- 110 Microcomputer Office Applications: Presentation Design (3) CSU - RPT 2**  
*Lecture 2 hours; Laboratory 3 hours.*  
*Advisory: Basic computer knowledge and ability to keyboard.*  
 Provides an overview of presentation design principles and a comprehensive study of presentation software. Uses PowerPoint 2007 to create presentations that incorporate PowerPoint templates, fonts, images, SmartArt, WordArt, transitions, animation, sound, and movies. Students will learn to outline presentations, create dynamic slides, develop slide shows, and deliver presentations based on business topics. In addition, students will learn to save PowerPoint presentations as Web pages and incorporate them into Web sites.
- 113 Introduction to Adobe Photoshop for the Office (3) CSU - RPT 2**  
*Lecture 2 hour; Laboratory 3 hours.*  
*Advisory: Basic keyboarding skills and computer knowledge.*  
*Note: Uses Adobe Photoshop CS4.*  
 Emphasizes the introductory concepts of Adobe Photoshop to edit images. Provides instruction in using digital equipment to create images for use with Adobe Photoshop. Uses various features of the program -- selection tools, layers, channels, masks, painting tools, etc. --to complete specific office-based projects. Covers the vocabulary specific to Adobe Photoshop. Current software used in Adobe Photoshop CS4.

**114 Adobe Acrobat for the Office and the Web (2) - RPT 2***Lecture 1 hour; Laboratory 2 hours.***Advisory:** Ability to keyboard and knowledge of Microsoft Word.**Note:** Uses Adobe Acrobat 9 Professional.

Uses Adobe Acrobat to create, review, and modify PDFs (Portable Document Files) from Microsoft Office files, including Word and PowerPoint, as well as from Web pages. Emphasizes use of PDFs on the Web for various purposes, including creating multimedia presentations, adding interactive features, creating electronic forms, and adding electronic security to documents.

**120 Adobe Illustrator for the Office and the Web (3)***Lecture 2 hours; Laboratory 3 hours.***Advisory:** Ability to keyboard and a working knowledge of any other Adobe program or experience with Microsoft Office programs.

Uses Adobe Illustrator CS4 features to execute professional-looking illustrations, images, and documents. Adobe Illustrator provides a wide variety of tools and techniques for adding visual effects to documents and allows users to integrate text and graphics. Covers toolbox functions, palettes, gradients, path operations, filters, and text elements.

**125 Microsoft Office Project (2) CSU - RPT 2***Lecture 1 hour; Laboratory 2 hours.***Advisory:** Ability to use a word processor and Microsoft Excel.

Uses Microsoft Office Project 2007 to build and manage a project plan by specifying what will be done, what order it should be done, how long it will take, who or what should be handling particular work, and what costs are involved. Covers tracking progress from the planning phase to the execution phase. Emphasizes sharing information with stakeholders and between/among other Microsoft application(s), including the Internet and Project.

**128 Communication Skills for the Business Professional (3)***Lecture 3 hours.*

Provides students with learning experiences to improve their reading, writing, and verbal communication skills as they relate to the global business environment and its challenges. Topics covered include a professional letter writing skills (format and content), professional e-mail writing skills and Netiquette, Business English grammar skills, business terminology, sales related communication skills, and cultural diversity affecting business practices and decisions. This course has been designed for business professionals in the workplace, although it is open to all students.

**130 Communication Skills in the Workplace (3)***Lecture 2 hours; Laboratory 3 hours.***Note:** Course may be presented in short-term modules - CAOT 130A, CAOT 130B, or CAOT 130C. Computer Applications and Office Technologies majors must take all three modules.

Develops communication skills necessary for success in the workplace. Emphasis on the fundamentals of business English, the principles of business writing, and the techniques of office verbal communication. Importance is placed on those skills that promote success in the work environment.

**132 Introduction to Student ePortfolios (2)***Lecture 1 hour; Laboratory 2 hours*

Develops the skills needed to create an ePortfolio using the California Community College-sponsored ePortfolio tool. Students will learn how ePortfolio can be used throughout their college and professional careers. They will also learn how to create sections; create subsections; and add attachments such as files, videos, and pictures for their portfolios. At the end of this course, students will have created their ePortfolio and have the skills needed to enhance it as they progress through their college and professional careers. Designed for career students at all levels.

**133 How to Succeed in an Online Course (1)***Lecture .5 hour; Laboratory 1 hour*

Develops the skills needed to succeed in an online class. This course is designed for students wishing to enroll for the first time in an online class. It covers the basic navigation of the online environment - including posting to forums, taking quizzes, submitting assignments, etc. - as well as the soft skills needed to be successful in an online environment.

**185 Directed Study - Computer Applications & Office Technologies (1) - RPT 2****285 Directed Study - Computer Applications & Office Technologies (2)****385 Directed Study - Computer Applications & Office Technologies (3)***Conference 1 hour per unit.***Prerequisite:** CAOT 1 or 2.

Allows students to pursue Directed Study in CAOT on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Computer Applications & Office Technologies (1-4)***See Cooperative Work Experience Education.*

# Computer Science And Information Technology

**501 Introduction to Computers and Their Uses (3) UC:CSU***Lecture 3 hours; Laboratory 1 hour.*

An introduction to the uses, concepts, techniques and terminology of computing. Places the possibilities and problems of computer use in historical, economical and social contexts. Provides adequate college-level and workplace skills in word processing, spreadsheets and presentation graphics. Provides familiarization with databases and visual programming. Includes Internet methods and procedures.

**508 Visual BASIC (3) UC:CSU***Lecture 2 hours; Laboratory 2 hours.***Prerequisites:** Computer Science 575 with a grade of "C" or better.

Introduces the programming language Visual BASIC as a tool for developing user-friendly applications in the Windows environment. Topics include event-driven programming, basic control structures, data types, arrays, sequential and random file processing.

**514 Network Operations and Systems (3) CSU - RPT 1***Lecture 2 hours; Laboratory 2 hours.***Prerequisites:** Computer Science 572 and 587, which may be taken concurrently with Computer Science 514.

Introduces students to the skills and knowledge to properly support contemporary network operating systems. Topics include administering and securing resources and users.

**516 Beginning Computer Architecture and Organization (3) UC:CSU***Lecture 2 hours; Laboratory 2 hours.***Prerequisites:** Computer Science 507 and one programming class from Computer Science 506 or 513, with a grade of "C" or better, or CoSci 575.

Computer architecture. Topics include: information representation and storage organization in computer systems, computer hardware components, typical computer architectures, instruction formats, addressing modes, subprograms, parameter passing, stacks, and the instruction execution cycle, assembly language instruction formats, compiler translation to assembly language, optimizing compilers, disassemblers, loaders and simulators, system interrupts, memory allocation process with virtual memory, Boolean algebra and logic gates, combinational logic and sequential devices.

**530 Personal Computer Application Software (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

A survey of business application software packages including operating systems, word processing, spreadsheets, PowerPoint presentations and the Internet. Examples include common business applications. Current software includes Windows, Word, Excel, and PowerPoint.

**532 Advanced Data Structures and Introduction to Databases (3) CSU**

Lecture 3 hours.

**Prerequisite:** Computer Science 536 (Data Structures) and Computer Science 540 (Object Oriented Programming in C++). Computer Science 540 may be taken concurrently.

This course is a continuation of the study of data structures begun in CS 536. Selected advanced tree topics (e.g.: Huffman coding trees, heaps), graphs, and hashing will be covered, as well as data structures for storing and searching for data in secondary storage.

**533 Databases with Access and SQL (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 501 with a grade of "C" or better.

A complete presentation of database management using Access, including database design, queries, macros, toolbars, VBA and SQL. Also includes advanced work in Excel, uses of the Internet in these products, and OLE product integration.

**534 Operating Systems (3) UC:CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 572 with a grade of "C" or better.

The primary issues surrounding the use and operation of the UNIX system are the focus of this course. An introduction to operating system concepts, structure, functions, performance and management is presented using the UNIX operating system. Review of computer hardware, software and operating system principals are also presented. The structure and command language interfaces are identified and discussed. Process control and scheduling methods, and interprocess communication techniques are studied. Memory requirements and strategies are reviewed and allocation/scheduling algorithms are examined. System reliability, security, and performance analysis are examined. Aspects of UNIX networking are also discussed.

**535 Network Configuration and Control Systems (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 587 with a grade of "C" or better

Introduces students to the skills and knowledge to properly support contemporary network operating systems (NOS) server environments. Topics include managing web and terminal services; and user and resource management in an enterprise-wide directory.

**536 Introduction to Data Structures (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 539.

Introduction to data structures and their applications. The role of the abstract data type in object-oriented programming design. The definition, implementation and application of data structures: stacks, queues, linked lists, trees and graphs. Recursion. A comparative study of sorting and searching algorithms. Evaluation of algorithms using time complexity expressions.

**537 Routing Systems, Devices and Protocols (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 578.

Introduces students to the skills and knowledge to implement and troubleshoot a basic routing system with multiple routers. Topics include the command language of the routing system and differences between routing and routed protocols. (Cisco 3)

**538 Implementing Wide Area & Wireless Networking (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 537.

Wide Area Networking (WAN) technologies, wireless solutions, and Virtual Private Networks (VPNs) will be explored in a combined lecture lab format. Topics will include an overview of WANs, the Point-to-Point Protocol (PPP), Frame Relay, an overview of network security including Access Control Lists (ACLs), and teleworker services (VPNs). Additionally, support for IP Addressing strategies, including DHCP, NAT, and IPv6 will be addressed. This is semester four in the Cisco Networking Academy program.

**539 Programming in C (3) UC:CSU**

Lecture 3 hours; Laboratory 1 hour.

**Prerequisites:** Computer Science 575; or Computer Science 506 and Computer Science 507; or Computer Science 508 and Computer Science 507.

This is a course in the programming language C. It covers data types, operators and expressions, control flow, functions and program structure, pointers, arrays, arrays of pointers, structures, I/O, binary files and an introduction to object-oriented C++. Examples illustrate programming techniques, algorithms, and the use of library routines.

**540 Object Oriented Programming in C++ (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 575 with a grade of "C" or better

Object-oriented programming methodology including encapsulation, data hiding, inheritance and polymorphism -- with emphasis on classes, constructors, destructors, friend functions, virtual functions, general and operator function overloading -- are studied and implemented in programming assignments and a project due at end of the semester.

**541 Advanced Visual Basic and Database Programming (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 508 and Computer Science 533.

Advanced Visual Basic programming on personal computers for database applications in a Windows environment using Visual Basic .NET as a front end for database access. Includes building complete applications. Also covers ADO and SQL.

**546 Advanced Computer Architecture and Organization (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 516 and 536, both with a grade of "C" or better.

Introduction to the structure, nature and characteristics of current computer system architecture and operations. Several recent and current computer architectures are compared and evaluated. Computer systems consist of an interrelated set of high-level components: the control unit, processor, memory and I/O components. The interconnections between these components are discussed, e.g., various interconnection bus structures. The hierarchy of memory systems, e.g., cache memory, internal memory, and external memory (storage) is discussed. The various types of I/O are analyzed. The interrelationship between operating systems and computer hardware is explained and various implementations are reviewed. A detailed analysis of the central processing unit is undertaken. Computer arithmetic is reviewed. The characteristics, functions and implementation impacts of the instruction set design on the hardware is evaluated, e.g., types and number of operations, types and number of addressing modes and the design of the instruction formats are analyzed. The processor structure and functions are reviewed, e.g., various instruction cycles, data flows and instruction pipeline architectures are discussed. CISC and RISC computer systems are compared and analyzed. Instruction-level parallelism and the relationship to superscalar processors are detailed. The internals of the control unit is explained, e.g., the internal registers, micro-operations and the instruction cycle is discussed in detail. The role of microprogrammed control in computer system design is explained. The design and operation of micro-instructions are analyzed. Since many desktop systems are currently available that support multiple processors, the architecture and organization of multiple processor systems are discussed. Finally the architecture of array processors and their relationship to supercomputers, mainframe computer, servers and desktop computers is discussed.

**547 Introduction to Digital Imaging Using Photoshop (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

Introduction to computer graphics and imaging concepts for web page development. Laboratory experience includes selecting, implementing, altering, and manipulating image files using current graphics applications. Topics include graphics file types, color generation schemes, texturing, spatial issues, touch-up, print and web-based graphics imaging techniques. Desirable for students wishing to study graphics applications for use in web page design and related graphics settings.

**548 Web Development Using Flash and ActionScript (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

Use Flash and ActionScript to develop and program interactive websites that include animation, graphics, video, and sound. Topics include Flash basics, creating and controlling animation, and programming using ActionScript, events and event handlers. Experience with Windows is required.

**550 Website Development and Programming Using Dreamweaver and JavaScript (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

Use Dreamweaver to develop, program and maintain websites. Topics include Dreamweaver basics, Tables, CSS, Rollovers, Forms, publishing websites and programming websites using JavaScript and XHTML. Experience with Windows is required.

**552 Programming in Java (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisites:** Computer Science 575 with a grade of "C" or better.

This course is an introduction to the Java programming language and principles of object-oriented design and programming using Java. Topics include Java language fundamentals, Applet programming for Web pages, building graphical user interfaces with multimedia components in Applets, and developing standalone application programs. Includes an introduction to C#.

**553 Introduction to Web Page Development (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisites:** Computer Science 501 with a grade of "C" or better.

An introductory course in web document design and development. Study of client-side programming. Study of Web terminology, nomenclature and use. Contemporary web page design strategies and techniques. Current and emerging markup and scripting languages and their use. Enhancing web document content and interactivity using graphics, audio, MIDI and video. Web document server interaction.

**554 Server-Side Programming for the World Wide Web (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisites:** Computer Science 553 with grades of "C" or better.

An advanced web programming course. The student will learn the PHP scripting language, and how to write PHP scripts to access web-based databases. Topics include basic PHP command and control structures, and the various aspects of the PostgreSQL RDBMS. Security, designs, and implementation issues are also discussed.

**555 Website Development Using Javascript and AJAX (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisites:** Computer Science 553 with grades of "C" or better.

Use JavaScript and AJAX to develop and program interactive websites. Topics include JavaScript basics, variables, arrays, control structures (selection and repetition), functions, Document Object Model (DOM), events, forms; AJAX basics, using text, XML, Web forms, and advanced JavaScript and advanced AJAX.

**556 Advanced Dreamweaver - Dynamic Website Development (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 550.

Use Advanced Dreamweaver tools and skills to develop dynamic, interactive websites which utilize database information to populate web pages. Learn to retrieve and pass user input data using form variables, URL variables, cookies, and email forms and dynamically populate web pages. Learn server-side data validation, how to filter and display data using XML, Spry and AJAX, creating Admin Pages, Authenticating Users and Managing content.

**560 Business Systems Design Using Oracle Developer (3)**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 533.

Examines the process of analysis, design, and implementation of computer database systems as applied to business. Using Oracle, project work will be assigned in table design, data retrieval using SQL and PL/SQL, forms and report development.

**572 Introduction to Personal Computer Hardware and Operating Systems (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

Introduction to the hardware found in modern Personal Computers (PCs), the evolution of various Operating Systems, and how hardware and software work together in a cooperative manner.

**575 Programming Fundamentals for Computer Science (3) UC:CSU**

Lecture 3 hours; Laboratory 1 hour.

**Prerequisite:** Mathematics 115 or one year of high school algebra with a grade of "C" or better.

Programming concepts and practical laboratory experience to successfully design, implement, test and debug computer programs using top-down, structured programming techniques. Topics include: program planning techniques, expressions, selection, repetition, arrays, data structures, functions, parameter passing, and file and interactive input/output. Intended as a first course in computer science. Combines the contents of CS 507 and CS 506 into one course. Required for computer science majors. Desirable for students wishing to study programming.

**578 Routing Systems Design and Programming (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 587.

Introduces students to the skills and knowledge to configure a contemporary routing system. Topics include routing fundamentals, network management & troubleshooting, and routing & routed protocols. (Cisco 2)

**581 Personal Computer Upgrade and Repair (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 572 with a grade of "C" or better.

This is a second of 2 classes to prepare students for A+ certification. The objective of this course is to teach the maintenance, repair and upgrading of personal computer systems. Topics will include software and hardware installation, maintenance and repair of disks, printers, memory expanders, and adapters. Course includes an introduction to small office/home office (SOHO) networks; hands-on installation of wireless (WIFI) and CAT-5 wired networks, installation and fine-tuning third-party security software to protect against viruses and spyware.

**587 Introduction to Computer Networks (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Computer Science 572, which may be taken concurrently with Computer Science 587.

Network terminology; topology; introduction to the OSI model; protocols, standards and concepts are discussed. Local and wide-area networks are analyzed. Lab activities are concerned with an examination of existing LAN/WAN hardware and software, and research projects on relevant network topics. (Cisco 1)

**588 Computer Projects (2) CSU - RPT 1**

Lecture 1 hour; Laboratory 3 hours.

**Prerequisites:** Computer Science 577 and 578 with a grade of "C" or better.

Requires the student, after consultation with the instructor, to design, build, evaluate and document a project involving digital computers. Professional approaches toward funding a real project as either an employee or contractor are discussed along with cost estimating, scheduling and documenting.



**185 Directed Study - Computer Science - Information Technology (1) CSU - RPT 2**

**285 Directed Study - Computer Science - Information Technology (2) CSU**

**385 Directed Study - Computer Science - Information Technology (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in Computer Science on a contract basis under the direction of a supervising instructor.

**911-941**

**Cooperative Work Experience Education - Computer Science - Information Technology (1-4) CSU**

*See Cooperative Work Experience Education.*

## Cooperative Work Experience Education

The following courses provide Cooperative Work Experience Education credit. See Cooperative Work Experience Education in the Educational Programs section of this catalog.

### Cooperative Work Experience Education - Occupational (CSU)

*Cooperative Work Experience Education is offered in the subjects listed below, repeatable three semesters of a maximum of 16 units whichever is reached first in compliance with Title 5 regulations.*

Accounting	Electronics
Addiction Studies	Engineering, General
Administration of Justice	English
Agriculture	Geography
American Sign Language	Health
Anthropology	Industrial Technology General
Architecture	Journalism
Art	Music
Automotive Service Technology	Nursing
Biology	Philosophy
Business	Photography
Chemistry	Physical Education
Child Development	Physics
Computer Applications and Office Technology	Political Science
Computer Science	Psychology
Economics	Sociology
Education	Speech Communication
	Theater

**Limits to transfer credit:** See Cooperative Work Experience Education Credit Guide.

Supervised training is conducted in the form of on-the-job training in an employment area that will enhance the student's education goals.

### Cooperative Work Experience Education - General

Cooperative Work Experience Education - General is repeatable one semester or a maximum of 6 units whichever is reached first in compliance with Title 5 regulations.

**195 Work Experience - General I (1) CSU - RPT 1**

**295 Work Experience - General I (2) CSU - RPT 1**

**395 Work Experience - General I (3) CSU - RPT 1**

Supervised training is provided in the area of general employment practices with emphasis on attitude, ethics, and integrity. On-the-job training need not be in the college major but must be educational.

## Criminal Justice

See Administration of Justice

## Dance

**812 Current Dance Events (1) CSU**

*Lecture 1 hour; Laboratory 2 hours.*

Enriches the student's dance, movement and related art experiences through opportunities to observe and participate in a wide variety of dance experiences. Consists of demonstrations by faculty; students, and guest artists. Offers previews of current concerts, symposia, and workshops with opportunities to attend and critically analyze these events. Emphasis will include an increased awareness and a greater understanding of the self and individual's response to his environment.

**185 Directed Study - Dance (1) CSU - RPT 2**

**285 Directed Study - Dance (2) CSU**

Allows students to pursue Directed Study in Dance under the direction of a supervising instructor.

**385 Directed Study - Dance (3) CSU**

*Conference 1 hour per unit.*

# Dance Specialties

## 402 Afro Hip Hop (1) UC:CSU

Laboratory 2 hours; (may be offered as 99).

Afro Hip Hop as a jazz style of dance will be explored through movement and sound/body rhythms. Hip Hop is raw and edgy often grounded in percussive rhythms of high energy and urban influences. Students will be challenged to develop a philosophy of this style of jazz and specifically Hip Hop in relation to styles learned and performed in the current social strata.

## 441 Latin Social and Salsa Dance (1) UC:CSU

Laboratory 2 hours.

Early Latin social dances which develop into contemporary popular social and ballroom styles in America.

*UC Credit limit for Dance activity courses is 4 units.*

## 490 Special Topics in Dance (1) CSU

Laboratory 3 hours.

This course introduces students to the historical and cultural origins and basic dance techniques of folk, ethnic, recreational, or other specialized dance genres. Basic steps and combinations of steps from the particular genre will be utilized to create an understanding of musical phrasing and rhythms utilized in that particular dance form. These combinations eventually will span a full range of motion, and touch upon basic movements that every individual studying dance should know and understand.

# Dance Studies

## 262 Special Projects (2) CSU - RPT 3

Laboratory 4 hours.

Students are given opportunity to plan, rehearse, stage and produce projects for presentation before student audiences, or otherwise increase knowledge and experience in dance theater.

## 452 Introduction to Choreography (1) CSU

Laboratory 2 hours.

Introduce and/or review the basic principles of dance composition and choreography; The course will include theory and practice using improvisation, critical analysis, and implementation of design, rhythm, dynamics and motivation in student projects.

## 801 Modern Dance I (3) UC:CSU - RPT 2

Lecture 2 hours; Laboratory 4 hours.

The course is designed to afford the student the opportunity to participate in a learning environment that is well planned to train the body in dance skills by engaging in stretching, strengthening, and endurance-developing techniques with an understanding of the biomechanical principles of movement. Improvisation and elementary composition will provide opportunity to create using this art form. Motivations for improvisation will encompass auditory, verbal, visual, tactile, kinesthetic, and other life forms.

## 802 Modern Dance II (3) UC:CSU - RPT 1

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Physical Education 431 or Dance 431 and Dance 801.

Exploring the language of dance through the study of the basic sources of movement and the relationship to the elements of rhythm, dynamics, design. The course is designed to extend skill development and increase opportunities for creativity. Historical perspectives are explored.

## 803 Modern Dance III (3) UC:CSU - RPT 2

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Dance 802.

The course is designed to afford the student the opportunity to participate in a learning environment that is well planned to train the body with intermediate and advanced techniques. Improvisation and opportunity for composition will be accompanied by historical information.

## 804 Modern Dance IV (3) UC:CSU - RPT 3

Lecture 1 hour; Laboratory 5 hours.

**Prerequisite:** Dance 803.

Learning to apply the principles of physics for increased anatomically correct movement that also increases the esthetic language of dance. Historical perspectives involving critiques.

## 814 Dance Production (2) UC:CSU - RPT 3

Lecture 1 hour; Laboratory 2 hours.

Emphasis on the decision-making process involved in and producing performances for stage, film and site-specific areas. Involves rehearsals for dancers and production duties for non-dancers.

## 818 Fundamental Rhythms (2) UC:CSU - RPT 1

Lecture 1 hour; Laboratory 2 hours.

Opportunity to participate in five different styles of dance: Round and Square, Folk Dance, Social Dance, Modern Dance, Ballet.

## 819 Choreography (4) UC:CSU - RPT 2

Lecture 2 hours; Laboratory 4 hours.

**Prerequisite:** Modern Dance, Ballet, or Jazz experience.

Opportunity to express oneself through the art of dance. Styles and choreographic principles and forms will be explored. The essence of choreography will begin with improvisation on design, dynamics, rhythm and motivation.

## 820 Dance Production II (4) CSU - RPT 1

Lecture 2 hours; Laboratory 4 hours.

Provides laboratory experience in increasing the skills involved in dance production (choreography, set design, lighting, costume design, make-up, etc.) Affords opportunity to perform with, and is also a workshop for the Pierce College Dance Theatre. This is a continuation of Dance 814.

## 821 Dance Production III (4) CSU - RPT 1

Lecture 2 hours; Laboratory 4 hours.

Opportunity for the student to gain increased experience in the art of dance production. The concepts and types of theater production and performances including the choreography, set design, lighting, multi-media dimensions, areas, costumes, makeup, other technical requirements.

## 822 Rehearsal and Performance (1) UC:CSU

Laboratory 2 hours.

This course introduces students to the historical and cultural origins and basic dance techniques of styles of dance in performance on stage and site specific areas.

## 860 Dance and Creative Movement for Educators (3) CSU

Lecture 2 hours; Laboratory 2 hours.

Course is designed for educators and parents interested in utilizing creative movement and dance as a tool for teaching. Learn to develop your students' artistic perception, create movement experiences that enhance early childhood and academic lessons, and facilitate kinesthetic learning, awareness, and expression in a multi-cultural environment.

*UC Credit limit for Dance activity courses is 4 units.*



# Dance Techniques

## 101 Dance to Fitness (1) UC:CSU

Laboratory 2 hours.

Using a variety of dance styles and movement forms, students of widely differing physical abilities will be able to participate in a program that contributes to the lifelong skill development of flexibility, cardiovascular endurance, muscle strength, and social interaction in a dance fitness workout.

## 290 Dance for Film and Stage (1) UC:CSU

Laboratory 2 hours.

Introduces dancers to renowned choreographers and dancers, and provides an opportunity to experience and perform selected choreography in all styles.

## 401 International Folk Dance (1) UC:CSU - RPT 3

Formerly Dance Activities 401.

Laboratory 2 hours.

An opportunity for students to learn dances of various countries, and become familiar with customs, costumes, music of those countries.

## 410 Dance Aerobics (1) UC:CSU

Laboratory 2 hours.

Using a variety of dance styles and movement forms aerobically. Students of widely differing physical abilities will be able to participate in a program that contributes to the lifelong skill development of flexibility, cardiovascular endurance, muscle strength, and social interaction in a choreographed fitness workout.

## 431 Modern Dance (1) UC:CSU - RPT 3

Formerly Dance Activities 431.

Laboratory 2 hours.

A method of movement that gives the student an opportunity to train the body and mind for communication. Opportunity to create and project own feelings and ideas through this art of dance.

## 434 Ballet (1) UC:CSU - RPT 3

Formerly Dance Activities 434.

Laboratory 2 hours.

Opportunity to study classical ballet technique with emphasis on basic movements and combination, vocabulary based on French terminology, classical music, and to explore all the characteristics of a classical ballet historically. Develop an awareness and an appreciation of dance as an art form. Course has live as well as recorded accompaniment, and may be taken four times.

## 437 Jazz Dance (1) UC:CSU - RPT 3

Formerly Dance Activities 437.

Laboratory 2 hours.

Designed to train the novice and intermediate dancer in jazz techniques of several styles as well as awareness and appreciation of the biomechanical principles of movement in this time-space art. Opportunity for creativity in working with the elements of dance: rhythm, motivation, dynamics, design.

## 440 Social Dance (1) UC:CSU - RPT 3

Formerly Dance Activities 440.

Laboratory 2 hours.

Popular social dancing including the Waltz, Foxtrot, East Coast Swing, West Coast Swing, Merengue, Tango, Cha Cha, Rhumba, Salsa, a review of the 20's dances, and other ballroom and social styles as time permits.

## 446 Tap Dance (1) UC:CSU - RPT 3

Formerly Dance Activities 446.

Laboratory 2 hours.

Affords the student opportunity to study and perform a style of dance in which the sound of the footwork is percussive, rhythmic and enjoyable.

## 710 Pilates For Dance and Movement I (1) CSU – RPT 3

Laboratory 2 hours.

This course is designed to support training in other dance classes and to offer the student an opportunity to experience and learn the basic techniques of Pilates relative to dance and other movement skills and styles. Students will become more aware of the body and its capacity to move safely, and rhythmically in learning the principles of alignment and balance, as well as the exploration of the elements of design (space and shape), and dynamics in providing and developing a strong foundation for all of the styles of dance. In addition, the study of this system will provide each participant with a method leading to harmony, balance, increased flexibility, elasticity, suppleness and strength through movements with concentration, breathing, and control. Pilates is a somatically-designed method that will be valuable to dancers of all styles and levels of training, and to anyone interested in enhancing and increasing movement knowledge.

UC Credit limit for Dance activity courses is 4 units.

# Desktop Publishing

See course listings under **Computer Applications and Office Technology**

# Drafting - Mechanical

See course listing under **Industrial Technology - Drafting- Mechanical**

# Economics

## 1 Principles of Economics I (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

Principles of economic analysis and decision-making from the viewpoint of the individual consumer, worker, and firm. Emphasis is on the price system allocation of resources and income, supply and demand analysis, the structure of industry, and the application of economic principles to current policies and social problems. Required subject coverage highlights the global economy and includes fundamentals of markets, comparative advantage and international trade, elasticity of demand and supply, the effects of taxes and price controls on market outcomes, factor markets, production costs, market structures, game theory, market failure, and public goods.

**2 Principles of Economics II (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

Principles of economics focusing on aggregate economic analysis. Topics include the market system of resource allocation, measurement of GDP, the problems of unemployment and inflation, stabilization policy, and macroeconomic controversies. Required subject coverage emphasizes the global economy and includes fundamentals of markets, national income accounting and macroequilibrium, economic growth and business cycles, fiscal and monetary policies, money and financial institutions, international trade and finance.

**10 Economic History of the United States (3) UC:CSU***Lecture 3 hours.**Same as History 15. Credit not given for both courses.*

Emphasizes the causes of growth in the American economy and how the economy today continues to be influenced by events from the past. Considers the causes of the American Revolution: how changes in institutions and British attitudes contributed to the revolution. Analyzes how Southern plantation agriculture, slavery, and westward expansion culminate in the Civil War. Traces the increasing role of government in the economy starting with the Industrial Revolution, the price controls of World War I, the Great Depression, and the New Deal. Speculates on the future of the U.S. economy.

**16 Economics of Sports (3) CSU***Lecture 3 hours.*

Using sports as the focal point, this course covers market power, labor theory, public finance, and the economics of discrimination. Specific issues addressed are antitrust protection of Major League Baseball, the competition among cities for professional sports franchises, racial discrimination in professional sports, and Title IX.

**30 Comparative Economic Systems (3) UC:CSU***Lecture 3 hours.*

The course first presents a survey of the development of economic systems, in particular discussing slave economies, mercantilism, and feudalism. The course presents the classical model [the capitalist model] as a reaction against feudalism and mercantilism. The course then looks at adaptations of the capitalist model, as found in Asian economies [in particular, Japan, South Korea, Hong Kong, Taiwan, and Singapore] and the European Economies [England, Germany, France, Sweden, and the European Union] - the "market socialist" countries. The final topic considers the transition economy - the Russian, Chinese, and developing economies. In all cases, the crucial roles of history and institutional development are recognized.

**60 Economics and the Environment (3) UC:CSU***Lecture 3 hours.*

This course provides an overview of natural and environmental resources. The first part introduces common themes: the optimist and pessimist models, property rights, externalities, public goods, sustainability, population growth, and valuation issues. The natural resource section includes renewable [fisheries and forestries], nonrenewable [oil, coal], and nonexhaustible [solar, wind] resources. The third section discusses pollution: local, regional, and global, point and nonpoint, water and air pollution, hazardous waste, and solutions to pollution problems [standards, market-based mechanisms, recycling]. The last section considers the case of less developed countries: the role of agriculture and population, rainforests, and a reconsideration of sustainability issues.

**185 Directed Study - Economics (1) CSU - RPT 2****285 Directed Study - Economics (2) CSU****385 Directed Study - Economics (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Economics on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Economics (1-4) CSU***See Cooperative Work Experience Education.*

# Education

**6 Methods and Materials of Tutoring (1)***Lecture .33 hours; Laboratory 1.33 hours*

A course offering instruction in tutoring techniques, group dynamics, interpersonal skills, record-keeping, organizational skills and study skills. Students will work 2-4 hours weekly from lab to practicum, tutoring those students who have enrolled in Supervised Learning Assistance Tutoring 001 and/or other college approved tutoring programs.

**200 Introduction to Special Education (3) CSU***Lecture 3 hours.*

This introductory course focuses on special education as a field and teaching as a profession. It begins with the history of special education and covers legislation and laws supporting the educational rights of individuals with disabilities and their parents and care providers.

**203 Education In American Society (3) UC:CSU***Lecture 3 hours.**Formerly Education 99B.*

This course is designed to provide future teachers with the fundamental knowledge base essential for understanding of the American educational enterprise, especially problems in urban multicultural schools. Concepts and methods from the fields of sociology, philosophy, and the politics of education are used to analyze the current conditions of American schools and to evaluate selected proposals/models for reform. A minimum of 30 hours of observation and participation in a multicultural setting is required.

**911-941****Cooperative Work Experience Education - Education (1-4) CSU***See Cooperative Work Experience Education.*

# Electronics

**4A Fundamentals of Electronics IA (3) CSU***Lecture 3 hours.*

The first class for electronics majors. Atomic theory, voltage, resistance, current, energy and power, Ohm's law, series-parallel circuits, voltage and current dividers. Network theorems and applications of Kirchhoff's laws. Voltage and current sources, conductors, resistors, batteries, magnetism, D.C. characteristics of capacitors and inductors. Computer aided schematic capture and circuit analysis.

**4B Fundamentals of Electronics IB (1) CSU***Laboratory 3 hours.*

Construction of basic DC circuits for the study of Ohm's law, series and parallel, network theorems including Kirchhoff's Law, superposition, mesh, Thevenin's and Norton's. Wiring practice from schematics. Use of laboratory instruments including analog and digital multimeters and power supplies. Computer aided schematic entry and circuit analysis.

**6A Fundamentals of Electronics IIA (3) CSU***Lecture 3 hours.**Advisory: Completion of Electronics 4A and 4B.*

A detailed study of alternating current theory and applications. AC waveforms, reactance, impedance, resonance, transformers, quality factor, magnetism, coupling, and filters are studied. Emphasizes the solution of alternating current circuit problems.

**6B Fundamentals of Electronics IIB (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 4A and 4B.

Practical laboratory applications of the theories presented in Electronics 6A. Experiments are performed to study alternating current parameters and components including capacitance, inductance, reactance, resonance, filters and transformers. Use of oscilloscopes, function generators, and other lab instruments. Computer aided circuit analysis.

**8A Electron Devices A (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Electronics 4A and 4B, 6A and 6B and concurrent enrollment in Electronics 8B.

Principles of semiconductors including diodes, bipolar and field effect transistors, SCR's, tunnel diodes, light emitting diodes, photo-transistors, DIACs, TRIACs, Zener diodes, UJT's. Characteristic curves for semiconductor devices. Biasing and load lines. Common emitter, collector, and base transistor configurations. Sample applications of semiconductor devices. Computer aided circuit analysis.

**8B Electron Devices B (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 4A and 4B, 6A and 6B and concurrent enrollment in Electronics 8A.

Provides laboratory experience in the characteristics and applications of solid state electron devices and the use of test equipment including multimeter, oscilloscope, function generator, and DC supply. Lab work focused on constructing, testing, analyzing, and troubleshooting a variety of circuits using semiconductor devices, including diodes and transistors. Supplemented with computer circuit simulation.

**26 Linear Circuits (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Electronics 8A and 8B.

Power supplies, AC and DC amplifiers, push-pull amplifiers, complementary symmetry, and phase splitters. Analysis of distortion in amplifiers. Class A, B, and C amplifiers and oscillators. Multistage and large signal amplifiers. Feedback, input and output impedance, and frequency response. Computer Circuit Analysis

**28 Electronic and Electro-Mechanical Drafting I (2) CSU**

Lecture 1 hour; Laboratory 2 hours.

Introduction to Computer Aided Drafting as applied to Electronics. Using CAD programs to draw schematic symbols and diagrams, flow charts, block diagrams, highway and logic diagrams. Printed circuit board design and layout. Introduction to assembly and construction drawings. Schematic capture using PSPICE. Introduction to printed circuit board design computer programs.

**44 Communications Electronics (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Electronics 8A and 8B, 72A and 72B and concurrent enrollment in Electronics 45.

Concepts of modulating and demodulating a RF carrier including AM, SSB, FM, and PM. Study of RF transmitters and receivers and their sub-circuits, including:RF filters, amplifiers, oscillators, modulators, mixers, detectors and discriminators. Frequency multipliers, phase locked loop detectors and synthesizers. TV systems. Digital Communications: FSK and PSK. Signals in the frequency and time domains.

**45 Communications Electronics Laboratory (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 8A and 8B, 72A and 72B and concurrent enrollment in Electronics 44.

Laboratory experience for Electronics 44. Communications circuits including oscillators, modulators, filters, IF amplifiers, TV sweep generator, and modem are built and tested. Communications test equipment usage, including signal generator, scope, FFT spectrum analyzer.

**60 Microwave Fundamentals (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Electronics 8A and 8B.

Microwave signals and their applications. Power density and RF safety. Electromagnetic waves and propagation. Antennas: Dipole, vertical. Transmission lines: Characteristics, principles and analysis. Use of Smith Chart. VSWR, return loss, and reflection coefficient. Stubs and tuners. Waveguides, modes. Microwave signal generation and amplifiers. Microwave components operation.

**61 Microwave Fundamentals Laboratory (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 8A and 8B.

Practical laboratory experience performing microwave measurements using VSWR and power meters, spectrum analyzers, swept frequency systems and plotters. VSWR, reflection coefficient, load impedance, power, frequency, and attenuation are determined through lab experimentation. Use of time domain reflectometry.

**63 Circuit Analysis Laboratory (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 8A and 8B.

Provides laboratory experience with linear and switching power supplies, AC and DC and multistage amplifiers, push-pull and complementary symmetry. Class A, B, and C amplifiers and oscillators are constructed and tested. Construction techniques and troubleshooting. Computer aided circuit analysis.

**74A Microprocessors (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Electronics 72A and 72B.

A comprehensive study of a representative microprocessor, with an emphasis on the internal architecture, instruction set, timing and support chips. The fundamentals of micro and macro programming, input and output control, interfacing, and machine language programming techniques. Many programming examples and control applications. A/D and D/A conversion

**74B Microprocessors Laboratory (1) CSU**

Laboratory 3 hours.

**Advisory:** Completion of Electronics 72A and 72B

Programming a representative microprocessor, with an emphasis on the internal architecture, instruction set, timing and support chips. The fundamentals of macro programming, input and output control, interfacing, and machine language programming techniques. Many programming examples including traffic light control.

**81 Projects Laboratory (1) RPT 3**

Laboratory 3 hours.

Requires the student, after consultation with the instructor, to assemble, test, and document the characteristics of an electronic system while following a specified time schedule. A report covering the theory of operation and test procedures is required. The student will provide all materials and do all research without direct supervision. Time and resource management is emphasized.

**185 Directed Study - Electronics (1) RPT 2****285 Directed Study - Electronics (2)****385 Directed Study - Electronics (3)**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Electronics on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Electronics (1-4) CSU**

See Cooperative Work Experience Education.

# Engineering - Mechanical

## 110 Engineering Computer-Assisted Drafting I (3) UC:CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I. T. 110. Credit not given for both courses.

A foundational course in the theory and practice of engineering computer-assisted drafting. Topics include technical sketching, hardware devices, software utilization, orthographic projection, single and multiple views, and basic dimensioning standards.

## 115 Engineering Computer-Assisted Drafting II (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I. T. 115. Credit not given for both courses.

An elementary course in the theory and practice of engineering computer-assisted drafting. Units include pictorial sketching, computer equipment, software manipulation, isometric projection, oblique projection, and pictorial dimensioning conventions.

## 205 Engineering Descriptive Geometry (3) CSU

Lecture 2 hours; Laboratory 2 hours.

Same as I. T. 205. Credit not given for both courses.

Provides training in the analysis and solution of orthographic projection problems through application of the fundamental principles of descriptive geometry. Emphasis is placed on exposure to and interpretation of points, lines, and planes, in primary, secondary, and successive auxiliary views. Theory and practice are included that involve visualization and graphic representation of intersections, angles, parallelism, perpendicularity, and revolutions.

## 210 Engineering Computer-Assisted Drafting III (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I. T. 210. Credit not given for both courses.

An introductory course in the principles and practices of engineering computer-assisted drafting. Areas covered include basic sectional views, cutting planes, section lining, basic auxiliary views, angle determination, and transfer distances.

## 215 Engineering Computer-Assisted Drafting IV (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I. T. 215. Credit not given for both courses.

A basic course in the concepts and skills of engineering computer-assisted drafting. Units include detail drawings, dimensional tolerancing, feature specification, assembly drawings, parts list generation, and screw thread call-outs.

## 310 Engineering Computer-Assisted Drafting V (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I.T. 310. Credit not given for both courses

An intermediate level course in concepts and skills of mechanical computer-assisted drafting. Topics covered include advanced details with multiple sectional views and advanced details with primary and secondary auxiliary views.

## 315 Engineering Computer-Assisted Drafting VI (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as I.T. 315. Credit not given for both courses

A mid-level course in the concepts and skills of mechanical computer-assisted drafting. Units include surface texture specification, detail assemblies with welding symbology, sheet metal details with flat patterns, and geometric dimensioning and tolerancing.

# English

**The results of the English Placement Process must be on file at the Assessment Center in order to enroll in English 21, 28 or 101 and above, English 82, or 84-87.**

All students planning to enroll in an English course for the first time are expected to complete the English Placement Process at the Pierce College Assessment Center. Contact the Assessment Center at (818) 719-6499 for an appointment and sample test information. Placement results or prerequisite courses taken at other colleges may be presented to the Assessment Center to be substituted for the Pierce English Placement test.

Placement recommendations made through the English Placement Process are intended to assist students enrolling in classes where they are most likely to succeed. Upon completing the process, students are informed of their placement and given their authorization to enroll.

## English Writing Laboratory

Open to any regularly enrolled student in Pierce College.

## 20 College Reading Skills (6) (NDA)

Lecture 6 hours.

Offered in 3-unit modules.

Note: This is not a course for non-native speakers of English.

Provides students with entry level opportunities to improve reading comprehension, critical thinking, vocabulary, and related skills necessary for success in college classes.

## 21 English Fundamentals (3) (NDA)

Lecture 3 hours.

**Prerequisite:** English 20 or English 87 with a grade of "C" or better, or appropriate skill level demonstrated through the English placement process.

Emphasizes improvement of writing, particularly sentences and paragraphs, and supplements and reinforces basic communication skills including punctuation, spelling and sentence structure. Develops ability to read analytically and think logically.

## 28 Intermediate Reading and Composition (3)

Satisfies reading and composition competency requirements for AA degree.

Lecture 3 hours.

**Prerequisite:** English 21 with a grade of "C" or better; or appropriate skill level demonstrated through the English placement process.

Introduces the student to the elements of composition and critical reading. Designed to assist the student to make a successful transition to English 101. Emphasizes grammar, sentence structure, paragraph and essay writing.

## 32 College Literary Magazine Editing (2) RPT 3

Lecture 2 hours.

This course studies the ways to process poetry and prose submitted to the editor of the literary magazine (Direction), including critical evaluation of short stories and poetry, rewriting, editing, and copy reading. In addition, it includes printshop experience doing makeup and proof-reading, study and evaluation of other college literary magazines, and training in magazine promotion and sales.

## 60 Publications Laboratory (1) (NDA)

Laboratory 2 hours.

An independent workshop for the writing and/or editing of poetry, short fiction, drama and essays intended for publication in the college literary magazine.

## 79 Beginning College English as a Second Language (6) (NDA)

Lecture 6 hours.

An integrated skills course intended for students whose native language is not English. Introduces basic English grammar, basic sentence structure, vocabulary, beginning reading for comprehension, guided writing, and oral communication.

**82 Introduction to College English as a Second Language (5) (NDA)**

Lecture 5 hours.

**Prerequisite:** English 79 with a grade of "C" or better, or appropriate skill level demonstrated through the ESL placement process.

An integrated skills course intended for students whose native language is not English. Introduces basic English grammar, sentence structure, vocabulary, beginning reading for comprehension, guided writing, and oral communication. Builds on the skills acquired in ESL 79.

**84 College English as a Second Language I (5) (NDA)**

Lecture 5 hours.

**Prerequisite:** Appropriate skill level demonstrated through the ESL placement process, or English 82 with a grade of "C" or better.

Specifically for students whose first language is not English. Introduces students to basic sentence patterns, simple grammar and vocabulary, reading comprehension, guided writing, and oral communication.

**85 College English as a Second Language II (5) CSU**

Lecture 5 hours.

**Prerequisite:** Appropriate skill level demonstrated through the ESL placement process, or English 84 with a grade of "C" or better.

Specifically for students whose first language is not English. Continues to work on the fundamentals of English as a second language. Places emphasis on writing, syntax and reading.

**86 College English as a Second Language III (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Appropriate skill level demonstrated through the ESL placement process, or English 85 with a grade of "C" or better.

Specifically for students whose first language is not English. Continues to work on the fundamentals of English as a second language. Places emphasis on writing, syntax and reading.

**87 Advanced ESL: Reading and Vocabulary (3) CSU**

Lecture 3 hours.

**Prerequisite:** Appropriate skill level demonstrated through the ESL placement process, or English 86 with grade of "C" or better.

A reading and writing skills course designed for advanced ESL students. Includes reading and writing for comprehension, and exercises in critical reading and writing. Prerequisite is ESL 86 or appropriate skill level demonstrated through the placement process.

**101 College Reading and Composition I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 28 with a "C" or better, or appropriate skill level demonstrated through the English placement process.

Develops proficiency in reading and writing through application of the principles of rhetoric and the techniques of critical thinking. Prerequisite is an understanding of the elements of grammar, punctuation, and sentence structure. Formal research paper required. Required for English majors.

**102 College Reading and Composition II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

One of two critical thinking courses offered by the English department. Develops critical thinking and writing skills beyond the level achieved in English 101 and emphasizes logical reasoning, analysis, and strategies of argumentation using expository prose as subject matter. Designed to improve critical thinking in written arguments by applying established modes of reasoning, analyzing rhetorical strategies, evaluating logical fallacies, and detecting propaganda techniques.

**103 Composition and Critical Thinking (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

One of two critical thinking courses offered by the English department. Focuses on developing critical analysis skills through the evaluation of "real world" modes of communications such as essays, editorials, advertising, propaganda, and electronic media. Designed to improve critical thinking in written arguments by applying established modes of reasoning, analyzing rhetorical strategies, evaluating logical fallacies, and detecting propaganda techniques. Builds on the reading and writing skills developed in English 101.

**127 Creative Writing (3) \*\*UC:CSU RPT 3**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

Presents a workshop in creative writing. Class and instructor informally discuss and criticize students' plays, poems, short stories, and essays. Encourages student participation in campus literary publication.

**203 World Literature I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

This course explores the works of great writers of the world from ancient times through the Renaissance.

**204 World Literature II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Continues the study of English 203, presenting great books of the world from the Renaissance to recent times. English 203 is not a prerequisite.

**205 English Literature I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Surveys English literature from the Anglo-Saxon period through the 18th century. Required for English majors.

**206 English Literature II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Continues the study of English 205, covering English literature from the 18th century to the 20th century. English 205 is not a prerequisite. Required for English majors.

**207 American Literature I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Surveys American literature from its beginning to 1860.

**208 American Literature II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Continues the study of English 207, covering American literature from 1860 to the 20th century. English 207 is not a prerequisite.

**209 California Literature (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

The course presents selected works by writers observing California life. Readings from sources as varied as Native-American legends and Hollywood memoirs will demonstrate such aspects of the study of literature as plot and structure, character, point of view, figurative discourse.

**210 Twentieth Century Novel (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Studies significant novels of the twentieth century. Works discussed include landmark American, British, and European novels. Explores the evolution of the novel in and the primary themes of the twentieth century.

**211 Fiction (3) UC:CSU - RPT 1**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

English 102 recommended but not required.

Emphasizes selected great novels and short stories from French, German, Russian, English, American, and Spanish literature.

**212 Poetry (3) UC:CSU - RPT 1**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Emphasizes reading, discussion and analysis of selected poems. Designed to increase the student's understanding and appreciation of all forms of poetry.

**213 Dramatic Literature (3) UC:CSU - RPT 1**

Lecture 3 hours.

Same as Theater 125. Credit not given for both courses.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Surveys dramatic literature from the beginnings to the present day with emphasis on the works of the major playwrights, such as Sophocles, Shakespeare, Moliere, Shaw, Ibsen, O'Neill, and Williams.

**214 Contemporary Literature (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Concentrates on significant literature since 1920, primarily American and British. Includes lectures and discussions, oral and written reports. Emphasis is placed upon critical analysis of short story, novel, drama, and poetry.

**215 Shakespeare I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Introduces the life and works of William Shakespeare, with emphasis on Shakespeare's milieu. Emphasizes detailed study of several history plays, earlier comedies and tragedies.

**216 Shakespeare II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

May be taken before English 215.

Introduces the life and works of William Shakespeare, with emphasis on Shakespeare's milieu. Emphasizes detailed study of Shakespeare's later works, especially the major tragedies.

**218 Children's Literature (3) CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

A survey of literature suitable for children of different age levels. Emphasis will be placed on story telling, acquaintance with authors and the development in children of desirable attitudes toward literature. Recommended for prospective nursery, kindergarten, elementary and secondary teachers. Parents will find the course helpful in discovering what reading material is available.

**219 Literature of American Ethnic Groups (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

A survey of the literature of American ethnic writers: stories, novels, plays, poems, essays, and other non-fiction prose works. Works are examined in the context of traditional and contemporary problems of American ethnic groups, each of which offers a unique contribution to American society.

**239 Women in Literature (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

This class focuses on major writings by women from ancient times to the present. The course considers the reflection of women's changing status as seen by women writers.

**240 Literature and the Motion Picture I (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.

This course examines the comparative arts of literature and the motion picture. Includes readings of literary works, both classic and modern, screenings of film versions based upon these literary sources, discussion, and writing of critical papers.

**250 Mythology and Literature (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Introduces the mythology of Western and Near-Eastern civilizations, broadened to include such other elements of folk tale as marchen, fairy tale, legend, etiological tale, fable, myth, and motif.

**251 The Short Story (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Focuses on the short story tradition, especially by Americans, exploring major works and developments within the genre. Elements of fiction as expressed by diverse authors will be examined.

**252 The English Bible as Literature (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended.

A study of the Bible with the Oxford Annotated Revised Standard Version with the Apocrypha as the basic text.

**270 Science Fiction - Fantasy (3) UC:CSU**

(J.R.R. Tolkien, etc.)

Lecture 3 hours.

**Prerequisite:** English 101 with a grade of "C" or better.  
English 102 recommended but not required.

Presents science fiction as literature, with emphasis on the use of mythology; science fiction by scientists and nonscientists, political and philosophical oriented science fiction, and science fiction as fantasy and escape literature.

**185 Directed Study - English (1) CSU - RPT 2****285 Directed Study - English (2) CSU****385 Directed Study - English (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in English on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - English (1-4) CSU**

See Cooperative Work Experience Education.

\***UC Credit Limit:** English 211 and 212 combined, maximum 6 units.

\*\***UC Credit Limit:** Maximum one repeat.

# Environmental Design

**101 Foundations of Design I (3) UC:CSU**

Lecture 1 hour, Laboratory 5 hours.

Introduces the principles of design common to architecture and visual arts. Integrates the theory of architectural design with historical and cultural foundations. Develops analytical skills in visual perception and critical awareness and visits to construction sites.

**102 Foundations of Design II (3) CSU**

Lecture 1 hour; 5 hours Laboratory.

**Advisory:** Environmental Design 101

Second level architectural design studio. Students continue to develop creative, conceptual and analytical skills by designing more complex projects addressing multiple programmatic requirements, symbolism and contextualism.

# Environmental Science

**1 The Human Environment: Physical Processes (3) UC:CSU**

Lecture 3 hours.

Introduction to the environmental mechanisms that constitute our life support systems and the social, political and economic factors that are the ultimate cause of these problems. This includes an examination of the difference between science and technology and the limits to technological solutions to our environmental problems. The basic science required to understand how our environmental systems work is presented followed by analysis of the essential components of our life support systems and how we impact them. Finally, the major environmental issues are analyzed along with potential solutions to these problems where they exist.

**2 The Human Environment: Biological Processes (3) \*\*UC:CSU**

Lecture 3 hours.

Introduction to the biological aspects of our environmental problems including an examination of large scale systems including population and ecosystems and individual scale issues such as nutrition and toxicity. We will examine the ability of species to adapt leading to an examination of pesticide resistance and development of antibiotic resistant pathogens. Global population will be examined as well the mechanisms of population dynamics. This information is the foundation for discussion and analysis of the relationship between population and economics (standard of living), the potential for global pandemics and the other results of uncontrolled population growth and an examination of population control programs. The structure of ecosystems and the dynamics of ecosystem function will be presented accompanied by analysis of topical ecosystem issues. This information will be used to develop an understanding of the problems in setting environmentally meaningful standards for toxins and other pollutants. In the time remaining, various issues of individual importance will be discussed such as nutrition, toxicity, birth defects, and cancer.

**7 Introduction to Environmental Geology (3) UC:CSU**

Lecture 3 hours. Same as Geology 10.

A survey course that examines the interrelationships between humans and the environment and includes a review of natural processes and their effects. Includes a discussion of hazard, risk and catastrophic geologic events such as earthquakes, landslides, floods and volcanoes. Mineral, energy, soil and water resources will be discussed, the future of these resources analyzed and the impact of their extraction and use investigated.

**31 Energy and Power (3) UC:CSU**

Lecture 3 hours. Same as Physical Science 13.

This course introduces the physics of energy conversion and explores the physical, economic, and environmental advantages and disadvantages of various energy sources, including fossil, nuclear, solar, hydro, biomass, wind, tidal, and geothermal; and examines various methods for conserving energy.

**185 Directed Study - Environmental Science (1) CSU - RPT 2****285 Directed Study - Environmental Science (2) CSU****385 Directed Study - Environmental Science (3) CSU**

**Prerequisite:** A minimum of 3 units in Environmental Science. Conference 1 hour per unit.

Allows students to pursue Directed Study in Environmental Science on a contract basis under the direction of a supervising instructor.

**\*\*UC Credit Limit:** Environmental Science 2 and Plant Science 901 combined, maximum one course.

# Equine Science

See additional courses under **Animal Science 600-699**

**680 Basic Mule Principles (2)**

Lecture 2 hours.

Formerly Equine Science 99A.

It is highly recommended for safety reasons that students have completed a course in basic equitation before enrolling in this course.

Schooling and training of mules for riding and utility purposes. Emphasis will be placed on controlling and conditioning the mule in a manner safe for students and mule.

# Finance

**1 Principles of Finance (3) CSU**

Lecture 3 hours.

Examines the principles of money, credit, banking, and the role of the Federal Reserve System and government policy on the financial environment. Studies types of financial instruments, interest rates, capital management, money and capital markets and currency fluctuations and hedging for global business. Includes detailed instruction on the Time Value of Money and its application to calculations in personal and business finance.

**2 Investments (3) CSU**

Lecture 3 hours.

This course emphasizes the study of the stock market from a practical viewpoint. It includes developing an understanding of diversification, allocation, growth stocks, value stocks, dividends, technical analysis, fundamental analysis, bonds and options. The course also covers real estate and other investment opportunities.

**8 Personal Finance and Investments (3) CSU**

Lecture 3 hours.

An examination of the concepts and tools necessary for the rational allocation of personal resources. Emphasis is on the significant financial decisions facing each household during its life cycle, including budgeting, record keeping, home ownership, consumer purchases, credit, insurance, investing, retirement and estate planning.

# French

## 1 Elementary French I (5) UC:CSU

Lecture 5 hours.

**Recommended:** Concurrent enrollment in French 101.

**Recommended:** Eligibility for English 28.

Students with previous knowledge of French should not enroll in French 1, but in a higher level Native speakers should enroll in French 4, 5, or 6

Introduces the fundamentals of pronunciation and grammar, practical vocabulary and useful phrases. Focuses upon the ability to understand, speak, read, and write in simple French. Exposes the student to French culture. English is only used when it is necessary to explain difficult grammatical concepts; otherwise, the class is conducted in French. This course corresponds to the first year of high school French.

## 2 Elementary French II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** French 1 or one year of high school French with a grade of "C" or better in either case.

**Recommended:** Concurrent enrollment in French 101.

**Recommended:** Eligibility for English 28.

Students with previous knowledge of French should not enroll in French 2, but in a higher level. Native speakers should enroll in French 4, 5, or 6

Continues the fundamentals of French pronunciation and grammar, practical vocabulary and useful phrases. Stresses the ability to understand, speak, read and write in simple French. Exposes the student to French culture. The class is conducted entirely in French except for grammar clarification. This course corresponds to the second year of high school French.

## 3 Intermediate French I (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** French 2 or two years of high school French with a grade of "C" or better in either case.

**Recommended:** Concurrent enrollment in French 101.

**Recommended:** Eligibility for English 28.

**Note:** Concurrent enrollment in French 8 is strongly recommended for non-native speakers.

Not offered every semester.

Completes the study of basic French grammar. Continued emphasis upon French pronunciation, practical vocabulary, and useful phrases. Stresses the ability to understand, speak, read, and write in intermediate French. Includes more challenging texts and continued improvement in writing and speaking through written and oral dialogues. Further exposure of French culture as a background for conversation and reading. The class is conducted entirely in French except when English clarification is necessary for grammatical concepts. This course corresponds to the third year of high school French.

## 4 Intermediate French II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** French 3 or three years of high school French with a grade of "C" or better in either case.

**Recommended:** Concurrent enrollment in French 101.

**Note:** Concurrent enrollment in French 8 is strongly recommended for non-native speakers.

Not offered every semester.

Expands the structural concepts acquired in French 1, 2, 3. Develops additional vocabulary to maximize comprehension and expression skills. Provides depth in the study of France and the francophone world's culture and literature with wider range of reading material. Emphasizes oral discussions, presentations, as well as written compositions and analysis.

## 5 Advanced French I (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** French 4 with a grade of "C" or better.

**Recommended:** Concurrent enrollment in French 101.

**Note:** Concurrent enrollment in French 8 is strongly recommended for non-native speakers.

Not offered every semester.

Expands the structural concepts acquired in French 4. Develops advanced vocabulary to maximize comprehension and expression skills. Provides greater depth in the study of France and the francophone world's culture and literature with wider range of readings. Emphasizes oral discussions, presentations, as well as written compositions and analysis on a more complex topics and advanced level.

## 6 Advanced French II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** French 5 with a grade of "C" or better.

**Note:** Concurrent enrollment in French 8 is strongly recommended for non-native speakers.

Not offered every semester.

Review advanced structures. Studies some important texts from the seventeenth century through the present time, with special emphasis on oral discussions, presentations, and written essays and analysis of the literature and culture of France and the Francophone world.

## 8 Conversational French (2) CSU RPT 3

Lecture 2 hours.

**Prerequisite:** French 2 or equivalent with a grade of "C" or better.

This course is offered as a pass/no pass course only.

Not offered every semester.

Continues to stress the fundamentals of French pronunciation. Develops conversational skill and fluency through a review of basic French grammar (French 1 & 2) and the core vocabulary of everyday situations, including cultural experiences. French is used throughout except in instances in which clarification in English is necessary. This course is intended for students who have had the equivalent of French 2, and is offered on a credit/ no credit basis only.

## 10 French Civilization (3) UC:CSU

Lecture 3 hours.

No knowledge of French required.

**Note:** May be taught in one-unit modules: French 10A, 10B, and 10C. All three modules must be taken for UC transfer credit to be granted.

French 10A (1 unit) is offered in conjunction with the Summer in Paris program.

This course is offered as a pass/no-pass course only.

Not offered every semester.

This course consists of lectures and discussions in English on the geography, history, government and institutions of France, the life and customs of its people, its literature, arts and sciences, and its contribution to civilization. It is especially recommended to all students of French.

## 81 Practical French for Business (3)

Lecture 3 hours.

**Prerequisite:** French 1 or equivalent.

Not offered every semester.

This course consists of lectures in English and exercises and conversational practice in French, related to commercial and marketing environments. Students will acquire skills in business correspondence in French and familiarize themselves with business and social practice in French-speaking countries.

## 101 French Language Laboratory (1) CSU - RPT 3

Laboratory 2 hours.

**Note:** Recommended for all students enrolled in French 1, 2, 3, 4, 5, or 8.

**This course is offered as a credit/no credit course only.**

This is a credit/no-credit course. Students receive one unit of college credit with no letter grade by spending at least 32 hours over the semester using the equipment and completing the lab workbook assignments. This language workshop uses multi-media (video, audio and computers) to enhance instruction. Students attend The Learning Center (TLC), the Media Center, and/or the Language Lab.

**185 Directed Study - French (1) CSU - RPT 2****285 Directed Study - French (2) CSU****385 Directed Study - French (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in French on a contract basis under the direction of a supervising instructor.

# Geographic Information Systems (GIS)

**31 Introduction to the Geographic Information Systems (3) UC:CSU**

*Lecture 3 hours.*

*Same as Geography 31. Credit not given for both courses.*

An introduction to fundamentals of GIS, including history of automated mapping; introduction to cartographic principles (scales, coordinate systems, projections, cartographic design); GIS terminology; data structures; topology; data acquisition; spatial analysis; review of hardware/software used in GIS; and applications of GIS technology in science, government, and business.

**32 GIS Applications: ArcView (3) CSU**

*Lecture 2 hours; Laboratory 2 hours.*

*Same as Geography 32. Credit not given for both courses.*

**Advisory:** Completion of Geography 31 or GIS 31, and Computer Science 501.

A brief survey of GIS Fundamentals, emphasizing hands-on experience using computer hardware and GIS software. Emphasis on vector-based data using and an introduction to hands-on work with raster-based data using Spatial Analysis modules. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

**33 Intermediate GIS Applications: ArcView (3) CSU**

*Lecture 2 hours; Laboratory 2 hours.*

*Same as Geography 33. Credit not given for both courses.*

**Advisory:** Completion of Geography 32 or GIS 32.

More in-depth use of GIS software and familiarization with more advanced GIS software operations. Application of GIS fundamentals and software skills to a semester-long project, from inception and initial planning to data acquisition and final project design, using census and/or other real-world data. Depending on selected project, possible use of 3-D, Spatial Analysis, Network Analysis, Model Building, and other modules. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

**36 Cartography and Base Map Development (3) CSU**

*Lecture 2 hours; Laboratory 2 hours.*

*Same as Geography 36. Credit not given for both courses.*

**Prerequisites:** Geography 31 or GIS 31, and Geography/GIS 32 (ArcView) or equivalent.

A comprehensive study of GIS cartography including cartographic principles (such as history, principles, projections, scales, map accuracy), data acquisition methods (such as remote sensing, aerial images, GPS), and base map development (scanning, digitizing, and coordinate geometry), and map production using ArcView and/or MapInfo software.

**37 Introduction to Global Positioning Systems (GPS) (1) CSU**

*Lecture 1 hour.*

*Same as Geography 37. Credit not given for both courses.*

**Advisory:** Completion of Geography 31 or GIS 31.

Introduction to the terminology, equipment, techniques, and technology of GPS, using a hand-held unit to determine location, and completion of a traverse using GPS and a topographic quadrangle, collecting data to be used in a GIS.

**38 Spatial Analysis and Modeling (3) CSU**

*Lecture 2 hours; Laboratory 2 hours.*

*Same as Geography 38. Credit not given for both courses.*

**Prerequisite:** Geography 31 or GIS 31, and Geography/GIS 32 (ArcView) or equivalent.

An introduction to spatial analysis, briefly reviewing principles of statistics and relating them to methods of geographically referenced data. Sampling strategies for data structures (raster and vector) used in GIS will be introduced. Single and multi-layer operations (classification, coordination, modeling analysis) and spatial correlation will be covered.

**39 GIS in Science, Business, and Government (3) CSU**

*Lecture 2 hours; Laboratory 2 hours.*

*Same as Geography 39. Credit not given for both courses.*

**Prerequisite:** Geography 38 or GIS 38, or equivalent.

An in-depth survey of uses of GIS applications in science, government, and business. Topics include data acquisition, accuracy, analysis, presentation techniques, and legal issues. Individual student projects will include use of hardware and software, data acquisition, base map development, cost benefit analysis, and presentation of map layouts.

**40 GIS Internship (1) CSU**

*Lecture 1 hour.*

*(Same as Geography 40. Credit not given for both courses.)*

**Prerequisite:** Geography 38 or GIS 38, or equivalent.

A directed field study in which students apply classroom instruction to real-world GIS projects in the community in a business or government agency while under the supervision of an advisor from the college. The short-term internship will include periodic meetings with the advisor, completion of interim reports, and presentation of a final report.

# Geography

**1 Physical Geography (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

Studies the earth's physical environment using an Earth Systems Science approach. Emphasis is given to earth-sun relationships, atmosphere-hydrosphere interactions related to weather and climate, lithospheric processes and geomorphology, integration of climate, soils and biomes and their spatial patterns. Tools used for geographic inquiry may include maps, satellite imagery, geographic information systems, and field investigation.

**2 Cultural Elements of Geography (3) UC:CSU**

*Lecture 3 hours.*

*May be offered as an honors section.*

Studies the diversity of human populations, their cultural origins, diffusion and contemporary spatial patterns. Topics include demography, languages, religions, political units, economic activities and development and urbanization. Emphasis is given to interrelationships between human activities and the biophysical environment including environmental alteration. Specific countries, areas or cultural groups illustrating various topics are utilized as case studies. Tools of geographic inquiry may include maps, satellite imagery, and geographic information systems.

**3 Introduction to Weather and Climate (3) UC:CSU***Lecture 3 hours.**Same as Meteorology 3. Credit not given for both courses.*

Studies the earth's atmospheric environment using an Earth Systems Science approach. Emphasis is given to Earth-sun relationships, solar radiation inputs, earth radiation emission and temperature, global warming, atmospheric moisture measurements, adiabatic processes, clouds and precipitation formation, atmospheric pressure and wind flow, storm development, weather forecasting, and climate and climate change. Tools used for inquiry may include weather maps, satellite imagery, and geographic information systems.

**7 World Regional Geography (3) UC:CSU***Lecture 3 hours.*

A geographical survey of the world's major regions with emphasis on those features important to an understanding of current global concerns and problems.

**14 Geography of California (3) UC:CSU***Lecture 3 hours.*

Delineates the regions of California, their biophysical features and resources in relation to patterns of population and settlement, economic activities, trade, transportation, and environmental problems.

**15 Physical Geography Laboratory (2) UC:CSU***Lecture 1 hour; Laboratory 2 hours.***Prerequisite:** *Geography 1.*

Supplements the material of Geography 1. Laboratory exercises are used to increase understanding of spatial location and temporal processes on the Earth, to develop skills for map and image analysis, to appraise Earth-sun relationships, to identify major atmosphere-hydrosphere interactions related to weather and climate, to interpret lithospheric processes and geomorphologic features, to analyze the integration of climate, soils and biomes and their spatial patterns. Tools used for laboratory inquiry may include topographic maps, satellite images, selected weather instruments and computer software.

**20 Field Studies in California Geography (6) CSU***Lecture 6 hours.**Course may be offered as 1 unit modules, Geography 20A-F.*

Field surveys of people-land relations on the diverse physical and cultural landscapes of Southern California. These surveys enhance the understanding of past and present cultural environments that people superimpose on their natural environment.

**21 Introduction to the Geography of the United States and Canada (3) UC:CSU***Lecture 3 hours.*

Provides a regional study of the western United States and Canada, the Eastern United States and Canada, and Alaska and Hawaii. This course explores the physical and cultural geographic backgrounds of Anglo-America and the current economic and land-use patterns.

**22 Introduction to the Geography of Latin America (3) UC:CSU***Lecture 3 hours.*

Provides a regional study of Mexico, Central America and the Caribbean, and South America. Course examines the physical and cultural backgrounds of Latin America and the current landuse and economic patterns.

*Course may be offered as 1 unit modules:***22A Geography of Mexico (1) \*UC:CSU****22B Geography of Central America and the Caribbean (1) \*UC:CSU****22C Geography of South America (1) \*UC:CSU****31 Introduction to Geographic Information Systems (3) UC:CSU***Lecture 3 hours.**(Same as GIS 31. Credit not given for both courses.)*

An introduction to fundamentals of GIS, including history of automated mapping; introduction to cartographic principles (scales, coordinate systems, projections, cartographic design); GIS terminology; data structures; topology; data acquisition; spatial analysis; review of hardware/software used in GIS; and applications of GIS technology in science, government, and business.

**32 GIS Applications: ArcView (3) CSU***Lecture 2 hours; Laboratory 2 hours.**(Same as GIS 32. Credit not given for both courses.)***Advisory:** *Geography 31 or GIS 31, and Computer Science 501.*

A brief survey of GIS Fundamentals, emphasizing hands-on experience using computer hardware and GIS software. Emphasis on vector-based data using and an introduction to hands-on work with raster-based data using Spatial Analysis modules. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

**33 Intermediate GIS Applications: ArcView (3) CSU***Lecture 2 hours; Laboratory 2 hours.**(Same as GIS 33. Credit not given for both courses.)***Advisory:** *Geography 32 or GIS 32.*

More in-depth use of GIS software and familiarization with more advanced GIS software operations. Application of GIS fundamentals and software skills to a semester-long project, from inception and initial planning to data acquisition and final project design, using census and/or other real-world data. Depending on selected project, possible use of 3-D, Spatial Analysis, Network Analysis, Model Building, and other modules. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

**36 Cartography and Base Map Development (3) CSU***Lecture 2 hours; Laboratory 2 hours.**Same as GIS 36. Credit not given for both courses.***Prerequisite:** *Geog/GIS 31, and Geog/GIS 32 or equivalent.*

A comprehensive study of GIS cartography including cartographic principles (such as history, principles, projections, scales, map accuracy), data acquisition methods (such as remote sensing, aerial images, GPS), base map development (scanning, digitizing, and coordinate geometry), and map production using GIS software.

**37 Introduction to Global Positioning Systems (GPS) (1) CSU***Lecture 1 hour.**Same as GIS 37. Credit not given for both courses.***Advisory:** *Geography 31 or GIS 31.*

Introduction to the terminology, equipment, techniques, and technology of GPS, using a hand-held unit to determine location, and completion of a traverse using GPS and a topographic quadrangle, collecting data to be used in a GIS.

**38 Spatial Analysis and Modeling (3) CSU***Lecture 2 hours; Laboratory 2 hours.**Same as GIS 38. Credit not given for both courses.***Prerequisite:** *Geog/GIS 31, and Geog/GIS 32 or equivalent.*

An introduction to spatial analysis, briefly reviewing principles of statistics and relating them to methods of geographically referenced data. Sampling strategies for data structures (raster and vector) used in GIS will be introduced. Single and multi-layer operations (classification, coordination, modeling analysis) and spatial correlation will be covered.

**39 GIS in Science, Business, and Government (3) CSU***Lecture 2 hours; Laboratory 2 hours.**Same as GIS 39. Credit not given for both courses.***Prerequisite:** *Geography 38 or GIS 38, or equivalent.*

An in-depth survey of uses of GIS applications in science, government, and business. Topics include data acquisition, accuracy, analysis, presentation techniques, and legal issues. Individual student projects will include use of hardware and software, data acquisition, base map development, cost benefit analysis, and presentation of map layouts.

**40 GIS Internship (1) CSU***Lecture 1 hour.**Same as GIS 40. Credit not given for both courses.***Prerequisite:** *Geography 38 or GIS 38, or equivalent.*

A directed field study in which students apply classroom instruction to real-world GIS projects in the community in a business or government agency while under the supervision of an advisor from the college. The short-term internship will include periodic meetings with the advisor, completion of interim reports, and presentation of a final report.

**185 Directed Study - Geography (1) CSU - RPT 2****285 Directed Study - Geography (2) CSU****385 Directed Study - Geography (3) CSU**

*Conference 1 hour per unit.*

**Prerequisite:** A minimum of 3 units in Geography

Allows students to pursue Directed Study in Geography on a contract basis under the direction of a supervising instructor.

**\*UC Credit Limit:** Geography 20A, B, C must all be taken for credit to be granted.

# Geology

See also **Environmental Science 1, 7; Oceanography 1, 10.**

**1 Physical Geology (3) UC:CSU**

*Lecture 3 hours.*

Introduces the student to the general field of geology; including a study of the work of rivers, winds, glaciers, oceans, volcanism and seismology in shaping the earth, with emphasis upon the relationships existing between humans and the geological processes.

**2 Earth History (3) UC:CSU**

*Lecture 3 hours.*

**Prerequisite:** Geology 1.

An introduction to the geological history of the earth and its inhabitants, with emphasis on the evolution of life and landforms of North America. Topics include life on earth such as plants, fish, amphibians, rise and fall of the dinosaurs, and the mammals. Multimedia presentations are used throughout the course. Field trips will be taken.

**4 Physical Geology & Laboratory (5) \*UC:CSU**

*Lecture 4 hours; Laboratory 2 hours.*

*Same as Geology 1 and 6 combined.*

A study of the work of rivers, winds, glaciers, oceans, volcanism, and seismology in shaping the earth, with emphasis upon the relationships existing between humans and the geological processes. Laboratory exercises in rock and mineral identification, and map interpretation.

**6 Physical Geology Laboratory (2) \*UC:CSU**

*Lecture 1 hour; Laboratory 2 hours.*

**Prerequisite:** Geology 1 or concurrent enrollment.

Laboratory exercises in identification of rock-making and ore minerals, igneous, metamorphic, and sedimentary rocks. Interpretation of topographic maps, geologic maps and aerial photographs. Geology 6 is intended to satisfy physical science lab credits for all students concurrently enrolled in Geology 1.

**7 Earth History Laboratory (2) UC:CSU**

*Lecture 3 hours.*

**Prerequisite:** Geology 1 and Geology 2.

**Corequisite:** Geology 2.

A supplemental laboratory course for Geology 2, intended to teach the scientific methods of reasoning and to give the student an acquaintance with the fundamental principles of historical geology. Laboratory exercises will examine the history of the earth from its origin to the present as interpreted from the fossil record and radiometric dating techniques. Also included will be the evolutionary study of fossils and study of rock types and ancient landforms. Will include methods used to determine events in Earth history and reconstruct past environmental conditions. Several field trips will be taken. Strongly recommended for the student who is enrolled in or has completed Geology 2.

**10 Introduction to Environmental Geology (3) UC:CSU**

*Lecture 3 hours.*

*Same as Environmental Science 7.*

A survey course that examines the interrelationships between humans and the environment and includes a review of natural processes and their effects. Includes a discussion of hazard, risk and catastrophic geologic events such as earthquakes, landslides, floods and volcanoes. Mineral, energy, soil and water resources will be discussed, the future of these resources analyzed and the impact of their extraction and use investigated.

**12 Introduction to the Geology of California (3) UC:CSU**

*Lecture 3 hours.*

Surveys the physical and historical geology of California. Gives consideration to the twelve geomorphic provinces into which the State is divided, and to the characteristic geological record, with particular reference to the later part of earth history.

**22 Geomorphology (4) UC:CSU**

*Lecture 3 hours; Laboratory 2 hours.*

**Note:** This course is taught in one unit modules

Offers a basic course in the description, evolution, and classification of landforms. The student will have an opportunity to examine representative landforms through field trips.

**185 Directed Study - Geology (1) CSU - RPT 2****285 Directed Study - Geology (2) CSU****385 Directed Study - Geology (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in Geology on a contract basis under the direction of a supervising instructor.

**\*UC Credit Limit:** Geology 1, 4 and 6 combined, maximum 5 units.

# Health

**2 Health and Fitness (3) CSU**

*Lecture 2 hours. Laboratory 2 hours.*

This course promotes healthy physical and psychological lifestyles, with emphasis on disease prevention, nutrition, sexuality, reproduction, drugs, alcohol, tobacco, aging, stress management and weight control. The physical fitness segment emphasizes individual improvement utilizing aerobic, flexibility and strengthening activities.

**7 Physical Fitness and Nutrition (3) \*UC:CSU**

*Lecture 3 hours.*

Considers the nature and importance of physical fitness and good nutrition in our personal and social development. Analyzes and evaluates various types of muscular activities in terms of students' needs and interests. Encourages the selection of nutritive foods for weight control, disease prevention, and general well-being.

**8 Women's Personal Health (3) \*UC:CSU**

*Lecture 3 hours.*

This course provides a comprehensive overview of critical, epidemiological, contemporary, and cultural/ethnic women's health topics and a framework for informed personal decision making.

**9 Health for the Mature Individual (3) CSU**

*Lecture 3 hours.*

Designed to meet the personal needs and interests of mature and older students in the field of aging. Emphasis is placed on promoting and maintaining physical, emotional, and social good health, despite possible limitations of advancing years.

**11 Principles of Healthful Living (3) \*UC:CSU**

Lecture 3 hours.

Not an activity class.

**Note:** Credit given for either Health 10 or Health 11, but not both.

Encompasses the same content as Health 10 but explores the material in greater depth.

**185 Directed Study - Health (1) CSU - RPT2****285 Directed Study - Health (2) CSU****385 Directed Study - Health (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Health Education on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Health (1-4) CSU**

See Cooperative Work Experience Education.

**\*UC Credit Limit:** Maximum one course.

# History

**1 Introduction to Western Civilization I (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Teaches historically the major elements in the Western heritage from the earliest Mesopotamian civilizations through the religious reformations of the sixteenth century. Introduces students to the ideas and institutions central to western civilization, and acquaints them, through reading and critical discussion, with representative contemporary documents and writings of enduring interest.

**2 Introduction to Western Civilization II (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Teaches historically the major elements of the Western heritage from the Age of Absolutism in the 17th century to the present. Introduces students to the ideas and institutions central to western civilization, and acquaints them, through reading and critical discussion with representative contemporary documents and writings of enduring interest.

**3 History of England and Great Britain I (3) UC:CSU**

Lecture 3 hours.

Surveys the political, economic, social, and cultural developments of the British Isles from the earliest times through the seventeenth century.

**4 History of England and Great Britain II (3) UC:CSU**

Lecture 3 hours.

Traces the political, economic, social, and cultural development of the British Isles and the British Empire from the eighteenth century to the present.

**5 History of the Americas I (3) UC:CSU**

Lecture 3 hours.

Surveys the political, economic, social, and intellectual history of Latin America from the Age of Exploration, conquest of the indigenous people of the Americas, through the colonial period.

**6 History of the Americas II (3) UC:CSU**

Lecture 3 hours.

Explores the political, economic, social, and intellectual history of Latin America and the development of the United States during the nineteenth and twentieth centuries with special emphasis on their interpolitical relationship.

**11 Political and Social History of the United States I (3) \*UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Surveys the history of the United States from pre-Columbian times to 1865. Devotes particularly attention to political and social events as well as the development of America's central institutions.

**12 Political and Social History of the United States II (3) \*\*UC:CSU**

Lecture 3 hours.

Surveys the political, economic, social, and intellectual history of the United States from the Civil War through the Twentieth Century.

**13 The United States in the Twentieth Century (3) \*\*UC:CSU**

Lecture 3 hours.

This course covers the main events, actors, and themes of the 20th century, primarily focusing on their impact on American history (i.e. cultural, political, and social movements), including a discussion of America's central institutions.

**29 Asian Civilization: The Middle East (3) UC:CSU**

Lecture 3 hours.

The course traces the historical development of the Middle East from the rise of the earliest Middle Eastern civilizations to the present, including a consideration of the major political and social issues and conflicts of the modern era.

**41 The African-American in the History of the United States I (3) \*UC:CSU**

Lecture 3 hours.

Surveys United States history and major American institutions from the early Colonial Era through the Civil War with special emphasis on the contributions of African-American to the nation's political and social development.

**42 The African-American in the History of the United States II (3) \*\*UC:CSU**

Lecture 3 hours.

Surveys United States history and major American institutions from the end of the civil war to the present time, with special emphasis on the African-Americans in the social and political development of American civilization.

**43 The Mexican-American in the History of the United States I (3) \*UC:CSU**

Lecture 3 hours.

Traces the historical evolution of the Mexican and his culture and institutions to 1865, and surveys the contributions of the Mexican-American to the United States, with particular emphasis on the Southwest, and the causes and consequences of the Mexican-American War.

**44 The Mexican-American in the History of the United States II (3) \*\*UC:CSU**

Lecture 3 hours.

Traces the historical evolution of the Mexican-American since the 1850s, and analyzes the aftermath of the Mexican-American War, legal and illegal immigration from Mexico, the civil rights movement, and the contributions of the Mexican-Americans to the American experience. Includes a discussion of basic American institutions.

**52 The Role of Women in the History of the U.S. (3) UC:CSU**

Lecture 3 hours.

Explores the political, economic, social, and intellectual history of women in the development of the United States from the early colonial era to the present day with special emphasis on their contributions as well as their problems.

**56 American Environmental History (3) CSU**

Lecture 3 hours.

Surveys the environmental history of the United States from the pre-Columbian era to the present, including an examination of the economic, social and political consequences of environmental degradation and the responses to those disasters by governmental and other bodies

**86 Introduction to World Civilizations I (3) UC:CSU**

*Lecture 3 hours.*

Traces the development and interrelationships of the major world civilizations and their cultural traditions and contributions from the earliest times to the beginning of the era of European expansion in the sixteenth century.

**87 Introduction to World Civilization II (3) UC:CSU**

*Lecture 3 hours.*

Traces the development and interrelationships of the major world civilizations and their cultural traditions and contributions from the era of European expansion in the sixteenth century to the present.

**185 Directed Study - History (1) CSU - RPT 2****385 Directed Study - History (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in History on a contract basis under the direction of a supervising instructor.

*\*UC Credit Limit: History 11, 41 and 43 combined, maximum one course.*

*\*\*UC Credit Limit: History 12, 13, 42 and 44 combined, maximum one course.*

## Horse Science

See course listings under **Animal Science** 600-699.

## Horticulture, Ornamental

See course listings under **Plant Science** 700-899.

## Humanities

**6 Great People, Great Ages (3) UC:CSU - RPT 1**

*Lecture 3 hours.*

*May be offered as an honors section.*

An interdisciplinary program in the liberal arts, which covers an historical period such as the Renaissance from the perspectives of philosophy, art, music, literature, architecture, science, etc.

**31 People in Contemporary Society (3) UC:CSU**

*Lecture 3 hours.*

Surveys humanity's cultural development from the Renaissance to the present. Presents general information on the arts, literature, and ideas of the Renaissance, Baroque, Neoclassic, and Romantic periods. Concludes an examination of Twentieth Century culture in particular. Since Humanities 30 and 31 are independent of each other, they need not be taken in successive order.

**60 People and Their World: Technology and the Humanities (3) UC:CSU**

*Lecture 3 hours.*

Examines art, music, literature, drama, philosophy, and history in an exploration of the urban environment and society as it has been affected by technology.

**61 People and Their World: The Creative Process (3) CSU**

*Lecture 3 hours.*

Surveys humanity's creativity as expressed in myths and dreams and explores works of art and literature to discover the range of humanity's creative instinct. Involves art, music, literature, psychology; drama, philosophy, and history.

**185 Directed Study - Humanities (1) CSU - RPT 2****385 Directed Study - Humanities (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in humanities on a contract basis under the direction of a supervising instructor.

## Industrial Technology

Industrial Technology courses are listed individually under sub-headings, (e.g., **Industrial Technology - Machine Shop/CNC**)  
**Automotive Service Technology** - Listed separately  
**Drafting-Mechanical** (includes CAD)  
**Electronics** - Listed separately  
**Engineering-Mechanical** - Listed separately  
**Machine Shop/CNC** (includes CAM)  
**Welding**

Industrial Technology classes are affiliated with the Society of Manufacturing Engineers and American Welding Society.

**185 Directed Study - Industrial Technology (1) CSU - RPT 2****285 Directed Study - Industrial Technology (2) CSU****385 Directed Study - Industrial Technology (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in Industrial Technology on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Industrial Technology (1-4) CSU**

*See Cooperative Work Experience Education.*

# Industrial Technology (Drafting - Mechanical)

## 105 Industrial Print Reading I (3) CSU

Lecture 2 hours; Laboratory 2 hours.

Provides training in reading basic engineering blueprints widely used in contemporary manufacturing industries. Both the visualization and interpretation facets of reading are given extensive coverage. Exposure and analysis of common drawing types, views, lines, dimensions, tolerances, callouts, notes, symbology; and revision procedures are included.

## 110 Mechanical Computer-Assisted Drafting I (3) UC:CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 110. Credit not given for both courses.

A foundational course in the theory and practice of mechanical computer-assisted drafting. Topics include technical sketching, hardware devices, software utilization, orthographic projection, single and multiple views, and basic dimensioning standards.

## 115 Mechanical Computer-Assisted Drafting II (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 115. Credit not given for both courses.

An elementary course in the theory and practice of mechanical computer-assisted drafting. Units include pictorial sketching, computer equipment, software manipulation, isometric projection, oblique projection, and pictorial dimensioning conventions.

## 205 Technical Descriptive Geometry (3) CSU

Lecture 2 hours; Laboratory 2 hours.

Same as E.M. 205. Credit not given for both courses.

Provides training in the analysis and solution of orthographic projection problems through application of the fundamental principles of descriptive geometry. Emphasis is placed on exposure to and interpretation of points, lines, and planes in primary, secondary, and successive auxiliary views. Theory and practice are included that involve visualization and graphic representation of intersections, angles, parallelism, perpendicularity, and revolutions.

## 210 Mechanical Computer-Assisted Drafting III (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 210. Credit not given for both courses.

An introductory course in the principles and practices of mechanical computer-assisted drafting. Areas covered include basic sectional views, cutting planes, section lining, basic auxiliary views, angle determination, and transfer distances.

## 215 Mechanical Computer-Assisted Drafting IV (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 215. Credit not given for both courses.

A basic course in the concepts and skills of mechanical computer-assisted drafting. Units include detail drawings, dimensional tolerancing, feature specification, assembly drawings, parts list generation, and screw thread callouts.

## 310 Mechanical Computer-Assisted Drafting V (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 310. Credit not given for both courses.

An intermediate level course in concepts and skills of mechanical computer-assisted drafting. Topics covered include advanced details with multiple sectional views, and advanced details with primary and secondary auxiliary views.

## 315 Mechanical Computer-Assisted Drafting VI (3) CSU

Lecture 1 hour; Laboratory 5 hours.

Same as E.M. 315. Credit not given for both courses.

A mid-level course in the concepts and skills of mechanical computer-assisted drafting. Units include surface texture specification detail assemblies with welding symbology, sheet metal details with flat patterns, and geometric dimensioning and tolerancing.

# Industrial Technology (Machine Shop-CNC)

## 130 Technology of Metal Machining Processes I (3)

Lecture 1; Laboratory 5 hours.

An introduction to the fundamentals of metal-machining processes. Theory is supplemented with demonstrations and/or practice on: lathes, mills, grinders, and drills. The course conveys concepts of metal-machining to: draftspersons, engineers/designers, NC programmers/ operators, QC inspectors; and provides entry-level skills to machinists, machine operators, and toolmakers.

## 140 Fundamentals of CNC Technology (3)

Lecture 1 hour; Laboratory 5 hours.

Acquaints the beginning student in numerical control with the fundamental concepts underlying this new science. Studies the format and manual preparation of tapes for a variety of basic numerical control Systems. Provides practical experience in the set up and operation of numerical controlled machine tools employing point-to-point, continuous path and circular interpolation machining control.

## 230 Technology of Metal Machining Processes II (3)

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of Industrial Technology 130.

Increases the depth and breadth of understanding of the theoretical concepts and practical skills introduced in Industrial Technology 130. The students will advance their studies in metallurgy theory and practice, engineering materials, metrology, and conventional machining techniques.

## 244 CNC Programming and Machine Operation - Lathe (3)

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of Industrial Technology 130 and 140.

Continues the study of N/C part program preparation begun in Industrial Technology 140 and develops the techniques of planning for efficient operation sequencing. Compares N/C, CNC and DNC; including examination of these techniques in relation to CAD/CAM. Emphasizes writing and running CNC Lathe programs.

## 248 CNC Programming and Machine Operation - Mill (3)

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of Industrial Technology 130 and 140.

Acquaints the advanced student with three axis CNC applications involving manufacturing planning, tooling design and/or specification, CNC mill programs employing full 3-axis positioning and implementation of programs using CNC mill equipment in the CAM lab. Students will learn and practice microcomputer assisted part programming of CNC mill.

## 330 Technology of Metal Machining Processes III (3)

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of Industrial Technology 230.

Emphasis is placed on the development of skill and concepts learned in Industrial Technology 130 and Industrial Technology 230 for those persons who will be employed in the metal-machining industry. Close tolerance work will be required. Additional techniques such as jig boring will be introduced.

**332 Projects Laboratory in Metal Machining Processes I (3)**

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of *Industrial Technology 230*.

The course develops skills in the techniques of design, planning, and execution. Prototype work not possible in regular classes will be covered. Emphasis is placed on developing a project that requires extensive job planning, independent study, and machining.

**346 CAM Programming Using Surf CAM (3) CSU**

**Advisory:** Completion of *Industrial Technology 140*.

Computer-aided manufacturing CNC programming using Surf CAM software. 2D and 3D geometry creation and manipulation, cutter selection & parameters, tool path creation and verification covered. Students will complete CNC programming assignments using Surf CAM.

**444 Projects Laboratory-CNC Lathe Programming (3)**

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of *Industrial Technology 244*.

Develops skills in the techniques of design, planning, and execution of computer numerical control programs for a CNC lathe. Part programs and CNC programming practices not possible in *Industrial Technology 244* will be covered. Emphasis is placed on developing a project to be programmed and machined using a CNC lathe, requiring extensive job planning, independent study and development.

**448 Projects Laboratory-CNC Mill Programming (3)**

Lecture 1 hour; Laboratory 5 hours.

**Advisory:** Completion of *Industrial Technology 248*.

Develops skills in the techniques of design, planing, and execution of computer numerical control programs for a CNC mill. Part programs and CNC programming practices not possible in *Industrial Technology 248* will be covered. Emphasis is placed on developing a project to be programmed and machined using a CNC mill, requiring extensive job planning, independent study and development.

**601 Robotics Workshop (2)**

Lecture 1 hour; Laboratory 2 hours.

Introductory course in Robotics and Manufacturing Technology covering safety, basic circuit theory, resistor color coding, use of DMM, soldering, integrated circuits, microprocessors, Moore's Law, computer controlled machines and the future of manufacturing. Students will build and program robots and develop computer control programs to operate robots.

**602 Advanced Robotics Workshop (2)**

Lecture 1 hour; Laboratory 2 hours.

An advanced course in robotics and manufacturing technology covering concepts of feedback control and reactive control of electro-mechanical systems, programming in Basic and C, uses of computers in robot control and metalworking & machining processes. Students will build, program, and operate a walking robot and a competition vehicular robot to be used in inter-school league activities.

**911-941****Cooperative Work Experience Education - Industrial Technology (1-4) CSU**

See *Cooperative Work Experience Education*.



# Industrial Technology (Pre-Engineering)

**171 Civil Engineering and Architecture (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

This course provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. This course covers topics such as: the roles of civil engineers and architects, project planning, site planning, building design, project documentation and presentation.

**175 Introduction to Engineering Design (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

A course that teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

**249 Computer Integrated Manufacturing (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

A course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in *Introduction to Engineering Design*, and *Design and Drawing for Production*. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included.

**275 Principles of Engineering (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

A course that helps students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problems solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

**278 Digital Electronics (3) CSU**

Lecture 1 hour; Laboratory 5 hours.

A course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

# Industrial Technology (Welding)

**161 Oxy-Acetylene Welding I (3)**

Lecture 1 hour; Laboratory 5 hours.

Gives the beginning student a solid foundation in the principles of oxyacetylene welding and cutting. Emphasizes safety along with related information on equipment, methods and materials.

**162 Oxy-Acetylene Welding II (3)***Lecture 1 hour; Laboratory 5 hours.*

Provides the advanced student with the enhanced concepts and skills required in the oxy-acetylene welding and cutting process. Reviews the basic principles of safety, equipment, methods, and materials then continues with fitting, metallurgy, heat treating, and distortion control factors.

**223 General Metallurgy I (4)***Lecture 4 hours.*

Presents an in-depth study of the production of ferrous metals, the physical and mechanical properties and characteristics of ferrous and nonferrous alloys. Includes a study of the varying effects of heat and alloy composition relative to structure and properties of various metals.

**261 Arc Welding I (3)***Lecture 1 hour; Laboratory 5 hours.*

Gives the student a basic foundation in the principles and practices associated with shielded metal arc welding. Emphasizes the rules of safety along with fundamental information on the tools and techniques used in the shielded metal process.

**262 Arc Welding II (3)***Lecture 1 hour; Laboratory 5 hours.*

Provides the student with the intermediate level concepts and skills required for successful shielded metal arc welding. Reviews essential safety, equipment, and methodology guidelines then continues with mid-level joint preparation and metallurgical effects on weldments.

**361 Inert Gas Arc Welding I (3)***Lecture 1 hour; Laboratory 5 hours.*

Gives the student a solid foundation in the principles and practices necessary to construct weldments using gas tungsten arc welding. Stresses welding safety and elementary information on the equipment and procedures critical to the gas tungsten process.

**362 Inert Gas Arc Welding II (3)***Lecture 1 hour; Laboratory 5 hours.*

Provides the student with the intermediate level theory and techniques required for successful gas tungsten arc welding of ferrous and nonferrous metals. Reviews basic safety and equipment information then explores the gas metal and flux cored arc welding processes.

**461 Advanced Arc Welding I (3)***Lecture 1 hour; Laboratory 5 hours.*

Gives the advanced student the training required to prepare for "Certification" in the Shielded Metal Arc Welding (SMAW) of structural steel. Lecture and practice concentrates on building codes, fabrication techniques, and testing.

**462 Advanced Arc Welding II (3)***Lecture 1 hour; Laboratory 5 hours.*

Provides the advanced student the skill needed to prepare for "Certification" in the Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) of structural steel. Discussion and application concentrates on construction regulations, weldment generation, and inspection.

**911-941****Cooperative Work Experience Education - Industrial Technology (1-4)***See Cooperative Work Experience Education.*

# Insurance

**101 Principles of Property and Liability Insurance (3)***Lecture 3 hours.*

This course presents basic information concerning various aspects of Property and Liability Insurance. First segment of the course covers fundamentals of insurance including: types of insurers, institutions that provide insurance, regulations, and measurements of financial performance. Second segment includes insurance operations, such as marketing, underwriting, and claims. Final segment covers insurance contracts, loss exposure, and risk management.

**102 Personal Insurance (3)***May be offered as Insurance 99a.**Lecture 3 hours.*

This course presents basic information regarding personal insurance. The course covers automobile insurance; homeowners insurance; other residential insurance, such as fire and earthquake insurance; marine insurance; other personal property and liability insurance; financial planning; life insurance; and health insurance. This course contains valuable personal insurance information for anyone who does not possess the knowledge of how to handle his/her personal insurance needs.

**103 Commercial Insurance (3)***May be offered as Insurance 99b.**Lecture 3 hours.*

This course presents basic information regarding the whole area of Commercial Insurance. Covers information concerning commercial property insurance, business income insurance, commercial crime insurance, equipment breakdown insurance, inland and ocean marine insurance, commercial general liability insurance, commercial automobile insurance, business owner's policies and farm insurance, workers compensation and employers liability insurance, and other miscellaneous insurance.

# International Business

**1 International Trade (3) CSU***Lecture 3 hours.*

This course gives a comprehensive overview of international business including basic trade theory, international marketing, export/import financing, the foreign currency markets, the operation and management of multinational firms, and the cultural aspects of global trade. It emphasizes the practical application of basic international trade topics.

**6 International Marketing I (3) CSU***Lecture 3 hours.*

This course presents the challenges of marketing consumer and industrial products in the global marketplace and the most effective approaches to these challenges. It explores the top potential exports for different countries and the most promising markets through the use of current market data and actual case studies of international marketing companies.

**18 Basics of Exporting (1)**

Lecture 1 hour.

This course is designed to provide the student with the basic information needed for an understanding of the export process. The course reviews the most important U.S. Government export regulations and gives the student an overview of export documentation and terminology.

**19 Basics of Importing (1)**

Lecture 1 hour.

This course is designed to give the student a solid understanding of the import process, including import documentation, and U.S. Government customs regulations. The course guides the student through the process of creating a basic import business plan.

**22 International Management (3)**

Lecture 3 hours.

An introduction to international management principles with an overview of global and multinational organizations. This course covers the issues of international human resource, operational topics, marketing decisions, strategic planning, and cross-cultural issues.

# Italian

**1 Elementary Italian I (5) UC:CSU**

Lecture 5 hours.

**Recommended:** Eligibility for English 28.

**Note:** Students with previous knowledge of Italian should not enroll in Italian 1 or 2, but in a higher level. Native speakers should enroll in Italian 3, 4, 5, or 6.

Introduces the fundamentals of pronunciation and grammar, practical vocabulary and useful phrases. Emphasizes the ability to understand, speak, read and write in simple Italian. Exposes the student to the culture of Italy. English is used whenever it is necessary to explain difficult grammatical concept. Otherwise the class is conducted in Italian. It corresponds to the first year of High School Italian.

**2 Elementary Italian II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Italian 1 or one year of high school Italian, with a grade of "C" or better.

**Recommended:** Eligibility for English 28.

**Note:** Students with previous knowledge of Italian should not enroll in Italian 1 or 2, but in a higher level. Native speakers should enroll in Italian 3, 4, 5, or 6.

Continues the study of basic Italian conversation using practical vocabulary and regular and irregular verbs in the present and past tenses. Stresses oral and written communication. Reading and writing for comprehension incorporate information about the culture and customs of Italy. It corresponds to the second year of High School Italian.

**3 Intermediate Italian I (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Italian 2 or two years of high school Italian with a grade of "C" or better.

**Recommended:** Eligibility for English 28.

**Note:** Concurrent enrollment in Italian 8 is strongly recommended for non-native speakers.

Normally offered in the Fall semester only.

Reviews the grammatical structures studied in Italian 1,2 and continues the grammar necessary for communication and comprehension of both spoken and written Italian. Promotes fluency by immersing the student in practical situations which require extensive use of the language. Continues the study of Italian culture, life and civilization. Provides special attention to representative Italian literature. Corresponds to the first three years of High School Italian.

**4 Intermediate Italian II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Italian 3 or three years of high school Italian with a grade of "C" or better.

**Note:** Concurrent enrollment in Italian 8 is strongly recommended for non-native speakers.

Normally offered in the Spring semester only.

Expands the structural concepts studied in Italian 1, 2 and 3. Develops additional vocabulary and related skills for maximum comprehension and expression. Provides greater depth in Italian literature with wider range of reading. Emphasizes discussion and analysis of the material. Continues the study of Italian culture and civilization.

**5 Advanced Italian I (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Italian 4 with a grade of "C" or better.

**Note:** Concurrent enrollment in Italian 8 is strongly recommended for non-native speakers.

Normally offered in the Spring semester only.

Introduces some of the important movements in Italian literature. It includes reading prose and poetry from representative Italian authors and continues the study of advanced composition and grammar.

**6 Advanced Italian II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Italian 5 with a grade of "C" or better.

**Note:** Concurrent enrollment in Italian 8 is strongly recommended for non-native speakers.

Normally offered in the Spring semester only.

Concerns works of Italian literature selected by students and instructor on the basis of relevance, interest and historical impact. Emphasis is on individual study and research shared in the form of reports both oral and written. This serves as a basis for the study of advanced composition, grammar and style.

**8 Conversational Italian (2) CSU - RPT 3**

Lecture 2 hours.

**Prerequisite:** Italian 2 or equivalent with a grade of "C" or better.

This course is offered as a pass/no pass course only.

Provides opportunities for practical conversation on everyday topics, current events, and cultural material, and for expansion of vocabulary according to student interest.

**10 Italian Civilization and Culture (3) UC:CSU**

Lecture 3 hours.

Study of the civilization of Italy from the origins to the present.

Conducted in English. Designed as a humanities course for all college students, especially those interested in arts, literature, architecture, music, politics, history and philosophy.

**185 Directed Study - Italian (1) CSU - RPT 2****285 Directed Study - Italian (2) CSU****385 Directed Study - Italian (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Italian on a contract basis under the direction of a supervising instructor.



# Japanese

## 1 Elementary Japanese I (5) UC:CSU

Lecture 5 hours.

**Recommended:** Eligibility for English 28.

**Note:** Students with previous knowledge of Japanese should not enroll in Japanese 1 or 2, but in a higher level Native speakers should enroll in Japanese 3 or 4.

Stresses the fundamentals of aural comprehension and pronunciation, basic vocabulary, useful phrases and the ability to speak, read and write simple Japanese. Includes basic facts on customs, culture and geography.

## 2 Elementary Japanese II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** Japanese 1 with a grade of "C" or better.

**Recommended:** Eligibility for English 28.

**Note:** Students with previous knowledge of Japanese should not enroll in Japanese 1 or 2, but in a higher level Native speakers should enroll in Japanese 3 or 4.

Continues the study of fundamentals of aural comprehension, basic vocabulary and the ability to speak, read and write simple Japanese. Includes orientation to customs, culture and geography.

## 3 Intermediate Japanese I (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** Japanese 2.

Normally offered in the Fall semester only

Continues the study of grammar and vocabulary building for conversational fluency and written composition. Begins the study of short narrative writings.

## 4 Intermediate Japanese II (5) UC:CSU

Lecture 5 hours.

**Prerequisite:** Japanese 3.

Normally offered in the Fall semester only.

Continues the study of grammar and vocabulary building for conversational fluency and written composition. Continues the study of short narrative writings. Includes the study of Japanese culture.

## 8 Elementary Conversational Japanese (2) CSU RPT 3

Lecture 2 hours.

**Prerequisite:** Japanese 1 with a grade of "C" or better.

Provides opportunity for oral communication in everyday settings about current events, general cultural materials and individual personal interests.

## 27 Cultural Awareness Through Advanced Conversation (3) UC:CSU

Lecture 3 hours.

**Prerequisite:** Japanese 3.

Stresses the usage of Japanese language skills that have been acquired through prior courses for authentic communication purposes. Explores the modern lives and customs of Japanese people and prepares for real encounters with Japanese culture. Includes intercultural comparisons between American culture and Japanese culture.

## 185 Directed Study - Japanese (1) CSU RPT 3

## 285 Directed Study - Japanese (2) CSU

## 385 Directed Study - Japanese (3) CSU

Conference 1 hour per unit.

Allows students to pursue Directed Study in Japanese on a contract basis under the direction of a supervising instructor.

# Journalism

## 100 Social Values in Mass Communication (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

**UC credit limitation:** Journalism 100 and 251 combined: maximum credit, one course.

A general interest survey and evaluation of the mass media in economic, historical, political, psychological and social terms. Focus is to help the media consumer better understand today's mass communications: newspapers, radio, television, motion pictures, magazines, advertising and public relations. Course content discusses relationships, ethics, rights and responsibilities of media in today's society.

## 101 Collecting and Writing News (3) CSU

Lecture 3 hours.

**Recommended:** Concurrent enrollment in Journalism 100 for all journalism majors.

Stresses instruction and practice in news gathering with particular emphasis on documentation, research and news writing. Adherence to professional writing style; legal and ethical aspects of the profession are included. Required of all journalism majors.

## 106 Mechanics of Expression (3) CSU

Lecture 3 hours.

Provides thorough instruction in grammar, punctuation, capitalization and word usage. Concentrates on critical analysis and application of the interaction and relationship to each other of words, phrases and clauses in the correct and effective expression and transference of thoughts in written English.

## 108 Article Writing (3) CSU

Lecture 3 hours.

Offers instruction in the writing of material for a magazine, including articles, editorials and reviews suitable for publication; includes practice in editing and the use of illustrative materials.

## 202 Advanced Newswriting (3) CSU

Lecture 3 hours.

**Prerequisite:** Journalism 101 with a grade of "C" or better.

Provides the student with principles and practice in writing specialized types of newspaper and online stories and increases mastery of fundamental reporting techniques. Interpretative writing skills, editorial writing, and feature writing are included. Required of all journalism majors.

## 217 Publication Laboratory (2) CSU RPT 3

Laboratory 6 hours.

**Prerequisite:** Journalism 101 with a grade "C" or better; concurrent enrollment in journalism 202 or 218 or Photography 21.

Stresses constructive criticism of students in writing style and news evaluation. Publication production plans are developed. The instruction is directed by newspaper, advisor and staff members.

## 218 Practical Editing (3) CSU RPT 3

Lecture 1 hour; supervised activity 6 hours.

**Prerequisite:** Journalism 202 with a grade of "C" or better.

**Recommended:** Prior or concurrent enrollment in Journalism 216 for Journalism majors.

Provides practical instruction and practice in writing, editing and other preparation required to produce the campus newspaper. Print and online editions are evaluated and critiqued in regularly scheduled student staff meetings.

**219 Techniques for Staff Editors (1) CSU RPT 2**

Laboratory 3 hours.

**Prerequisite:** Journalism 101 with a grade of "C" or better and concurrent enrollment in Journalism 202 or 218 or Photography 21.

Offers instruction for campus newspaper editors in editorial writing and analysis of editorial problems. Emphasis is placed on formulating editorial policy.

**220 Magazine Editing (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 3 hours.

**Prerequisite:** Journalism 101 with a grade of "C" or better and concurrent enrollment in Journalism 202 or 218, or Photography 20 or 21.

Presents the theory of writing and editing a magazine. Artistic design, principles of harmony and unity, and creativity in layout are stressed. Writing and editing of copy, designing pages, selecting photographs and other illustrations and design materials, preparing them for production; arranging production schedules; and other aspects of publishing are included.

**221 News Photography (4) CSU RPT 3**

Lecture 2 hours; Laboratory 6 hours.

Same as Photography 21. Credit not given for both courses.

**Prerequisite:** Photography 20 with a grade of "C" or better.

Gives practical experience in the taking and processing of news and feature pictures, emphasizing the use of cameras normally employed in photojournalism. Affords students the opportunity to take, develop, and print pictures for the college newspaper and magazine.

**251 Visual Communication in Mass Media (3) UC:CSU**

Lecture 3 hours.

**Recommended:** Journalism 100,101; Photo 10.

UC Credit Limitation: Journalism 100 and 251 combined; maximum credit, one course.

Examines the pervasive influence of the visual components of mass communication including signs, typography, photographs, newspaper layout, magazine and Web design, editorial cartoons, print and television advertisements, television programs, and cinematography. Emphasizes determining obvious and implied messages and their impact on individuals and society. Includes discussion of ethical considerations inherent in visual communication.

**255 Online Journalism Production (The Roundup Online) (1) CSU – RPT 3**

Lecture 1 hour; Laboratory 1 hour.

**Recommended:** Journalism 101 and Photography 10.

This course focuses on producing journalistic content and multimedia storytelling for online campus publications, such as The Roundup Online and The Bull Online, as a practical laboratory. Students research, produce and edit content for the online school newspaper using multimedia techniques, such as photo slideshows, videos, animations, Flash-based presentations, podcasts, Webcasts and other various forms of digital content. Students research stories, produce and edit them, and prepare them for dissemination. New trends in online journalism are also explored. Ethical and legal aspects of communication and journalism are also covered.

**185 Directed Study - Journalism (1) CSU - RPT 2****285 Directed Study - Journalism (2) CSU****385 Directed Study - Journalism (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Journalism on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Journalism (1-4) CSU**

See Cooperative Work Experience Education.

## Law

For additional law courses, see **Administration of Justice and Business Administration.**

**3 Civil Rights and the Law (3) UC:CSU**

Lecture 3 hours.

The course offers a comparative and analytical study of Civil Rights Law and related subjects based upon the United States Constitution and decisions of the United States Supreme Court. Students will have an opportunity to participate in class discussion of civil rights issues currently affecting their lives everyday. Topics included in the course are Due Process of Law, Freedom of Expression, Association, Press, Religion; Right of Privacy; Equal Protection; Search and Seizure; Miranda Rights; Right to a Fair Trial; Death Penalty; and Structure of the Legal System.

## Learning Foundations

See also **Learning Skills and Special Education**

**22 Learning Strategies (1) (NDA)**

Lecture 1 hour.

Replaces Special Education 1.

Designed for students with verified disabilities, this course provides information about each student's individual learning disabilities and how to compensate for their related learning problems. The course will develop and practice techniques to enhance academic achievement appropriate for specific learning disabilities.

**30 Study Strategies (2) (NDA) - RPT 3**

Lecture 2 hours.

Designed for students with verified disabilities, this course will develop and implement effective study strategies. Topics will include: time management, note taking, textbook reading strategies, test taking, coping with test anxiety, improving active listening skills, and goal setting. In addition, student will identify their personal learning strengths and how to apply them.

**43 Reading Comprehension II (3) (NDA) - RPT 2**

Lecture 3 hours.

Replaces Special Education 2.

Specifically designed for students with verified learning disabilities, especially in reading, this course will focus on reading comprehension of extended passages from various media and chapters from diverse academic fields. Students will read materials related to current events, world geography, world history, and world politics while learning basic techniques of note-taking, paraphrasing and preparing for examinations. Students will develop an extensive vocabulary while mastering the art of paraphrasing, taking notes and preparing for examinations.

**50 Computer Assisted Vocabulary Development (1) (NDA) – RPT 3**

Laboratory 3 hours.

Designed for students with verified disabilities, this course uses a special computer program that individualizes instruction and provides opportunities for learning, review, and testing of vocabulary words in all three learning modalities (visual, auditory, tactile). Open to students of all ranges of vocabulary knowledge. Students may take this course up to three times and learn different words each time.

**56 Computer Assisted Spelling Development (1) (NDA) – RPT 3***Laboratory 3 hours.*

Designed for students with verified disabilities, this course uses a special computer program that individualizes instruction and provides opportunities for learning, review, and testing of commonly misspelled words in all three learning modalities (visual, auditory, tactile). Open to students of all ranges of spelling knowledge. Students may take this course up to three times and learn different words each time.

**60 Computer Assisted Beginning Writing Skills (3) (NDA) – RPT 3***Laboratory 3 hours.*

Designed for students with verified disabilities, this course uses special computer programs that teach and practice sentence writing, proof reading, and short paragraph writing. This course involves the use of sentence patterns and verb forms. Students may take this course up to three times and do more advanced work each time.

**61 Computer Assisted Intermediate Writing Skills (3) (NDA) – RPT 2***Laboratory 3 hours.*

Designed for students with verified disabilities, this course uses special computer programs that teach and practice intermediate sentence writing and short essay writing. This course involves the use of more advanced sentence patterns and verb forms than Learning Skills 60. Students may take this course up to three times and do more advanced work each time.

## Learning Skills

**1 Reading (3) (NDA) - RPT 3***Lecture 2 hours; Laboratory 2 hours with homework.*

Individualized, self-paced reading remediation for ESL students and/or native speakers. Program ranges from learning to read to improving comprehension and interpretation. Tutors and computer programs supplement learning.

**2 English Fundamentals (3) (NDA) - RPT 3***Lecture 2 hours; Laboratory 2 hours with homework.***Recommended:** Concurrent enrollment in Learning Skills 7.

Individualized, self-paced work on punctuation, sentence structure and correctness, supplemented by computer-assisted instruction.

**3 Vocabulary (3) (NDA) - RPT 3***Lecture 5 hours.*

This class teaches strategies to learn vocabulary in the context of language use. Acquisition techniques such as context clues, phonology, word morphology, syntax, word forms, semantic categories, dictionary and thesaurus use, and comprehension skills will be covered for success in college/vocational coursework.

**7 Basic Composition (3) (NDA)***Lecture 2 hours; Laboratory 2 hours with homework.*

Small group workshop (4-10 people) in all types of writing, from journal to research paper. ESL and native-speaking students participate in exercises, writings, peer response, as well as work individually at their own pace. Tutors, computer programs supplement workshop activities. Preparation for English 84-87 or English 21.

**10 Mathematics Fundamentals (3) (NDA) - RPT 3***Lecture 2 hours; Laboratory 2 hours.*

Individualized, self-paced instruction in math from whole number operations to algebra and geometry. Tutorial and computerized math programs provide review, remediation and/or practice.

**33 Basic Skills for Nursing (3) – RPT 2***Lecture 1 hour; Laboratory 6 hours.*

This course is offered as a supplement to nursing in the areas of reading, writing in the workplace, applied math, biology and listening

**37 Nursing, Learning Skills (1)***Lecture .5 hour; Laboratory .5 hour.**Co-requisite Nursing 404 or 406*

This course is offered as a supplement to nursing for improvement of advanced learning skills, and nursing techniques.

## Library Science

**102 Internet Research Methods (1) CSU***Lecture 1 hour; Laboratory 1.5 hours per week.***Recommended:** Knowledge of Windows 6, Basic keyboarding skills.

This course focuses on how to find and evaluate information and resource materials on the Internet. Information access, search strategies, and specific search tools will be covered. Copyright, censorship, and intellectual property will be discussed.

## Life Science

Life Science courses are listed under the headings of:

**Anatomy**  
**Biology**  
**Microbiology**  
**Oceanography**  
**Physiology**

## Linguistics

**1 Introduction to Language and Linguistics (3) UC:CSU***Lecture 3 hours.**Same as Anthropology 104 and 161. Credit given for one course.**May be offered as an honors section.*

Surveys the great variety of ways humans communicate both verbally and nonverbally. The course focuses on the structure, function, and history of language, with selections on the sociology and psychology of language, language learning, and the origins and evolution of language.



## 2 Introduction to Sociolinguistics (3) UC:CSU

Lecture 3 hours.

Same as Anthropology 162. Credit not given for both courses.

This course examines how societies create, maintain, and change languages. Students will study the history of the varieties of language and their relationship to geography, cultural identity, and gender. Students will gain an understanding of language as a tool of communication, symbolism, and education in society.

## 3 Introduction to Psycholinguistics (3) UC:CSU

Lecture 3 hours.

Same as Anthropology 163. Credit not given for both courses.

This course is a general introduction to psycholinguistics, which will focus on speech, perception, language processing, language production, and language acquisition. Students will study the relationship between the theories proposed by linguistics, and data as observed in everyday life. The course will touch on related areas, such as processes of reading, language and the brain, and language and thought.

## 31 Human Relations for Employees (3) CSU

Lecture 3 hours.

This course covers the practical application of psychological and sociological principles to the study of human relations in business and industry. The course emphasizes case studies and teamwork. Topics covered include communication styles, self-esteem, ethics, attitude and motivation, self-disclosure, emotional balance, leadership strategies, work force diversity, and professional presence.

## 33 Personnel Management (3) CSU

Lecture 3 hours.

Consists of a critical examination of the principles, methods, and procedures related to the effective utilization of human resources in organizations. Includes the management of employment recruiting, testing, selection and placement; job evaluation; wage and salary administration; labor relations and communication; performance evaluation; promotion and transfer; accident prevention; labor law and legislation; benefits and services; discipline, motivation and morale.

## Cooperative Work Experience Education - Business (1-4)

See Cooperative Work Experience Education.

# Machine Shop

See course listings under  
Industrial Technology - Machine Shop/CNC.

# Management

## 2 Organization and Management Theory (3) CSU

Lecture 3 hours.

This course provides students with an introduction to the management and organization of businesses. Provides students with an understanding of how the management of people and resources accomplishes organizational goals. Covers the basic concepts of leading, planning and control, organization design, operations management, decision making, human resource management, managing change, individual and group behavior, motivating and rewarding employees, communicating and interpersonal skills, work teams, ethics, leadership and trust.

## 6 Public Relations (3) CSU - RPT 1

Lecture 3 hours.

Covers essentials for organizing and operating a public relations program. Includes the study of relations with the community, customers, stockholders, news media, employees. Multicultural relations and PR writing are also covered.

## 13 Small Business Management I (3) CSU

Lecture 3 hours.

Presents a systematic approach to successful small business operation. Covers personnel evaluation, pre-ownership evaluation, management and leadership, financing, location, taxation, records, employees, purchasing, advertising, sales, and credit. Emphasizes the development of a business plan.

# Marketing

## 1 Principles of Selling (3) CSU

Lecture 3 hours.

This course emphasizes the principles used in persuasive communication. Consumer buying behavior, presentations, and closing are covered. The course is designed to help students currently involved in sales as well as those seeking to improve their communication skills. Sales presentations, videotapes and case studies are used.

## 11 Fundamentals of Advertising (3) CSU

Lecture 3 hours.

This course introduces the student to the role of advertising in our economy. It gives a comprehensive overview of the planning and managing of advertising. The course also covers how the major forms of media, such as television, radio, newspapers, magazines, the internet are integrated into the advertising campaign.

## 21 Principles of Marketing (3) CSU

Lecture 3 hours.

This course introduces students to various activities in the field of marketing. It provides an understanding of the principles involved in the distribution of a product from the producer to the user or consumer. It covers the consumer market, consumerism, packing and branding, pricing, wholesaling, retailing, sales promotion, personal selling and international marketing.

## 31 Retail Merchandising (3) CSU

Lecture 3 hours.

Offered Fall semesters only.

Covers the retail operation in total including a study of store location, store layout, store organization, merchandise buying, pricing, stock planning and retail sales promotion. Personnel duties and responsibilities are also studied including the work of the department manager, store buyer, merchandise manager, publicity director, store superintendent, and the store comptroller.

## Cooperative Work Experience Education - Business (1-4)

See Cooperative Work Experience Education.

# Mathematics

## MATHEMATICS PLACEMENT PROCESS:

All students who have not completed a college mathematics course must complete the Mathematics Placement Process at the Pierce College Assessment Center (Campus Center). Contact the Assessment Center at (818) 719-6499 for an appointment and sample tests. Review is essential because the test cannot be taken again for six months.

Placement tests are given at four levels: Algebra Readiness, Elementary Algebra, Intermediate Algebra, and Precalculus. Upon completing the process, students are advised of their recommended placement and given an authorization to enroll in that course. Students seeking authorization to enroll in a course other than that recommended by the assessment process must obtain enrollment authorization from a Mathematics Department advisor, if they have satisfied the prerequisite.

### Mathematics Laboratory

Open to any regularly enrolled student in Pierce College. Mathematics tutoring is located in The Learning Center in room TLC 1613 (enter through room TLC 1604), 9 a.m. – 8 p.m., Monday – Thursday, and 9 a.m. – 2 p.m., Friday. Additional Mathematics tutoring is available in room COSC 1512 (Mathematics computer classroom). Call 818-719-6468 for times.

### 105 Arithmetic for College Students (3) (NDA)

Lecture 3 hours.

Reviews the arithmetic essential in college and business. Topics include fractions, decimals, percent, and measurement. The course emphasizes problem-solving techniques that are useful in practical situations.

### 110 Introduction to Algebraic Concepts (5) (NDA)

Lecture 5 hours.

Discusses abstract ideas necessary to understanding algebra and reviews selected topics of arithmetic relevant to algebra. Introduces fundamental notions of algebra including signed numbers, simple equations, and modeling. Includes hands-on laboratories and group work instruction in study skills.

### 112 Pre-Algebra (3) (NDA)

Lecture 3 hours.

Discusses abstract ideas necessary for understanding algebra and reviews selected topics in arithmetic relevant to algebra. Introduces fundamental notions of algebra including signed numbers, simple equations, and modeling.

### 113 Elementary Algebra A (3)

Lecture 3 hours.

**Prerequisite:** Math 112.

The first half of Math 115. The course covers integer exponents, polynomials, solving linear equations and inequalities, and factoring. Math 113 and 114 together are equivalent to Math 115. Credit is allowed in only one of Math 115 or the Math 113/114 combination. Concurrent enrollment in Math 113 and 114 is not permitted.

### 114 Elementary Algebra B (3)

Lecture 3 hours.

**Prerequisite:** Math 113.

The second half of Math 115. The course reviews factoring, and covers rational expressions, introduction to graphing linear equations in two variables, solving systems of linear equations, roots and index 2 radicals, and methods of solving quadratic equations. Math 113 and 114 together are equivalent to Math 115. Credit is allowed in only one of Math 115 or the Math 113/114 combination. Concurrent enrollment in Math 113 and 114 is not permitted.

### 115 Elementary Algebra (5)

Lecture 5 hours.

**Prerequisite:** A grade of "C" or better in Mathematics 110 or 112, or appropriate skill level demonstrated through the Mathematics placement process.

Includes operations with algebraic expressions, solutions of linear equations and inequalities, systems of linear equations, quadratic equations, graphs of lines and simple parabolas. No credit given for students who have completed Mathematics 116.

### 117 Elementary Algebra Part 1 (5)

Lecture 5 hours.

**Prerequisite:** A grade of "C" or better in Mathematics 110 or 112 or appropriate skill level demonstrated through the Mathematics placement process.

This course covers the first half of Math 115. It includes operations with algebraic expressions, solution of linear equations and inequalities, graphs of lines, systems of linear equations, and exponents and roots. No credit given for students who have completed Mathematics 115 or 116.

### 118 Elementary Algebra Part 2 (5)

Lecture 5 hours.

**Prerequisite:** A grade of "C" or better in Math 117

This course covers the second half of Math 115. It includes quadratic equations, polynomials and factoring, algebraic fractions, scientific notation, and working with radicals. No credit given for students who have completed Mathematics 115 or 116.

### 120 Plane Geometry (5)

Lecture 5 hours.

**Prerequisite:** Mathematics 115\*\*\* or appropriate skill level demonstrated through the Mathematics placement process, and equivalent high school preparation.

Covers an introduction to logic and the construction of a formal proof, the study of plane figures such as triangles, parallelograms and other polygons, and circles. Construction methods with compass and straight edge; computations for perimeter, area and volume.

### 125 Intermediate Algebra (5)

Lecture 5 hours.

**Prerequisite:** Mathematics 115\*\*\* with a grade of "C" or better, or appropriate skill level demonstrated through the Mathematics placement process and equivalent high school preparation.

**Note:** Credit given for either Mathematics 125 or 126, but not both.

Linear equations and inequalities, systems of linear equations and Gaussian elimination, quadratic equations, polynomials and rational expressions, exponents and radicals. Functions and their graphs, including linear, quadratic and exponential functions; logarithms, polynomials and algebraic fractions. Modeling and problem solving. Sequences, conic sections, and complex numbers.

### 145 Technical Mathematics I (3)

Lecture 3 hours.

**Prerequisite:** Mathematics 105

Provides an introduction to the practical application of mathematics as needed in industry. Fractions, decimals, percentage, square and square roots, constants, solids, etc. are reviewed. Emphasis is on the solution of technical problems beneficial to those engaged in an industrial trade.

### 215 Principles of Mathematics I (3) UC:CSU

(for Prospective Elementary School Teachers)

Lecture 3 hours.

**Prerequisite:** Mathematics 120 and either 125 or 126\*\*\* with grades of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

Includes problem solving, functions, systems of numeration and number concepts; whole numbers, integers, rational and real numbers, together with their algorithms; use of manipulatives; techniques/strategies employed by children to accomplish arithmetic tasks. For prospective elementary or junior high school teachers.

### 227 Statistics (4) UC:CSU

Lecture 4 hours.

**Prerequisite:** Mathematics 125 or 126\*\*\* with a grade of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

**UC Credit Limit:** Credit not given for both Statistics 1 and Mathematics 227

Discusses averages, variability, graphical techniques, probability hypothesis testing, sampling, estimation, correlation, prediction, and linear regression. Emphasis is on the collection and analysis of data and how inferences about a population are made from a sample.

**235 Finite Math (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 125.

This course covers topics of finite mathematics, including solving systems of linear equations, operations on matrices, and linear programming with the simplex method. In addition, the course covers the mathematics of finance, combinatorics, probability and statistics. Optional topics may include set theory, logic, and game theory.

**238 Calculus for Business and Social Science I (5) \*UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 125 or 126\*\*\* with a grade of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

**Advisory:** Completion of Mathematics 245.

An introduction to the study of calculus of one variable, differentiation and integration of algebraic and exponential functions, application of differential calculus to modeling and curve sketching, use of integral calculus to determine areas between curves, techniques of integration. Topics of finite mathematics including compound interest and annuities.

**240 Trigonometry (3) CSU**

Lecture 3 hours.

**Prerequisite:** Mathematics 120 and either 125 or 126\*\*\* with grades of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

Centers on a study of the six trigonometric functions, including a study of their graphs, inverses of the functions, solution of triangles, models for periodic phenomena, identities, conditional equations, and polar coordinates.

**245 College Algebra (3) \*\*UC:CSU**

Lecture 3 hours.

**Prerequisite:** Mathematics 120 and either 125 or 126\*\*\* with grades of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

Discusses relations, functions and their graphs, matrices and determinants, theory of equations, permutations, combinations, probability, and conic sections.

**260 Pre-calculus (5) \*\*UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 240\*\*\* with a grade of "C" or better or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

**UC Credit Limit:** Maximum 4 units.

Develops properties of the elementary functions, including exponential, logarithmic and trigonometric functions. Graphing is stressed. Elements of analytic geometry, including conic sections and sequences and series are developed.

**261 Calculus I (5) \*UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 260\*\*\* with a grade of "C" or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.

Begins a sequence of three courses in calculus. Coverage includes limits, continuity, differentiation and some integration of algebraic and transcendental functions. Applications of the calculus include related rates, maxima and minima of functions of one variable, calculation of areas, volumes, arc length and growth.

**262 Calculus II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 261\*\*\* with a grade of "C" or better, or a score of 3 or higher on the high school Advanced Placement Calculus AB Test.

Continues the study of calculus begun in Mathematics 261 with attention given to techniques and applications of integration as well as functions expressed in polar and parametric forms. Infinite series and expansion of functions into series and introduction to differential equations complete the course.

**263 Calculus III (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Mathematics 262\*\*\* with a grade of "C" or better, or a score of 3 or more on the high school Advanced Placement Calculus BC Test.

Concludes the study of calculus begun in Mathematics 261. The concepts of the derivative and the definite integral are extended to functions of several variables in the form of partial derivatives and multiple integrals. In addition, the theory of limits, derivatives, and integrals are extended to vector-valued functions. Topics in vector calculus such as vector fields, line integrals, divergence and curl, Green's, Stokes', and the Divergence theorems are treated.

**270 Linear Algebra (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** Mathematics 262\*\*\* with a grade of "C" or better  
*Mathematics 263 is strongly recommended*

Covers vector spaces, linear transformations and matrices, matrix algebra, determinants, solutions of systems of equations, eigenvectors and eigenvalues.

**275 Ordinary Differential Equations (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** Mathematics 263 with a grade of "C" or better

Includes an introduction to first, second and higher order linear differential equations, operator methods, series solutions, the gamma function, Laplace transform techniques, Boundary value problems, and numerical methods with an emphasis on applications.

**185 Directed Study - Mathematics (1) CSU - RPT 2****285 Directed Study - Mathematics (2) CSU****385 Directed Study - Mathematics (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Mathematics on a contract basis under the direction of a supervising instructor.

**\*UC Credit Limit:** Mathematics 238 combined with Mathematics 261 maximum credit one course.

**\*\*UC Credit Limit:** Mathematics 245 combined with Mathematics 260, maximum credit one course.

**\*\*\*Or the equivalent course at an accredited college or university.**

**UC Credit Limit:** Mathematics 227, Statistics 1 and 7, maximum one course.

## Media Arts

Media Arts courses are listed separately under the following headings:

**Broadcasting  
Cinema  
Journalism  
Multimedia  
Photography  
Public Relations**

# Meteorology

## 3 Introduction to Weather and Climate (3) UC:CSU

Lecture 3 hours.

Same as Geography 3. Credit not given for both courses.

Studies the earth's atmospheric environment using an Earth Systems Science approach. Emphasis is given to Earth-sun relationships, solar radiation inputs, earth radiation emission and temperature, global warming, atmospheric moisture measurements, adiabatic processes, clouds and precipitation formation, atmospheric pressure and wind flow, storm development, weather forecasting, and climate and climate change. Tools used for inquiry may include weather maps, satellite imagery, and geographic information systems.

## 185 Directed Study - Meteorology (1) CSU - RPT 2

## 285 Directed Study - Meteorology (2) CSU

## 385 Directed Study - Meteorology (3) CSU

Conference 1 hour per unit.

**Prerequisite:** Geography 3 or Meteorology 3.

Allows students to pursue Directed Study in Meteorology on a contract basis under the direction of a supervising instructor.

# Microbiology

## 1 Introductory Microbiology (5) \*UC:CSU

Lecture 3 hours; Laboratory 6 hours.

**Note:** A total of 5 units given for Microbiology 1 and 20.

**Prerequisite:** Biology 3, 6 or 44 and Chemistry 51 or Physiology 1 or equivalent with a grade of "C" or better.

Major emphasis is on the nature of bacteria—their morphology, metabolism, genetics, growth and methods of controlling their populations, their aptitude in causing infectious diseases, and host-pathogen relationships. Other topics include free living and pathogenic fungi, protozoa, the helminthes (worms) and the diseases they cause, the fundamentals of virology and immunology, bioterrorism, and potential infectious agents of bioterrorism. Laboratory techniques emphasize microscopy, aseptic techniques in cultivation, isolation, staining, enumeration, control, and identification of bacteria. Students explore microbes in soil, air, water, and food with particular emphasis on medical microbiology and the major etiological agents of disease, as well as an introduction to biotechnology.

## 20 Introductory Microbiology (4) \*UC:CSU

Lecture 3 hours; Laboratory 3 hours.

**Note:** A total of 5 units given for Microbiology 1 and 20.

**Prerequisite:** Biology 3, 6 or 44 and Chemistry 51 or Physiology 1 or equivalent with a grade of "C" or better.

Micro 20 is the study of microorganisms, including their discovery, morphology, metabolism, genetics, growth requirements, and most importantly, their roles in infectious diseases. Other major topics covered are virology, immunology, and methods of control of microorganisms. The labs include microscopy, aseptic technique in the handling of bacteria, and isolation, cultivation, staining, identification, and control of bacterial populations. Recommended for nursing and allied health students.

**\*UC Credit Limit:** Combined Microbiology 1 and 20, maximum one course.

# Modern Languages

Modern Language courses are listed separately under the following headings:

**American Sign Language**

**French**

**Italian**

**Japanese**

**Spanish**

# Multimedia

## 100 Introduction to Multimedia Computer Applications (3) CSU - RPT 3

Lecture 2 hours; Laboratory 2 hours.

This course develops skills necessary to digitally manipulate graphic images and text in industry standard multimedia computer applications. Emphasis is placed on mastering basic computer skills while applying design principles to finished projects. The course will also introduce the principles of digital video editing.

## 108 Beginning Digital Film/Video Production Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.

Same as Cinema 108. Credit given for one course.

Comprehensive overview of all aspects of digital film/video production from script concept to finished project, centering on basic theory and its application via exams, demonstrations, and hands-on experiences with digital media exercises.

## 109 Beginning Documentary Production Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.

Same as Cinema 109. Credit given for one course.

Comprehensive overview of all aspects of documentary digital film/video production from concept to finished project, centering on basic theory and its application via exams, demonstrations, and hands-on experiences with digital media documentary production exercises.

## 110 Visual Communication (3) CSU - RPT 3

Lecture 2 hours; Laboratory 2 hours.

This is a fundamental course on the nature of visual communication. Emphasis is placed on historical, philosophical, theoretical, cultural and practical aspects of art, design and Multimedia.

## 114 Sound Design for Digital Film/Video/Radio (3)

Lecture 2 hours. Laboratory 2 hours

Same as Cinema 114 and Broadcasting 114. Credit given for one course.

Intermediate course dealing with all aspects of digital media including film/video/radio sound recording, mixing, and editing from theory to application, centering on learning the basic parts and functions of professional motion picture and digital video/radio sound equipment, as well as sound techniques and aesthetics with an emphasis on editing and post-production for digital media.

**200 Digital Imaging (3)**

Lecture 2 hours; Laboratory 2 hours.

**Note:** Computer application for this class is Adobe Photoshop.

**Prerequisite:** Art 604.

This is a fundamental course in digital imaging. Emphasis is placed on techniques used in computer manipulation of photographs, digital capture, color theory, lighting, the printing process and presentation.

**210 Digital Editing (3) CSU - RPT 3**

Lecture 2 hours; Laboratory 2 hours.

This course introduces students to computer applications for the digital editing of video and sound. Emphasis is placed on non-linear post production tools.

**230 Visual Communication for Multimedia (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

This course examines visual communication as it is affected by recent trends in multimedia. Emphasis is placed on creating original scripts and multimedia projects that reflect a wide variety of cultural contexts.

**340 Vector Graphics (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Note:** Computer applications covered in this class are Adobe Illustrator and Macromedia Flash.

This is a course in vector graphics for multimedia, using multimedia computer applications to produce full-color vector illustrations. Students will examine the role of vector graphics in various multimedia applications, such as game design and animation.

**801 Multimedia Storytelling (6) CSU**

Lecture 3 hours; Laboratory 9 hours.

**Prerequisite:** Journalism 101 and Photo 10.

This convergence journalism course incorporates print and broadcast techniques to produce multimedia pieces for the web. This includes multimedia storytelling incorporating shooting and editing video, recording and editing sound, writing and still photographs.

**802 Introduction to Podcast (1) CSU**

Laboratory 3 hours.

**Corequisite:** Journalism 101.

This course teaches the principles and practice of writing for audio podcasts -- with some additional instruction for video -- emphasizing news, entertainment and information. Podcasts will be developed in class. Students will learn to use microphones, recording and editing software, and how to post their podcasts. A website will be provided for students to post podcasts, and popular online options will be used for posting.

**803 Intro to Webcasting (2) CSU**

Lecture 1 hour. Laboratory 2 hours.

Teaches the principles and practice of producing Webcasts-- emphasizing news, entertainment and information. Students will learn fieldwork, interviewing, writing, shooting, editing and postproduction techniques for Webcasts. This course provides instruction on the use of video and audio recording equipment, live streaming techniques, recording and editing software, as well as posting and publicizing Webcasts. Audience, lighting techniques, composition, Students' work may also be posted to student-run campus media online.

**804 Photoshop for Motion Picture and Television (3) CSU**

Lecture 2 hours; Laboratory 2 hours

Beginning level course dealing with graphics for Motion Pictures and Television using digital imaging software, with an emphasis on Adobe Photoshop, including layers, masks, filters, text, blend modes, editing tools, animation techniques and output to video applications, via demonstrations, practicums, and exercises.

**805 Motion Graphics and Compositing for Film and Television (3) CSU**

Lecture 2 hours. Laboratory 2 hours.

Intermediate level course dealing with motion graphics and compositing for film and television using digital imaging and animation software, with an emphasis on After Effects or similar state-of-the-art software, including layers, masks, filters, animation techniques and output to video, via demonstrations, practicums, and exercises.

# Music

Check with the Music Department or Counseling Office for transferability of courses to four-year institutions, and for unit limitations of courses accepted by both University of California and CSUN. All Music Majors are required to enroll in a performing ensemble each semester (Music 501, 531, 721, 741, 745). Performance classes study different literature each semester, and musical growth is in no sense completed in a single semester. For these reasons it is educationally sound for a student to repeat a music performance course.

**101 Fundamentals of Music (3) UC:CSU**

Lecture 3 hours.

This course presents basic information about music and music performance, including the rudiments of music notation, scales, key relationships, intervals, chord construction and common musical terms. Also, beginning levels of ear training, sight singing and keyboard techniques are introduced.

**111 Music Appreciation I (3) UC:CSU**

Lecture 3 hours.

Provides a survey of music by considering the development of musical ideas and their relationship to cultural life from the Middle Ages to the present. Music listening skills are developed through lectures, listening activities, and concert attendance.

**112 Music Appreciation II (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** Music 111.

Offers a continuation of Music 111, stressing the forms and styles of music common to the various historical periods.

**121 Music History and Literature I (3) UC:CSU**

Lecture 3 hours.

**Note:** Students should have some familiarity with 18th century harmonic practice. Offered Fall semesters.

Traces the history and development of musical thought from ancient Greece through 1750. Emphasizes extensive listening through recordings and concerts. Designed primarily for music majors and those with considerable musical background.

**122 Music History and Literature II (3) UC:CSU**

Lecture 3 hours.

**Note:** Students should have some familiarity with 18th century harmonic practice. Offered Spring semesters.

Studies styles and forms beginning with the great classical composers and concluding with the music of the present day. Designed primarily for music majors and those with some musical background.

**152 Current Musical Events (1) CSU - RPT 3**

Laboratory 2 hours. Attendance at local concerts required.

Concurrent enrollment in Music 111 is recommended.

Students attend on campus concerts presented by faculty, student, and guest artists. These concerts present a wide variety of musical styles which serve to enrich the student's appreciation of music.

**161 Introduction to Electronic Music (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

This course provides instruction in the use of synthesizers, Musical Instrument Digital Interface (MIDI), computers, musical acoustics, sound design, and music software. Emphasis is placed on technical, compositional, and performance skills utilizing digital synthesizers in conjunction with computers and music software.

**165 Introduction to Recording Arts (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

An introduction to the theory and practice of audio recording. Topics include: the nature of sound; basic acoustics; analog and digital audio recording systems; terminology; microphone principals and usage; recording styles; multitrack recording procedures.

**181 Applied Music I (.5) UC:CSU***Laboratory 1 hour***Corequisite:** Concurrent enrollment in a harmony class (Music 201, 202, 203, 221 or 223).

Private and small group study of the performance techniques related to the students major instrument or voice.

**182 Applied Music II (.5) UC:CSU***Laboratory 1 hour.***Prerequisite:** Music 181.

Continuation of Music 181.

**183 Applied Music III (.5) UC:CSU***Laboratory 1 hour.***Prerequisite:** Music 182.

Continuation of Music 182.

**184 Applied Music IV (.5) UC:CSU***Laboratory 1 hour.***Prerequisite:** Music 183.

Continuation of Music 183.

**200 Introduction to Music Theory (4) UC:CSU***Lecture 3 hours; Laboratory 2 hours.*

This course prepares music majors to qualify for Music 201 and Music 211. It presents basic information about music and music performance, including the rudiments of music notation, scales, key relationships, intervals, chord construction and common musical terms. Also, beginning levels of ear training, sight singing and keyboard techniques are introduced.

**201 Harmony I (3) UC:CSU***Lecture 3 hours.***Note:** Students must be familiar with notation, scales, intervals keys and common musical terms. Concurrent enrollment in Music 211 and a major performing ensemble (Music 501, 531, 721, 741 or 745) is strongly recommended for music majors.

Concerns diatonic harmony which includes a study of triads and their inversions. Introduces nonchordal tones through harmonization of simple given parts. Includes harmonic analysis.

**202 Harmony II (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 201 and 211.**Corequisite:** Music 212 and 501, 531, 721, 741, or 745.

Continues Music 201, including a study of secondary triads, modulation, all forms of dominant harmony, and the sequence.

**203 Harmony III (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 202 and 212**Corequisite:** Music 213 and 501, 531, 721, 741, or 745.

Continues Music 202 and is primarily a study of nondominant seventh chords, the Neopolitan and augmented sixth chords and other chromatic harmonies.

**211 Musicianship I (2) UC:CSU***Lecture-Performance 3 hours.***Prerequisite:** Music 101 or equivalent with a grade of "C" or better.**Note:** Students must be familiar with notation, scales, intervals, keys and common musical terms.

Development of sight reading, dictation and keyboard skills.

**212 Musicianship II (2) UC:CSU***Lecture-Performance 3 hours.***Prerequisite:** Music 211 with a grade of "C" or better.

Continuation of Music 211.

**213 Musicianship III (2) UC:CSU***Lecture-Performance 3 hours.***Prerequisite:** Music 212 with a grade of "C" or better.

Continuation of Music 212.

**214 Musicianship IV (2) UC:CSU***Lecture-Performance 3 hours.***Prerequisite:** Music 213 with a grade of "C" or better.

Continuation of Music 213.

**221 Counterpoint I (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 201 and 211 with grades of "C" or better.*Offered in the Fall semesters.*

Covers two and three-part modal counterpoint based upon sixteenth century polyphony.

**222 Counterpoint II (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 201 and 211 with grades of "C" or better.*Offered in the Spring semesters.*

Covers two and three-part tonal counterpoint based upon the polyphony of the Baroque period.

**223 20th Century Compositional Techniques (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 203.

Provides an opportunity for the gifted and creative student to experiment with new harmonic techniques of the 20th century. Includes an introduction to analytical techniques and principles of musical composition.

**225 Basic Conducting (2) UC:CSU - RPT 2***Lecture-Performance 3 hours.***Note:** Students must be familiar with musical notation.

Concerns the basic techniques for conducting both choral and instrumental musical ensembles. Explores various conducting responsibilities including rehearsal technique, beat patterns, cueing and expressive gestures.

**226 Choral Conducting (2) CSU***Lecture-Performance 3 hours.***Note:** Students must be familiar with musical notation.

Continues Music 225 and applies techniques to choral works suitable for school, church, and community choral groups.

**231 Orchestration and Arranging I (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 201.

Presents the student with an introduction to the instruments of the orchestra and band and teaches how to score for them in various combinations.

**232 Orchestration and Arranging II (3) UC:CSU***Lecture 3 hours.***Prerequisite:** Music 231.

Continuation of Music 231. Offers the student an opportunity to advance the techniques learned in Music 231.

**250 Music Performance Workshop (1) CSU - RPT 3***Laboratory 3 hours.*

Preparation and performance of musical selections. Lectures and discussions of various aspects of public performance.

**251 Jazz Improvisation Workshop (1) UC:CSU - RPT 3***Laboratory 3 hours.***Note:** Students must be able to play a jazz instrument or voice.

A student-directed environment for jazz and rock-style improvisation. The ensemble is determined by enrollment which differs every semester.

**261 Electronic Music Workshop (3) CSU - RPT 2***Lecture 2 hours; Laboratory 2 hours.***Note:** Students must be familiar with basic concepts of digital synthesis through computer and MIDI applications.

This course extends the electro-acoustic music techniques introduced in Music 161. As continuation of Music 161, the focus of this course is on the application of advanced electro-acoustic music equipment, software and techniques used in a contemporary music project studio. The production of music using advanced synthesis, computer applications, MIDI, signal processing and recording techniques will be stressed.

**265 Advanced Recording Arts Workshop (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Music 165 with a grade of "C" or better.

This is an advanced recording theory and hands-on workshop using our recording studio. Topics include stereo and multitrack recording, overdubbing and mixing processes, use of microphones and microphone placement, digital and analog console operation, advanced magnetic and digital recording principles, computerized digital audio workstation operation, and signal processing equipment.

**299 Music Honors (1) †UC:CSU - RPT 3**

Laboratory 3 hours.

**Prerequisite:** Music 121, 122, and 203.

Provides the gifted student in music an opportunity for concentrated independent study in selected areas under the direct supervision of an instructor. Presents a course of study through a series of projects designed to increase the students' knowledge of those aspects of music most pertinent to their individual interests and talents.

**301 Keyboard Harmony I (1) UC:CSU**

Lecture 1 hour.

**Prerequisite:** Music 101 or equivalent.

Emphasis will be on work using both hands, on harmonizing anthem-type melodies and on using 3-note chords in the right hand with single bass notes in the left hand. The student will also perform florid melodies using single notes in the right hand with 3-note chords in the left hand.

**302 Keyboard Harmony II (1) UC:CSU**

Lecture 1 hour.

**Prerequisite:** Music 301 with a grade of "C" or better, or equivalent.

This course is a continuation of student development of keyboard skills. Emphasis will be on left hand harmonic patterns such as Alberti bass, "waltz" bass, and two part (treble and bass) harmonizations. This level is to include secondary seventh chords (and inversions), secondary dominants (and inversions), as well as transient and real modulatory exercises.

**303 Keyboard Harmony III (1) UC:CSU**

Lecture 1 hour.

**Prerequisite:** Music 302 with a grade of "C" or better, or equivalent.

This course is a continuation of student development of keyboard skills, using more complex piano idioms, harmonizations to include the augmented sixth chord family, the Neapolitan sixth, chromaticism, remote key movement and relationships, as well as some early 20th Century techniques, such as parallelism, chords in fourths, polytonal passages, etc.

**321 Elementary Piano I (2) UC:CSU**

Lecture-Performance 3 hours.

This course introduces the basic techniques and skills used to play the piano and electronic keyboard instruments. Also, music reading, scales and chord progressions are introduced along with the terminology and theory related to the music being studied.

**322 Elementary Piano II (2) UC:CSU**

Lecture-Performance 3 hours.

**Note:** Students must be able to perform simple major scales, melodies with basic chordal accompaniment and two-part pieces similar to those found in Bartok's Mikrokosmos, volume 1.

Continuation of Music 321.

**323 Elementary Piano III (2) UC:CSU**

Lecture-Performance 3 hours.

**Note:** Students must be able to perform two-octave major scales, simple melody, and accompaniment pieces such as those found in Music for Millions, Volume 17 and two-part pieces similar to those found in Bartok's Mikrokosmos, Volume 2.

Continuation of Music 322.

**324 Elementary Piano IV (2) UC:CSU**

Lecture-Performance 3 hours.

**Prerequisite:** Music 323 with a grade of "C" or better.

Continuation of Music 323.

**341 Intermediate Piano (2) UC:CSU - RPT 3**

Lecture-Performance 3 hours.

**Prerequisite:** Elementary Piano.

Continuation of Music 324. Introduces compositions stressing scales, chords, arpeggios and harmonic structure of music in an interpretive manner. Emphasizes style and interpretation.

**351 Piano Ensemble (1) UC:CSU - RPT 3**

Laboratory 2 hours.

**Prerequisite:** Music 341.

Provides the opportunity for ensemble experience through the performance of literature for two pianos, four and eight hands. Particular emphasis on style, interpretation and the development of sight reading.

**411 Elementary Voice I (2) UC:CSU**

Lecture-Performance 3 hours.

Concentrates on general, basic fundamentals of singing, using vocal exercises, and simple songs. Emphasis on developing an understanding of the singing voice, the body as a musical instrument, and the vocal potential of each student. Songs used implement and illustrate vocal growth and development.

**412 Elementary Voice II (2) UC:CSU**

Lecture-Performance 3 hours.

**Note:** Traditional voice students must be familiar with the basic fundamentals of singing and the art song styles. Pop voice students must be familiar with the fundamentals of singing and microphone technique.

Continuation of Music 411.

**413 Elementary Voice III (2) UC:CSU**

Lecture-Performance 3 hours.

Continuation of Music 412.

**414 Elementary Voice IV (2) UC:CSU**

Lecture-Performance 3 hours.

Continuation of Music 413.

**441 Song Repertoire (2) UC:CSU - RPT 3**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Music 414.

Offers the voice student the opportunity to study and perform a varied repertoire selected from musicals, art songs and operas.

**501 College Choir (1) UC:CSU - RPT 3**

Laboratory 3 hours.

Open to all students, regardless of vocal experience.

Experience the joy of singing! In this class you will learn basic singing techniques and music reading skills through the study, preparation and performance of standard choral literature and popular music.

**531 Philharmonic Choir (1) UC:CSU - RPT 3**

Laboratory 3 hours.

**Note:** Some familiarity with choral repertoire and proper vocal technique is required.

Study and performance of choral literature from all stylistic periods, including popular music. Emphasis, however, is placed upon major choral works.

**561 Chamber Chorale (1) UC:CSU - RPT 3**

Laboratory 3 hours.

**Prerequisite:** Audition.

Concerns the study and performance of musical literature of small chamber choral groups from the sixteenth century to the present.

**571 Jazz Choir (1) CSU - RPT 3**

Laboratory 4 hours.

**Prerequisite:** Audition.

This course offers practical experience in singing jazz, folk, and rock music in a small ensemble setting.

**601 Brass Instrument Instruction I (2) UC:CSU***Lecture-Performance 3 hours.*

Offers instruction in trumpet, trombone, tuba and French horn. Recommended for students interested in learning to play a brass instrument, to write and arrange for brass instruments, or acquiring the skills to teach others to play these instruments.

**602 Brass Instrument Instruction II (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 601.

**603 Brass Instrument Instruction III (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 602.

**604 Brass Instrument Instruction IV (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 603.

**611 String Instrument Instruction I (2) UC:CSU***Lecture-Performance 3 hours.*

Offers instruction in violin, viola, cello and bass. Recommended for students interested in learning to play a string instrument, to write and arrange for string instruments, or acquiring the skills to teach others to play these instruments.

**612 String Instrument Instruction II (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 611.

**613 String Instrument Instruction III (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 612.

**614 String Instrument Instruction IV (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 613.

**621 Woodwind Instrument Instruction I (2) UC:CSU***Lecture-Performance 3 hours.*

Offers instruction in flute, oboe, clarinet, bassoon and saxophone. Recommended for students interested in learning to play a woodwind instrument, to write and arrange for woodwind instruments, or acquiring the skills to teach others to play these instruments.

**622 Woodwind Instrument Instruction II (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 621.

**623 Woodwind Instrument Instruction III (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 622.

**624 Woodwind Instrument Instruction IV (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 623.

**650 Beginning Guitar (2) UC:CSU***Lecture-Performance 3 hours.*

Concerns beginning guitar skills with emphasis on learning to read music on the guitar, up to the fifth fret for the left hand. Right hand technique will be finger, and pick oriented; and the course is a perfect introduction to either classical, commercial, or folk guitar playing.

**651 Classical Guitar I (2) UC:CSU***Lecture-Performance 3 hours.*

**Note:** Familiarity with music notation and basic guitar technique is required. Provides basic instruction in Classical Guitar playing at the beginning level. Includes appropriate exercises to develop technical facility, material for sight-reading, study of basic chords, and repertoire.

**652 Classical Guitar II (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 651.

**653 Classical Guitar III (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 652.

**654 Classical Guitar IV (2) UC:CSU***Lecture-Performance 3 hours.*

Continuation of Music 653.

**661 Commercial Guitar I (2) CSU***Lecture 1 hour; Laboratory 2 hours.*

**Note:** Familiarity with rudimentary chord symbols and basic guitar technique is required.

Designed to give the guitarist experience in playing melody, accompaniments, and performing songs with simultaneous chords and melody. Styles covered include jazz, jazz-fusion, rock and bossa-nova. Techniques include scales and sight reading up to the fifth position in keys up to three flats and three sharps.

**662 Commercial Guitar II (2) CSU***Lecture 1 hour; Laboratory 2 hours.*

**Prerequisite:** Music 661 or appropriate private instruction.

**Note:** Must possess own instrument.

Continuation of Music 661.

**663 Commercial Guitar III (2) CSU***Lecture 1 hour; Laboratory 2 hours.*

**Prerequisite:** Music 662 or appropriate private instruction.

**Note:** Must possess own instrument.

Continuation of Music 662.

**664 Commercial Guitar IV (2) CSU***Lecture 1 hour; Laboratory 2 hours.*

**Prerequisite:** Music 663 or appropriate private instruction.

**Note:** Must possess own instrument.

Continuation of Music 663.

**705 Chamber Music (1) UC:CSU - RPT 3***Laboratory 3 hours.*

Provides experience in typical chamber music and chamber orchestra combinations. Open to qualified instrumentalists, including pianists, string and wind instrument players.

**721 Orchestra (1) UC:CSU - RPT3***Lecture-Performance 4 hours.*

Concerns reading and detailed study of the standard symphonic repertoire. Provides experience in interpreting music of various styles and performing for college functions.

**741 Band (1) UC:CSU - RPT 3***Laboratory 4 hours.*

**Note:** Ability to play a band instrument required.

Includes the study and performance of standard works for instrumental wind ensembles.

**745 Symphonic Band (1) UC:CSU - RPT 3***Laboratory 3 hours.*

**Note:** Ability to play a wind or percussion instrument required.

Explores contemporary and traditional band literature with an emphasis upon performance-related experiences. Provides opportunities for solo performances, section rehearsals, and large ensemble rehearsals and performances.

**755 Brass Ensemble (1) UC:CSU - RPT 3***Laboratory 3 hours.*

Provides rehearsal and performance experiences that utilize a wide variety of brass literature.

**765 Percussion Ensemble (1) UC:CSU - RPT 3**

Laboratory 3 hours.

Provides the student with the opportunity to learn a wide variety of percussion ensemble literature including both symphonic and commercial styles. Public performances will be given.

**776 Musical Theatre (2) \*UC:CSU - RPT 3**

Lecture 1 hour; Laboratory 2 hours.

A survey of musical theater with emphasis on the development of singing (vocal) techniques and performance skills. Dancing, acting and movement techniques will also be covered. Opportunities will be offered to apply these skills and techniques before a student audience.

**777 Musical Theatre Workshop (3) \*UC:CSU - RPT 3**

Laboratory 6 hours.

Practical experience using techniques and principles of singing and vocalization, staging of singing with dancing numbers, and acting scenes in a musical will be presented before an audience. Emphasis will focus on the development of acting, singing and movement skills.

**781 Studio Jazz Band (1) CSU - RPT 3**

Laboratory 4 hours.

**Note:** Ability to play a jazz instrument required

This course offers practical experience playing in a large jazz band. Standard and special musical arrangements are rehearsed and performed with emphasis placed upon intonation, rhythmic accuracy, artistic expression and improvisation.

**185 Directed Study - Music (1) CSU - RPT 2****285 Directed Study - Music (2) CSU****385 Directed Study - Music (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Music on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Music (1-4) CSU**

See Cooperative Work Experience Education.

**\*UC Credit Limits:** Music 776 and Theater 279 combined; maximum credit, one course.

Music 777 and Theater 280 combined; maximum credit, one course.

# Numerical Control

See course listings under  
Industrial Technology - Machine Shop/CNC



# Nursing

See "Nursing: Associate in Arts Degree" for  
General Education prerequisites, page 82.

**250 Orientation to Nursing (1)**

Lecture 1 hour.

An elective course for generic students who have been accepted and will be entering the Nursing Program. This class provides students with an introduction to the program. Course work is designed to assess learning styles and develop individual strategies for promoting student success.

**400 Adult Health Care I (4) CSU**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Acceptance into the Nursing Program.

Introduces the student to the nursing process and Gordon's Functional Health Patterns as they relate to the care of the adult client. Basic clinical skills and related theory are presented. Encompasses physical, psychosocial, cultural, developmental, and legal aspects as related to nursing. Includes clinical experience.

**402 Pharmacology (1) CSU**

Lecture 1 hour.

**Prerequisite:** Acceptance into the Nursing Program.

Introduces basic knowledge and skills required for safe and effective drug therapy. Includes mathematics used in calculation of drug dosage. Specific drug classifications are discussed in conjunction with Gordon's Functional Health Patterns. Nursing process serves as a framework in the application of content to client care.

**403 Adult Health Care II (5) CSU**

Lecture 2 hours; Laboratory 9 hours.

**Prerequisite:** Completion of the first semester of the Nursing Program or its equivalent.

Introduces theory and concepts central to the practice of medical-surgical nursing, emphasizing short-term acute health problems and perioperative care. Encompasses physical, psychosocial, cultural, developmental, and legal aspects. Continues to expand knowledge of functional health patterns and the use of nursing process. Clinical experience is focused on multiple primary care assignments.

**404 Maternal and Newborn Health Care (4) CSU**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Completion of the second semester of the Nursing Program or its equivalent or BRN referral.

Studies the reproductive process and its effect on health and family life within the framework of the nursing process and Gordon's Functional Health Patterns. Covers the normal maternity cycle, common problems, and the newborn. Encompasses psychosocial, cultural, developmental, legal, and ethical aspects of maternity care. Women's health care is discussed. Includes clinical experience.

**405 Psychiatric Health Care (4) CSU**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Completion of the first semester of the Nursing Program or its equivalent or BRN referral

Introduces the concepts of psychiatric nursing utilizing Gordon's Functional Health Patterns and the nursing process. Presents current theory and practice in the care of the mentally ill. Psychosocial, physical, legal and illness stressors are discussed as they relate to the individual and family. A variety of clinical experiences are provided.

**406 Adult Health Care III (5) CSU**

Lecture 2 hours; Laboratory 9 hours.

**Prerequisite:** Completion of the second semester of the Nursing Program or its equivalent.

Builds upon previously learned concepts of medical-surgical nursing. Emphasizes the chronically-ill adult and gerontic client with concurrent acute health problems. Utilizes the Functional Health Patterns as a basis for assessment and implementation of the nursing process. Clinical experiences include multiple primary care assignments and introduces management of clients in small groups in the acute care setting.

**407 Geriatric Health Care (3) CSU**

Lecture 1 hour; Laboratory 6 hours.

**Prerequisite:** Acceptance into the Nursing Program.

Introduces the gerontic client including physical, psychological, social, spiritual, and intellectual aspects. Emphasizes interrelatedness of Gordon's Functional Health Patterns and nursing process, growth and development, and health problems in the aging client. Includes clinical experience.

**408 Psychological Aspects of Health Care (1) CSU**

Lecture 1 hour.

**Prerequisite:** Acceptance into the Nursing Program.

Facilitates assessment and promotion of mental health perspectives across the life span. Introduces the concepts of wellness and holistic health care while focusing on community mental health. Emphasizes nursing process and identification of behaviors which represent functional and dysfunctional health patterns as defined by Gordon. Examines multiple factors influencing mental health such as biological, sociocultural, or psychological components.

**414 Adult Health Care IV (5) CSU**

Lecture 2 hours; Laboratory 9 hours.

**Prerequisite:** Completion of the third semester of the Nursing Program or its equivalent.

Advanced theories and concepts of adult medical-surgical nursing with emphasis on complex and acute health problems. Includes physical, psychosocial, cultural, developmental, and legal aspects. Provides in-depth clinical experience utilizing functional health patterns and nursing process. Stresses management experience focusing on the staff nurse role.

**415 Pediatric Health Care (4) CSU**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Completion of the third semester of the Nursing Program or its equivalent or BRN referral.

Discusses concepts of Pediatric Health Care within the framework of Gordon's Functional Health Patterns and the nursing process. Emphasis is placed upon health problems and the pediatric client's unique reaction to illness. Topics include growth and development from infancy through adolescence and adaptation of nursing techniques for the pediatric client/family. Includes clinical experience.

**441 History, Trends, and Issues of Nursing (1) CSU**

Lecture 1 hour.

**Prerequisite:** Concurrent enrollment in the fourth semester of the Nursing Program.

Examines current and relevant nursing issues within the context of historical development of organized nursing. Includes legal and ethical responsibilities and economic and educational issues as they affect the emergence of the modern nurse. Discusses the nurse's role as a contributing member of the discipline and the community.

**442 Role Transition to RN (1) CSU**

Lecture 1 hour.

**Prerequisite:** Approval to enter the Nursing Program. Must currently be a Licensed Vocational Nurse, foreign nurse graduate or a transfer nursing student.

Orients the advanced placement nursing student to the College and to the Nursing Program. Discusses the roles and responsibilities of the registered nurse. Instruction focuses upon the application of nursing process, its components, and the use of Gordon's Functional Health Patterns for assessment. Includes development of care plans for clients in a variety of settings.

**450 Clinical Nursing Preceptorship (3)**

Laboratory 8 hours.

**Prerequisite:** Completion of the second or third semester of the Nursing Program or the equivalent.

Elective nursing course to enhance student skills and knowledge, improve clinical performance, and increase confidence in the work setting. An intensive clinical experience in which the student is paired with a staff nurse in an acute care facility. Clinical topics include management and communication.

**455 Workstudy Program (2)**

Laboratory 6 hours.

**Prerequisite:** Nursing 403 and 406

Elective nursing course to enhance student skills/knowledge, improve clinical performance, and increase confidence in the work setting. An intensive clinical experience in which the student is paired with a staff nurse in an acute care facility.

**463 Introduction to Nursing (.5)**

Lecture .5 hour.

Designed for the pre-nursing major or student considering Nursing as a career. An introduction to nursing and the Nursing Program at L. A. Pierce College.

**185 Directed Study - Nursing (1)****285 Directed Study - Nursing (2)****385 Directed Study - Nursing (3)**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Nursing under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Nursing (1-4) CSU**

See Cooperative Work Experience Education.

# Oceanography

See course listing under **Biology** for **Marine Biology** courses.

**1 Introduction to Oceanography (3) UC:CSU**

Lecture 3 hours.

Introduces the student to the general field of oceanography, including a study of the features of the ocean floor, how ocean basins are made and destroyed, the chemical and physical aspects of seawater, ocean-atmosphere interactions, ocean circulation, waves, tides, and beaches, with some emphasis on the Southern California marine environment. Interactions between marine life and seawater are also discussed. In addition, some of the effects that human society has on the ocean are discussed.

**10 Physical Oceanography Laboratory (2) UC:CSU**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Oceanography 1 or concurrent enrollment. May be offered as an honors section.

Using oceanographic data to describe ocean conditions and interpret processes responsible. Bathymetric data are used to describe the ocean floor along the Southern California coast. Sediment samples are examined and interpreted. Oceanographic data are examined that demonstrate connections between sunlight, wind, water movement and phytoplankton abundance, as well as other relationships between life and water chemistry. A half-day cruise on a research vessel may be available for student participation.



**185 Directed Study - Oceanography (1) CSU - RPT 2**

**285 Directed Study - Oceanography (2) CSU**

**385 Directed Study - Oceanography (3) CSU**

*Conference 1 hour per unit.*

Allows students to pursue Directed Study in Oceanography on a contract basis under the direction of a supervising instructor.

*\*UC Credit Limit: Oceanography 2, 12, and 14 combined, maximum 5 units.*

## Office Administration

See course listing under **Computer Applications and Office Technologies**

## Older Adults

**Encore is a Pierce College noncredit program that provides lifelong learning designed specifically for older adults.**

**29CE Literature and the Human Experience**

This course is designed for older adults and offers a variety of literary experiences both past and present taking into consideration individual interests, backgrounds, and mental abilities. Selected literary works will be read and discussed. Class discussion provides an opportunity for participants to express an opinion and share life experiences.

**42CE Creative Art for Seniors**

Designed to unlock creativity with guided visualization in art. Students will learn to express themselves through drawing, painting and design.

**43CE Arts & Crafts for Assisted Living**

This course is designed for assisted living residents. A supportive and stimulating environment is provided to develop ideas expressed through mixed media, painting, sculpture and papermaking.

**44CE Personal Finance for Seniors**

This course is specifically designed for the older adult. The course will cover basic investment strategies, financial planning, the law, as well as techniques to minimize taxes and facilitate asset transfers.

**47CE Beginning Shakespeare for Seniors**

Participants will become acquainted with the great dramatic genius. Selected plays by Shakespeare will be read and discussed.

**48CE Writing your Autobiography**

This course will enable participants to share memories and create a record of events for family and friends. Learn the technical aspects of autobiography while reviewing and discussing the experiences that shape our lives.

**49CE Music Appreciation for Seniors**

Each week the class will focus on different musical themes and musical eras. The class will be invited to share musical memories while listening to professionally recorded music.

**50CE Bereavement Support Group**

Learn about the natural grieving process while learning how to heal and rebuild your life. Participants will have an opportunity to share experiences with others in a compassionate environment.

**51CE Feeling Fit for Seniors**

Build and maintain strength with resistance exercises. This course is for beginners who have not exercised frequently.

**52CE Body Movement for Seniors**

Improve cardiovascular performance with low impact aerobic exercises, some strength training and stretch movements; increase your flexibility with a variety of motions to music.

**53CE Yoga for Seniors**

This course will introduce participants to a form of yoga that conditions and improves flexibility and balance. Apply these concepts to manage stress and improve restful sleep.

**55CE Implications of Aging**

Explore the issues facing adults in contemporary society: stereotypes, age bias, loss and change. Course will examine the aging process using physiological, psychological and sociological points of view.

**56CE Seeing and Understanding Art for Seniors**

Investigate the history of art and view selections from particular time periods and regions. Students will view art through slides, film and video.

**57CE Adventures in Theatre**

This class explores the development of a play from paper to performance. Students will be guided from the backstage to the front stage while tracing the life cycle of a play from the hands of the playwright through auditions, rehearsals and performance.

**58CE Healthy Living**

Learn about health promotion and lifestyle choices by reviewing research and literature from allied health professions.

**59CE Body Conditioning for Seniors**

Build and maintain strength with resistance exercises. Improve cardiovascular performance with low impact aerobic exercises, strength training and stretch movements for core strength, weights and resistance machines for muscular strength and increased bone density, and stretches for increased flexibility.

**60CE Senior Topics**

This course is designed for older adults and offers a variety of topics both past and present taking into consideration individual interests, backgrounds, and physical and mental abilities. The discussion forum provides an opportunity for participants to express an opinion, share life experiences, compare events through reminiscence and examine current events to interpret how they impact their lives.

**61CE Chi Gong / Tai Chi for Seniors**

This course is designed for the older adult and offers instruction in the principles of chi gong and tai chi to maintain and increase flexibility, muscle tone, breathing capacity, and enhance coordination and balance. This course provides exercises that are flowing, smooth and gentle on the body and contribute to sound physical, mental and emotional well-being.

**62CE Life Drawing for Seniors**

This course will introduce the older adult student to rendering the human figure through gesture, contour and value. A variety of materials and techniques will be utilized in describing the human form.

**63CE Watercolor Painting for Seniors**

This course introduces participants to basic watercolor techniques and equipment while concentrating on color and composition.

**64CE Matter of Balance: Managing Concerns about Falls**

A Matter of Balance is based on research conducted by the Roybal Center for Enhancement of Late-Life Function at Boston University. This course is designed to reduce the fear of falling and increase activity levels among older adults. Participants learn to set realistic goals to increase activity, change their environment to reduce fall risk factors, and learn simple exercises to increase strength and balance. If you have turned down a chance to go out with family or friends because you were concerned about falling down or have cut down on a favorite activity because you might fall, A Matter of Balance is for you.

**65CE Healthier Living: Managing Ongoing Health Conditions**

Developed by Stanford University School of Medicine, Healthier Living is taught by two trained leaders, one or both of whom also have a chronic health condition. Healthier Living provides participants with effective strategies and mutual support to build the participants' confidence in their ability to manage their health and maintain active and fulfilling lives.

**68CE Flexibility and Core Strength for Seniors**

This course is designed for older adults to improve flexibility and core strength.

**VOC ED 187CE Computer Usage Skills**

This short-term open entry-open-exit, self-paced course will allow students to learn to use microcomputers as an educational tool and workplace skill. The course will provide non-threatening mode for computer training in the use of software and the Internet to complete assignments.

# Personal Development

**4 Career Planning (1) CSU**

*Lecture 1 hour.*

Designed to give the vocationally undecided student an understanding of the career planning process. May include vocational tests, various self appraisal techniques, and information regarding occupational characteristics, trends, entry and career levels. Teaches career planning skills and allows the student to work toward a career choice.

**8 Career Planning and Development (2) CSU**

*Lecture 2 hours.*

Teaches the process of career planning. The emphasis is on learning about yourself and the world of work and how to use this information in career planning. This course also acquaints the students with college services, personnel, curricula, and student activities.

**15 Personal Development Seminar (3) (NDA) - RPT 3**

*Lecture 3 hours.*

Group study of a selected topic, the title and units to be specified in the schedule of classes. No more than 3 units may be taken in any semester.

**20 Post Secondary Education: The Scope of Career Planning (3) \*UC:CSU**

*Lecture 3 hours.*

This Course introduces students to the role of higher education in society and to their role as students. Students explore personal attributes needed for college success, critical thinking and effective study strategies, relating to others in a diverse world, the career planning and decision making process, and transfer and educational planning. This course will also provide students with an overview of campus resources and policies.

**40 College Success Seminar (3) \*UC:CSU**

*Lecture 3 hours.*

This course introduces students to the study of the educational, psychological, intellectual, social, and health-related factors that impact lifelong learning, well-being, and success. Topics include factors affecting internal and external motivation, critical thinking, effective learning strategies, interpersonal and cross-cultural communication, health and wellness issues, effective written and oral communication strategies, life management strategies, career exploration and educational planning.

*\*UC Credit Limit: 20 and 40 combined. Maximum credit one course.*

**111 Internship Success I (1)**

*Lecture 1 hour.*

Designed to provide students with on-the-job practical work experience to enhance work-related skills, increase awareness of potential careers, and develop knowledge of the "work culture." Allows students to earn from 1-3 units for a structured internship off-campus. Students must attend an in-person orientation prior to beginning of class and are responsible for securing their own internship.

**121 Internship Success II (2)**

*Lecture 2 hours*

Designed to provide students with on-the-job practical work experience to enhance work-related skills, increase awareness of potential careers, and develop knowledge of the "work culture." Allows students to earn from 1-3 units for a structured internship off-campus. Students must attend an in-person orientation prior to beginning of class and are responsible for securing their own internship





### 131 Internship Success III (3)

Lecture 3 hours.

Designed to provide students with on-the-job practical work experience to enhance work-related skills, increase awareness of potential careers, and develop knowledge of the "work culture." Allows students to earn from 1-3 units for a structured internship off-campus. Students must attend an in-person orientation prior to beginning of class and are responsible for securing their own internship.

# Philosophy

### 1 Introduction to Philosophy (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

This is a basic introduction to some of the fundamental issues of philosophy and humanity that include topics such as knowledge and reality, the foundations of truth and science, and the nature of human consciousness/self.

### 2 Society and Values (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

This course introduces the student to some of the traditional and contemporary theories in rational decision making about ethical and political issues.

### 5 Critical Thinking and Composition (3) UC:CSU

Prerequisite: English 101 with a grade of "C" or better.

May be offered as an honors section.

This course is a development of critical thinking skills necessary for evaluation and formulation of argumentative essays, and practice in applying these skills. Critical writing about philosophical/logical concepts applicable to any systematic thinking is the focus of this course.

### 6 Logic in Practice (3) UC:CSU

Lecture 3 hours.

Logic in Practice deals with how to understand and evaluate arguments and explanations by applying accepted standards of good reasoning. Students will learn techniques to recognize deductively valid arguments and avoid formal fallacies. They will also consider what is required for inductively strong arguments in order to avoid informal fallacies. There is particular emphasis on the appeals made in advertising and political rhetoric.

### 9 Symbolic Logic I (3) UC:CSU

Lecture 3 hours.

Introduces techniques for representing truth-functional statements using letters and symbols, determining the validity of arguments using such statements, and demonstrating validity through formal proofs using a natural deduction system. Covers both propositional and quantificational logic through to first-order predicates and identity.

### 12 History of Greek Philosophy (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

This course introduces the student to a rigorous overview of ancient Greek thought starting with pre-Socratic philosophers and ending with Greco-Roman philosophy of the later ancient period. Major emphasis is placed on the works of Plato and Aristotle.

### 14 History of Modern European Philosophy (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

Traces western philosophy from the renaissance to the 20th century. The course explores the rise of modern science, continental rationalism and British empiricism, and Kant.

### 15 History of Contemporary Philosophy (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

Studies recent philosophical developments in Continental and Anglo-American philosophy with readings from such figures as Nietzsche, Heidegger, Husserl, Derrida, Foucault, Gadamer, Ricoeur, Habermas, Russell, Wittgenstein, Dewey, Quine, Rawls, Davidson and Rorty

### 19 Contemporary Problems in Bioethics (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

This class introduces the student to some of the traditional ethical theories and how they apply to contemporary biomedical ethical problems. Topics to be discussed will include some of the following: abortion, euthanasia, suicide, organ donation, informed consent, allocation of scarce resources, genetic engineering, human and animal research, stem cell research, and cloning.

45 C. E. U.'s will be available upon request.

### 20 Ethics (3) UC:CSU

Lecture 3 hours.

May be offered as an honors section.

Considers human conduct, the rules and institutions of moral order, and philosophically examines a range of today's moral issues, such as the just distribution of the social good, abortion, euthanasia, the environment, war, and world hunger.

### 29 The Ethics of Biotechnology (1) \*UC:CSU

Lecture 1 hour.

This course provides an introduction to the use of ethical theories to examine the dilemmas associated with advances in biotechnology and methods of resolution of these dilemmas.

### 30 Asian Philosophy (3) UC:CSU

Lecture 3 hours.

Presents the history and key teachings of the philosophical traditions of East and South Asia with emphasis on Confucianism, Daoism, Hinduism, and Buddhism.

### 33 Comparative Survey of World Religions (3) UC:CSU

Lecture 3 hours.

This course is a historical overview of the principal religious traditions of the world, concentrating on Hinduism and Buddhism, Confucianism and Daoism, Christianity and Islam. Course considers origins, principal beliefs and practices, and contemporary issues.

### 35 Judaism, Christianity, and Islam (3) UC:CSU

Lecture 3 hours.

Offers a study of the history and doctrines of those religions that have emerged from the tradition of the prophet Abraham. The course will consider other major influences on their early development, including, but not limited to, ancient Egyptian and Mesopotamian religions, Zoroastrianism, Greek philosophy and Hellenic mystery religions. Representative sacred texts will be read.

### 40 Introduction to the Philosophy of Art (3) UC:CSU

Lecture 3 hours.

This introductory class will discuss and critically evaluate: the meaning of art, the meaning of beauty, truth in art, creativity and art, various philosophical theories regarding the nature of art.

**41 Introduction to Philosophy and Literature (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Studies the literary medium as it is employed to express and explore philosophical themes such as freedom, determinism, moral responsibility, alienation and logic. Each particular class also allows for a review of literature of a relatively specific milieu, for example, twentieth century existentialism. Cognate concepts from literary criticism, anthropology, sociology, psychology and religion are utilized for understanding selected literary works although no background in any of these fields is required.

**42 Philosophy and Cinema (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Examines film as philosophy, as a philosophical statement by the filmmaker via his or her art form; covering the traditional philosophical problems within the human condition, such as the very meaning of that human condition, reality, self, freewill, morality, mortality, along with other questions within the human quest that come under the role of philosophy.

\*UC Credit Limit: Philosophy 29 must be taken with Biology 40 to receive transfer credit.

# Photography

**9 Introduction to Cameras and Composition (3) UC:CSU**

Lecture 3 hours.

Not offered each semester.

**Note:** Intended for non-photo majors. No laboratory. Students must have a 35 mm camera. Fully automatic cameras without manual override capabilities do not allow students to fulfill some of the course's required assignments and limit the student's ability to learn basic photography concepts. If in doubt, contact the Photography Lab in BUNG 0333 for specific recommendations.

Designed to provide basic information in the use of cameras, lenses, film and exposure to produce good photographs. Slide assignments are given for analysis in class.

**10 Beginning Photography (3) UC:CSU**

Lecture 2 hours; Laboratory 3 hours.

**Note:** Students must have a 35 mm camera. Fully automatic cameras without manual override capabilities do not allow students to fulfill some of the course's required assignments and limit the student's ability to learn basic photography concepts. If in doubt, contact the Photography Lab in BUNG 0333 for specific recommendations.

**Advisory:** Previous or concurrent enrollment in Journalism 100 for Photojournalism majors. Students interested in taking advanced photo classes should enroll in Photography 27 concurrently with Photography 10 or the next semester.

Provides theory and practice of contemporary use of the camera; Includes expanded comprehension of exposure control with various light sources; Introduction to studio and flash exposure; Skills of photographic printing emphasized; an emphasis is also given to creative thinking and idea preparation and execution. Course will cover conventional and digital photography including imaging editing software, printing methods and the internet.

**11 Advanced Photography (4) CSU - RPT 2**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Photography 10 with a grade of "C" or better.

**Recommended:** Previous or concurrent enrollment in Journalism 101 for Photojournalism majors.

Provides theory and practice of contemporary use of the camera; training in projection control; includes special effects procedures with an emphasis on creative thinking and idea preparation and execution.

**16 Commercial Photography (3)**

Lecture 2 hours; Laboratory 3 hours. Not offered each semester.

**Prerequisite:** Photography 11 with a grade of "C" or better.

Covers the major phases of commercial and illustrative photography as they apply to publication photography and Adobe Photoshop skills.

**20 Beginning Photojournalism (4) CSU**

Lecture 2 hours; Laboratory 6 hours.

**Prerequisite:** Photography 10 with a grade "C" or better.

**Advisory:** Previous or concurrent enrollment in Journalism 101 for Photojournalism majors.

Covers photojournalism methods, news, feature and sports photography. Introduction to documentary photograph and Adobe Photoshop skills.

**21 News Photography (4) CSU - RPT 3**

Lecture 2 hours; Laboratory 6 hours.

Same as Journalism 221. Credit not given for both courses.

**Prerequisite:** Photography 20 with a grade of "C" or better.

Gives practical experience in taking photojournalistic pictures, including news, sports, and feature photos. Students take pictures for the campus newspaper, magazine and website. Student learn editing, Photoshop and design skills. Some students will serve as editors for the campus newspaper.

**27 History and Aesthetics of Photography (6) UC:CSU**

Lecture 6 hours.

Provides a chronological description of the major developments of the photographic medium. Relates these developments to society and to events in the other visual arts and examines the meaning of photography as a work of art.

**49 Advanced Photographic Digital Imaging (6)**

Lecture 2 hours; Laboratory 8 hours.

This digital imaging course will incorporate the use of camera, photographic software, scanners, and printers. Emphasis on creating and printing photographic images.

**185 Directed Study - Photography (1) CSU - RPT 2****285 Directed Study - Photography (2) CSU****385 Directed Study - Photography (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Photography on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Photography (1-4) CSU**

See Cooperative Work Experience Education.



# Physical Education

University of California accepts 4 units of credit from the following Physical Education courses listed under the headings of Aquatics, Individual and Dual Activities, Team Sports, Dance, Dance Studies, Dance Specialties, Dance Techniques and Intercollegiate Sports plus related activities. All classes may be taken by either gender with the exception of Intercollegiate Sports, which classifies various activities for "Men" or "Women."

Note: Only courses marked activity meet the District Requirements for Physical Education activity. Read thoroughly the Schedule of Classes to determine which level one should enroll in (i.e., Beg., Int., Adv.).

The activity of Physical Education requires repetitive practice for the student to achieve the course objectives. For this reason, it is educationally sound for a student to repeat a Physical Education activity course. No activity course may be taken for more than four semesters.

Check with the Department or Counseling Office for transferability of courses to four-year institutions and for unit limitations of courses accepted by both University of California and CSUN.

## 90 Individual Physical Fitness Laboratory A and B (2) UC:CSU - RPT 3

Laboratory 4 hours.

Individualized program to develop cardiovascular endurance, muscular endurance, strength and flexibility through aerobics, low impact aerobics, stretch/tone, power walking, jogging, weight training, resistance exercises, aqua-aerobics, par course and other exercise equipment. Individual evaluation and information on fitness, body composition analysis, nutrition and stress management.

## 91 Theory and Application of Aerobics and Conditioning (3) CSU

Lecture 2 hours; Laboratory 2 hours.

Increases student awareness regarding changes in physiology resulting from aerobic exercise. Provides the students with an opportunity to participate in, and understand the components of a valid conditioning and nutritional program.

## Aquatics (1) UC:CSU - RPT 3

Activity, 2 hours.

Beginning, intermediate, and advanced levels offered for all courses listed below except 101. All levels may not be taught each semester:

101	Non-Swimmer
102	Swimming Skills

## Individual and Dual Activities (1) UC:CSU - RPT 3

Activity, 2 hours.

Beginning, intermediate, and advanced levels offered for all courses listed below. All levels may not be taught each semester:

203	Badminton Skills
212	Tennis Skills
225	Yoga Skills
228	Body Conditioning
229	Body Dynamics
230	Weight Training Skills
238	Self-Defense Skills
259	Golf Skills

## Team Sports (1) UC:CSU - RPT 3

Activity, 2 hours.

Beginning, intermediate, and advanced levels offered for all courses listed below. All levels may not be taught each semester:

301	Baseball Skills
304	Basketball Skills
313	Soccer Skills
322	Volleyball Skills

## 440 Social Dance (1) UC:CSU - RPT 3

Activity 2 hours.

Same as Dance 440.

Popular social dancing including the Waltz, Foxtrot, East Coast Swing, West Coast Swing, Merengue, Tango, Cha Cha, Rhumba, Salsa, a review of the 20's dances, and other ballroom and social styles as time permits.

## Intercollegiate Sports - Men, Women, and Coed. (3) UC:CSU - RPT 3

Activity, 10 hours or more in the sports in season.

503	Baseball (Men)
504	Basketball (Men/Women)
508	Football (Men)
511	Soccer (Women)
512	Softball (Women)
513	Swimming (CoEd)
514	Tennis (Men)
516	Volleyball (Men/Women)

## 550 Cheer / Yell Leaders / Marching Band (2) CSU - RPT 3

Activity, 6 hours. May be offered in 1 unit, 3 hour modules A & B

## 552 Athletics Pre-season Conditioning (1) UC:CSU - RPT 3

Activity, 3 hours.

## Intercollegiate Sports - Strength and Fitness Training (1) UC:CSU - RPT 3

Activity, 3 hours.

These courses are designed for the student athlete and are intended to provide focused strength and conditioning exercises, emphasize safety and injury prevention and present new rules and techniques for the sport.

553	Football
554	Field
555	Cross Country
556	Basketball
557	Baseball
558	Soccer
559	Tennis
560	Competitive Swimming
561	Water Polo

## 640 Beginning Lifelong Fitness Laboratory (1) UC:CSU - RPT 3

Laboratory 3 hours.

A laboratory physical fitness course designed to assess and address the areas of cardiovascular efficiency, body composition, muscle strength and endurance, and flexibility.

## 665 Basketball (1) UC:CSU - RPT 3

Activity 3 hours.

This course is an activity class requiring 3 hours per week of participation in various basketball activities and skills.

**666 Body Conditioning (1) UC:CSU - RPT 3***Laboratory 3 hours.*

This course offers instruction and participation in theory and techniques of attaining increased overall fitness through endurance and strength training utilizing resistance machines, circuit training, par course, and running.

**675 Karate (1) UC:CSU - RPT 3***Activity, 3 hours.*

This course is structured under the Korean martial art Taekwondo. It emphasizes both the physical and mental aspects of human development. Focuses on improving flexibility, muscle strength, endurance, coordination, balance, self-confidence, and self-esteem.

**684 Volleyball (1) UC:CSU - RPT 3***Activity 3 hours*

A course designed to teach the individual the fundamental principles of the rules, skills, play strategy and team work of volleyball.

**690 Weight Training (1) UC:CSU - RPT 3***Laboratory 3 hours.*

This course offers instruction and practice in theory and techniques of weight training to gain muscle strength, flexibility; and endurance.

**185 Directed Study - Physical Education (1) CSU - RPT 2****285 Directed Study - Physical Education (2) CSU****385 Directed Study - Physical Education (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Physical Education under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Physical Education (1-4) CSU***See Cooperative Work Experience Education.*

## Physical Science

**4 Physical Science & Laboratory (4) UC:CSU***Lecture 3 hours; Laboratory 3 hours.**Same as Physical Science 1 and 14 combined.*

This is a one semester, inquiry-based physical science course suitable for a general education course or prospective or practicing elementary teachers. This is a single integrated course without separate lecture and laboratory parts. This course uses a computerized active learning format involving group activity and discussion. Students construct a meaningful understanding of physics and chemistry concepts through hands-on experiences and computer simulations. The course covers: mechanics, electricity & magnetism, light, thermodynamics, physical changes, chemical changes, and the periodic table.

**13 Energy and Power (3) UC:CSU***Lecture 3 hours. Same as Environmental Science 31.*

This course introduces the physics of energy conversion and explores the physical, economic, and environmental advantages and disadvantages of various energy sources, including fossil, nuclear, solar, hydro, biomass, wind, tidal, and geothermal; and examines various methods for conserving energy.

**185 Directed Study - Physical Science (1) CSU - RPT 2****285 Directed Study - Physical Science (2) CSU****385 Directed Study - Physical Science (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Physical Science on a contract basis under the direction of a supervising instructor.

*No credit for Physical Science 1 if taken after a college course in astronomy, chemistry, geology or physics.*

## Physics

All **Physics, Engineering, and Astronomy** majors should enroll in either Physics 101 if qualified or Physics 6 their first semester at Pierce.

**6 General Physics I (4) \*UC:CSU***Lecture 3 hours; Laboratory 3 hours.**May be offered as modules 6A (3 units) and 6B (1 unit)**Prerequisite: A course in Trigonometry with a grade of "C" or better.*

Introduction to general physics addressing mechanics, thermodynamics, and Vibrations & Sound. The course includes both lecture and laboratory. The laboratory provides students hands-on verification of the laws of physics discussed in the lecture.

**7 General Physics II (4) \*UC:CSU***Lecture 3 hours; Laboratory 3 hours.**May be offered as modules 7A (3 units) and 7B (1 unit)**Prerequisite: Physics 6 with a grade of "C" or better.*

Continues Physics 6 into principles of electricity and magnetism, optics, and modern physics. The laboratory includes both quantitative and qualitative experiments, and active-learning activities which permit students to verify, illustrate, and deduce various laws of physics.

**11 Introductory Physics (4) \*\* $\Delta$ UC:CSU***Lecture 3 hours; Laboratory 3 hours.**Prerequisite: Mathematics 115 and Mathematics 120.*

Surveys the field of physics including laws of motion, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear structure, relativity and brief introduction to modern physics. This general introductory course with laboratory helps prepare the student for Physics 101, 66, or 6. It is aimed at developing physical intuition, problem solving techniques and laboratory procedures. It is not open to students who have had a college course in physics.

**15 Physics of Music (3) CSU***Lecture 3 hours*

Surveys the fields of physics that apply to the production of the sounds of music. The course delves into wave theory, harmonics, musical scales, musical instrument construction theory, harmonic sound analysis using FFT (Fast Fourier Transform) via Raven (a sound analysis program that can be run on any PC or Mac), musical instrument acoustics, room acoustics, amplification (acoustic and electronic) and the actual construction of a musical instrument. This course is designed for anyone majoring in music, or anyone using music in their careers, or anyone interested in music.

**12 Physics Fundamentals (3) \*\* $\Delta$ UC:CSU***Lecture 3 hours.**Credit not given for BOTH Physical Science 1 and Physics 12.*

Surveys the field of physics including laws of motion, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics, and relativity. There will be given an historic perspective and applications in today's culture.

**66 Physics for Life Science Majors I (5) \*UC:CSU**

Lecture 3 hours; Laboratory 6 hours.

**Prerequisite:** Mathematics 240.

**Corequisite:** Mathematics 261.

Considers, at the beginning calculus level, the fundamental principles of mechanics, gravitation, thermodynamics, fluids, oscillatory motion, waves, and sound, with applications to biological and biochemical systems.

**67 Physics for Life Science Majors II (5) \*UC:CSU**

Lecture 3 hours; Laboratory 6 hours.

**Prerequisites:** Mathematics 261 and Physics 66.

Continues the study begun in Physics 66 into principles of electricity and magnetism, optics, and modern physics, at the beginning calculus level of mathematical sophistication, with applications to biological and biochemical systems.

**101 Physics for Engineers and Scientists I (5) \*UC:CSU**

Formerly Physics 37.

Lecture 3 hours; Laboratory 6 hours.

**Prerequisite:** Mathematics 261.

**Corequisite:** Mathematics 262.

Considers the fundamental principles and applications of classical mechanics, gravitation, periodic motion, and fluid mechanics at the beginning calculus level of mathematical sophistication. The laboratory includes both quantitative and qualitative experiments, tutorials, and active learning activities which permit students to verify, illustrate, and deduce various laws of physics.

**102 Physics for Engineers and Scientists II (5) \*UC:CSU**

Formerly Physics 38.

Lecture 3 hours; Laboratory 6 hours.

**Prerequisites:** Mathematics 262 and Physics 101.

**Corequisite:** Mathematics 263.

Continues the study of physics begun in Physics 101 involving introductory thermodynamics and electricity and magnetism. The laboratory includes both quantitative and qualitative experiments, tutorials, and active-learning activities which permit students to verify, illustrate, and deduce various laws of physics.

**103 Physics for Engineers and Scientists III (5) \*UC:CSU**

Formerly Physics 39.

Lecture 3 hours; Laboratory 6 hours.

**Prerequisites:** Mathematics 263 and Physics 102.

Concludes the study of physics begun in Physics 101 and Physics 102 involving waves, light and optics, relativity, introductory quantum mechanics, atomic and nuclear physics. It may include topics in molecular and condensed matter as well as particle physics. The laboratory includes both quantitative and qualitative experiments, tutorials, and active-learning activities which permit students to verify, illustrate, and deduce various laws of physics.

**911-941****Cooperative Work Experience Education - Physics (1-4) CSU**

See Cooperative Work Experience Education.

\*UC Credit Limit: Physics 6 and 7, or 66 and 67, or 101, 102 and 103; maximum credit, one series.

\*\*UC Credit Limit: No credit for Physics 11 or 12 if taken after Physics 6, 66 or 101.

△ UC Credit Limit: Physics 11 and 12 combined, maximum credits one course.

# Physiology

**1 Introduction to Human Physiology (4) \*UC:CSU**

Lecture 3 hours; Laboratory 3 hours.

**Prerequisite:** Anatomy 1, or Agriculture 511 and 512, AND Biology 3, 6 or 44 with a grade of "C" or better.

Lectures and laboratory exercises focus on the principle functions of the human body; circulatory, respiratory, digestive, nervous, sensory, muscular, excretory, endocrine, and reproductive.

# Plant Science

**Agriculture - General****Plant Science 100-199****Horticulture and Landscaping****Plant Science 700-899****Natural Resources Management****Plant Science 900-999****103 Introduction to Soils (3) UC:CSU**

Lecture 2 hours; Laboratory 2 hours.

Considers the origin, formation, structure, and composition of soils. Includes the effects of tillage, drainage, and irrigation upon soil productivity. Examines the effect of laboratory and field work dealing with the maintenance and improvement of soil fertility upon various crops and farm systems. Analyzes the effect of organic and inorganic fertilizers upon soil productivity, control of Soil moisture, and the problems of alkali and dry land management.

**110 Food and Society (3) CSU**

Lecture 3 hours.

A general education course which reviews the role and impacts of food, and food production, on the development of civilization. The biological and ecological impacts of food production will be covered as well as the economic, political, and social dimensions of modern Agri-business. Issues of world hunger and food policies will be explored.

**701 Retail Floral Design and Practices I (2) CSU**

Lecture 1 hour; Laboratory 2 hours.

Teaches students the flowers and plants in Southern California used primarily in the florist trade. Includes the use and care of equipment used in the trade and shop practice in flower care and corsage making.

**702 Retail Floral Design and Practices II (2) CSU**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Plant Science 701.

Continues Agriculture 701. As laboratory work, includes bowl arrangements for home and hospital, baby novelty arrangements, and anniversary arrangements. Studies foliage and flowering plant trimming, green planters, and the use of plastic flowers.

**703 Retail Floral Design and Practices III (2) CSU**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Plant Science 702.

Continues Agriculture 702. Studies floral designing of memorial offerings, floral sprays, set pieces such as wreaths, hearts, crosses, and blankets. Includes a study of general shop techniques. As part of the course requirements, requires students to spend some time in local floral shops.

**704 Advanced Retail Floral Design and Practices (2)**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Plant Science 703.

Presents advanced demonstration in floral arrangements for special occasions, including complete coverage of wedding bouquets and corsages, church decorations, ballroom and banquet decor.

**708 Floristry Projects (6)**

Laboratory 12 hours.

Involves planning, developing, and completing an individual floricultural production project under the guidance of a faculty advisor, on or off the college campus.

**711 Botany for Horticulture (4) UC:CSU***Lecture 3 hours; Laboratory 3 hours.*

Considers the fundamentals of botany, including a study of the main external parts and functions of flowering plants, the basic plant cell, composition and functions, and various specialized tissues and their functions. Discusses plant reproduction, both sexual and asexual, including the basics of plant breeding and selection of new varieties for landscape horticulture. Emphasizes recognition, proper utilization, and maintenance of ornamental plants.

**714 Principles of Horticulture (3) CSU***Lecture 3 hours.*

Concerns the maintenance work commonly done in home and estate gardens as well as parks and other public areas. Gives attention to lawn care, techniques of watering, fertilization and weed control.

**716 Arboriculture I (Care of Trees and Shrubs) (1)***Lecture 1 hour.*

Basic methods of tree and shrub care. Selection, planting and maintenance of trees and shrubs from youth to specimen maturity. Emphasizes cultural aspects as well as selection criteria. Extensive instruction in pruning and shaping.

**721 Organic Gardening (1)***Lecture 1 hour.*

Introduces natural methods of food production. Different organic gardening methods; discussion of organic types of fertilizers, composting and pest control methods; sources of natural gardening supplies and natural food cooperatives are covered.

**722 Care of Horticulture Equipment I (1)***Lecture 1 hour.*

Studies the selection, storage, maintenance, and care of horticultural tools and equipment with emphasis on hand operated types. Includes sources of equipment, adjustment, service, sharpening, and repair.

**724 Drip Irrigation Techniques (1) CSU***Lecture 1 hour.*

Studies the design, installation and maintenance of drip irrigation systems with emphasis on both theory and practical application to ornamental horticulture and food crop production.

**725 Vegetable Production (1) CSU***Lecture 1 hour.*

Discusses production of garden vegetables, preparation of the seed bed, planting, watering and fertilization. Pest control methods, selection of varieties and gardening equipment and tools are topics of instruction.

**729 Viticulture Practices (3) CSU***Lecture 2 hours; Laboratory 2 hours.*

A comprehensive study of grape growing utilizing the college plantings for field practice in planting, training and maintaining the vineyard. Varietal identification and use. Commercial production practices, mechanization and processing are covered.

**730 Introduction to Enology (1) CSU***Lecture 1 hour.*

History of wine and the wine production regions of the world. Emphasis on grapes and wine in California's historic Los Angeles area. Considers wine production and techniques. Theoretical aspects only. Wine not tasted or made.

**742 Practicum in Horticulture (5) CSU***Lecture 5 hours.**See schedule of classes for specific topics.*

Designed to present specific subjects to meet the needs of the horticulture industry and the community-at-large. Also meets the requirement for continuing education for various horticulture industries as dictated by the Agriculture Code of California.

**756 Greenhouse Plant Production (3) CSU***Lecture 2 hours; Laboratory 3 hours.*

Studies the status of the flower and pot plant growing industry. Considers all types of forcing structures, including their parts, maintenance, and use. For both greenhouse and field situations, studies soil and container mixes, nutrition, light, temperature, moisture, and pest and disease problems. Identifies flowering and foliage plants in common usage, which are grown in laboratory practice. Includes field trips for observation of industry facilities, methods, and problems.

**757 Plant Propagation (3) CSU***Lecture 2 hours; Laboratory 3 hours.*

Provides practice in plant propagation for commercial or home use. Requires students to propagate plant materials during laboratory hours. Discusses propagation methods, structures, diseases, and insect prevention and control of the plants being propagated. Provides laboratory work which includes seeding, transplanting, cutting, budding and grafting, potting and canning.

**760 Indoor Plant Care and Maintenance I (1)***Lecture 1 hour.*

Watering, fertilization, staking, pruning and planting the house plant. Discusses soil, light and humidity relationships. Discusses how and where to purchase plants.

**761 Indoor Plant Care and Maintenance II (1)***Lecture 1 hour.***Prerequisite:** *Plant Science 760.*

A continuation of Plant Science 760. Discusses general plant care, pest control and troubleshooting plant problems. Instruction of the plant maintenance business to include all aspects of customer relations and plant maintenance technician operations.

**762 Interior Plantscaping (1)***Lecture 1 hour.*

Economic and managerial aspects of plantscaping. Introduces technical aspects of interior design and planting. Emphasis on foliage plant selection and installation and client relationships.

**800 Plant Identification and Use I (3) UC:CSU***Lecture 2 hours; Laboratory 2 hours.***Recommended:** *Plant Science 711 or Botany 1.*

Presents a general course in plant identification, including woody and non-woody kinds. Emphasizes ornamental trees, shrubs, and vines, with some attention to annuals, perennials, flowers, succulents, and grasses. Is planned chiefly for students entering the fields of nursery practices, landscaping, and maintenance.

**801 Plant Identification and Use II (3) CSU***Lecture 2 hours; Laboratory 2 hours.*

Continues Plant Science 800, considering plants used in landscaping and nursery occupations not included in Agriculture 800. Requires a number of field trips for observation of plants and their uses.

**802 Plant Identification and Use III (3) CSU***Lecture 2 hours; Laboratory 2 hours.*

Includes the basic botany, habits, habitats, and culture of ornamental and fruit trees. Emphasizes identification, selection, training, correct placement, planting, and all-around care of trees. Considers problems of pruning, fertilization, pests and diseases and their treatment. Uses demonstrations and field trips largely within the school facilities.

**803 Native Plants for the Landscape (3) CSU***Lecture 2 hours; Laboratory 2 hours.*

Teaches California native plant materials suitable for landscape use. Includes some drought tolerant species as well. Emphasizes recognition, selection for specific uses, cultural requirements, and ecology;

**804 Landscape Drafting and Graphics (1)***Lecture 1 hour.*

Basic landscape drafting practices, lettering, line work, symbols, sheet composition and dimensioning. Provides brief introduction to landscape design.

**805 Basic Planting Design (1)**

Lecture 1 hour.

**Prerequisite:** Plant Science 800 and 801 and 804.

Design and preparation of landscape planting plans. Emphasizes ecological and aesthetic considerations.

**806 Landscape Planning and Design (4) <sup>△</sup>UC:CSU**

Lecture 2 hours; Laboratory 4 hours.

<sup>△</sup>**UC Credit Limit:** Plant Science 806 and 807 maximum of one course.

Includes the fundamental principles of landscape design, drafting, mapping techniques, basic design concepts as applied to residential and commercial developments, and practice in preparing landscape plans for small properties. Students must provide their own drawing equipment.

**807 Advanced Landscape Planning and Design (4)**

<sup>△</sup>**UC:CSU - RPT 3**

Lecture 2 hours; Laboratory 4 hours.

**Prerequisite:** Plant Science 806.

<sup>△</sup>**UC Credit Limit:** Plant Science 806 and 807 maximum of one course.

Continues Plant Science 806 with special emphasis on planting design oriented to commercial aspects, grading plans, construction drawings, specifications, cost estimates, and client relationships. Affords practice in solution of more difficult problems.

**808 Residential Landscape Design (3) CSU**

Lecture 3 hours.

Concentrates on home landscaping and the identification and selection of plant materials suitable for the average small house. Considers tree placement, lawn and ground covers, floral and shrub borders, foundation planting, the outdoor living space, play areas, and service yards. Requires students to complete a landscape plan of their choosing.

**811 Landscape Construction Design (1)**

Lecture 1 hour.

**Prerequisite:** Plant Science 804.

Design of basic garden elements (i. e. walls, overheads, pools, steps, fences, decks, and paving). Reviews construction materials and their inherent qualities. Preparation of construction drawings.

**812 Landscape Installation and Maintenance I (3) CSU - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

Teaches how to install the landscape work commonly done at commercial and residential job sites. Includes sod installation; soil preparation; turf renovation, tree moving equipment; pruning and surgery; injection feeding; lawn header board construction; vertical mulching techniques; planting of shrubs, trees, flowers, and ground covers. Covers use and care of operative equipment used by landscaping and maintenance crews, rototillers, edgers, mowers, sod cutters, chainsaws, and use of instruments (transit, builders level, etc.).

**813 Landscape Installation and Maintenance II (3) - RPT 1**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Plant Science 812.

A continuation of skills and practices in the installation and maintenance of landscape projects. Emphasis will be on maintenance and business aspects.

**815 Blueprint Reading and Cost Estimating (2)**

Lecture 1 hour; Laboratory 2 hours.

Interpretation of construction drawings and specifications for landscaping, to include quantity counts of material items and estimating costs of labor and materials.

**816 Grading and Drainage Planning (1) CSU**

Lecture 1 hour.

Proper grading and drainage methodology in the landscape construction industry. Emphasis will be given to industry standards and practices.

**817 Landscape Contracting Practices (1) CSU**

Lecture 1 hour.

Licensing requirements, testing procedures, and responsibilities of operating as a licensed landscape contractor.

**818 Basic Construction Techniques (Landscape Construction) (3) CSU**

Lecture 2 hours; Laboratory 3 hours.

**Note:** Due to the nature of the class, strenuous activity is necessary on occasion.

Includes fundamental concepts, materials and methods of working with earth, wood, concrete, concrete block, brick and stone, and irrigation and drainage as they apply to construction. Includes projects, blueprint reading, budget information, use of construction equipment and instruments as related to projects. Includes operation of power equipment.

**819 Advanced Construction Techniques (3)**

Lecture 2 hours; Laboratory 3 hours.

**Prerequisite:** Plant Science 818.

Installation of landscape projects with a minimum of instruction and supervision. Emphasis on responsibility and decision making.

**820 Irrigation Design and Installation (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

Studies the importance of irrigation to plant growth as well as the various methods of irrigation with special emphasis on sprinklers and irrigation management procedures.

**821 Advanced Irrigation Design (3) CSU - RPT 2**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Plant Science 820.

Design of large irrigation system, including multisystem operation, satellite programming, loop systems, pump systems, and installation procedures

**822 Turf and Ground Cover Management (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

Studies turfgrasses, their characteristics, uses, and management. Covers soils, soil preparation, irrigation, fertilization, insects, weeds, disease, and special management factors. Requires field trips to supplement class work.

**823 Advanced Turf and Ground Cover Management (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

**Prerequisite:** Plant Science 822.

Includes study of the following topics: equipment used with turfgrass management; soil aeration and thatch control irrigation, including drainage requirements and the use of wetting agents; sprinkler system design, checking and repair; disease, insect and weed identification and control; landscape shrubs and tree maintenance; record keeping and budgeting; personnel management and public relations.

**826 Computer Landscape Design (3)**

Lecture 2 hours; Laboratory 2 hours.

Provide basic training in the theory and practices of computer aided drafting and design (CAD). Emphasis will be placed on drawing and design solutions as they apply to the landscape industry. Both operating and application software is discussed and utilized to produce design solutions.

**840 Introduction to Pest Management (3) CSU**

Lecture 2 hours; Laboratory 2 hours.

Covers the identification and control of insect pests common to agricultural crops inclusive of ornamentals, the identification and the knowledge and control of common rodents and their effect upon agricultural production. Requires identification collection of insects by each student, and field work to supplement class and laboratory work.

**845 Biological Pest Control (1)**

Lecture 1 hour.

Natural approach to pest management based on understanding agro-ecosystems. Control of insects, mites and weeds using parasites and predators. Insectary operations, collection and release methods.

**851 Vertebrate Pest Control (1)**

Lecture 1 hour.

Vertebrate pests injurious to agricultural crops. Identification, life histories, and control methods. Covers gophers, ground squirrels, mice, rats, and others.

**852 Residential Pest Control (1)***Lecture 1 hour.*

Identification of and control methods for common pests found around the homestead, including indoor and outdoor pests, ornamental, fruit, and vegetable pests.

**896 Horticulture Projects (6) CSU***Laboratory 12 hours.*

Involves planning, developing, and completing an individual horticultural production project under the guidance of a faculty advisor, on or off the college campus.

**901 Natural Resources Conservation (3) <sup>Δ</sup>UC:CSU***Lecture 3 hours.*

<sup>Δ</sup>**UC Credit Limit:** *Plant Science 901 and Env. Sci. 2 maximum credit one course.*

Surveys the development of the conservation ethic in the United States and abroad and human populations in relation to natural resources. Examines the ecological basis of conservation, major ecosystems, their energy flow and resource relationships. Discusses plant and animal population dynamics, pollution, and pest control. Covers current government programs, legislation, and activities of conservation organizations. Studies practical conservation procedures and research applicable to improving environmental resources including soil, water, forests, fisheries, wildlife (including endangered species), air, and open spaces.

**942 Urban Forestry (2)***Lecture 1 hour; Laboratory 2 hours.*

Studies the emerging interest in developing and managing urban forests. Includes the environmental uses and benefits of trees in the urban environment; street tree and park plantings; windbreaks and climate moderating effects. Covers the use of trees as an energy source including recycling and fuelwood concepts. Field trips required.

**960 Wildland Fire Science (2) CSU***Lecture 2 hours.*

Provides the NRM major with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques. Covers fire ecology, effects on other resources, and the use of prescribed fire.

**975 California Native Plants (3) CSU***Lecture 2 hours; Laboratory 2 hours.*

Native plants of Southern California. Emphasizes identification, plant community concepts, and native plant ecology. Covers the use of identification keys, classification concepts, and management implications of the various vegetation types. Intended primarily for NRM majors.

# Political Science

Also See **Law 3** and **Chicano Studies 80**

**1 The Government of the United States (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

Studies the government of the United States as to historical background, constitutional background and development, structures and organizations, legal framework, basic concepts and key problems. Also provides an understanding of U. S. foreign policy, political parties and the electorate, civil liberties and civil rights, and issues facing the American people. A special study of California state and local government is a basic part of this course, providing for a strong civic involvement in self-government.

**2 Modern World Governments (3) UC:CSU***Lecture 3 hours.*

Studies a selected variety of major national states to secure a comparative picture of political philosophies, constitutions, political processes and governmental institutions. Emphasis is placed on those factors, geographic, historic, demographic and cultural, which contribute to differences in governmental experiences. Students will learn how to identify and apply concepts relevant to comparative political analysis.

**5 The History of Western Political Thought (3) UC:CSU***Lecture 3 hours.*

Surveys important ideas and theories in political thinking that have been developed from the time of the ancient Greeks to the present day. Explores relationships between political theory and political life.

**7 Contemporary World Affairs (3) UC:CSU - RPT 1***Lecture 3 hours.**May be offered as an honors section.*

Studies modern international relations and the forces which confront policy makers. Emphasizes current areas of crisis. Provides a basic understanding of the position of the United States in a tense and highly competitive political world.

**14 Government and Politics in the Middle East (3) UC:CSU***Lecture 3 hours.*

This course surveys the domestic, regional, and international factors which shape the political landscape of the Middle East. It identifies and explains sources of instability and violence in the region by focusing on the processes of state building and state disintegration. The course examines, in comparative context, the particular experiences of Middle Eastern countries to answer questions concerning the nature, roots, and historical evolution of the region's regimes, nationalism, leadership, and institutions. The approach is thematic, not chronological.

**19 Women in Politics (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

Examines from a woman's perspective political theories and public policies which shape the various possibilities and strategies for women's political participation in the United States as well as other selected countries.

**30 The Political Process (3) UC:CSU***Lecture 3 hours.*

This course surveys the nature and foundation of the democratic order. Specific focus is placed on traditional democratic theory, the contrasting philosophies of the Framers of the Constitution, and the impact of the decentralized, federal structure on the political processes of the United States. The course devotes considerable attention to the political rights and obligations of citizenship, important institutions and processes created under the US and California constitutions, elections and political behavior, public opinion and socialization, and the role of political parties and interest groups in a modern democratic political process.

**37 Introduction to Political Sociology (3) UC:CSU***Lecture 3 hours.**Same as Sociology 37. Credit not given for both.*

This course is the sociological study of power, politics, and the state. In political sociology, students will examine the interrelation of politics and society by combining sociological analysis with analyses of political structure and political processes. Emphasis is placed on political sociological theories, elites and masses, the state, globalization, nationalism and social movements, media and interest groups, social and political institutions, capitalism, corporatism, and status.

**42 Politics of Central and South America (3) UC:CSU***Lecture 3 hours.*

A survey of the political history, institutions, socio-political movements, geography, interest groups and political parties of Central and South America. To discuss and analyze the history and geography of Central and South America, followed by a survey of several nations as each nation experienced the impact of European Colonialism and the subsequent transition from colonialism, American imperialism, and 20th century authoritarianism into 21st century democracies.



### 43 Politics of Mexico and Cuba (3) UC:CSU

Lecture 3 hours.

A survey of the political history, institutions, socio-political movements, geography, interest groups and political parties of Cuba and Mexico. To discuss and analyze the history and geography of the Cuba and Mexico, followed by a survey of the nations as each nation experienced the impact of European Colonialism and the subsequent transition from colonialism, American imperialism, and 20th century authoritarianism into 21st century democracies.

### 185 Directed Study - Political Science (1) CSU - RPT 2

### 285 Directed Study - Political Science (2) CSU

### 385 Directed Study - Political Science (3) CSU

Conference 1 hour per unit.

Allows students to pursue Directed Study in Political Science on a contract basis under the direction of a supervising instructor.

911-941

### Cooperative Work Experience Education - Political Science (1-4) SU

See Cooperative Work Experience Education.

# Psychology

### 1 General Psychology I (3) \*UC:CSU

Required for Psychology majors.

Lecture 3 hours.

**\*UC Credit Limit:** Credit given for either Psychology 1 or Psychology 6, not both.

**Advisory:** Eligibility for English 28 or higher.

May be offered as an honors section.

Introduction to the scientific study of behavior and mental processes through exploring well established psychological perspectives, theories, concepts, research methods and results. Main topics include: history of psychology, physiological psychology, sensation and perception, consciousness, life span development, learning, memory, cognition, social psychology, motivation and emotion, health psychology, personality, psychological disorders, and therapy. Additional coverage may include: sexuality and statistics.

### 2 General Psychology II (3) UC:CSU

Lecture 3 hours.

**Note:** Physiological Psychology or its college equivalent.

**Prerequisite:** Psychology 1 or 6 or its college equivalent with a grade of "C" or better.

Provides an introduction to physiological psychology, which considers the functional and anatomical aspects of the nervous system as they apply to behavior. Physiological processes, structure and functions of sense organs, and the effects of natural and introduced blood transported substances are analyzed in terms of their influences on emotions, speech, intelligence, consciousness, sleep, motivational and psychosomatic relationships.

### 3 Personality and Social Development (3) CSU

Lecture 3 hours.

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Examines the psychological processes through which people deal with the challenges of everyday life. Main topics include: personality theory, stress, coping processes, the self, social cognition, communication, interpersonal relationships, gender, developmental processes in adolescence and adulthood, human sexuality, health psychology, psychological disorders, and psychotherapy.

### 6 Human Behavior (3) \*UC:CSU

Lecture 3 hours.

**Note:** Not recommended for students who have credit for Psychology 1, who are Psychology majors, or whose major requires Psychology 1.

**\*UC Credit Limit:** Credit given for either Psychology 1 or Psychology 6, not both.

Introduces the student to the methods and data of psychology as a behavioral science. Enables students to apply systematically obtained data and techniques to their own experience and to their relations with others.

### 11 Child Psychology (3) UC:CSU

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6

(Equivalent to Child Development 1. Credit not given for both courses.)

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Considers general and specific behavior patterns of children with a view to helping adults better understand the child's behavior and development.

### 12 Adolescent Psychology (3) UC:CSU

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Discusses behavioral patterns in the second decade of life, exploring differences between male and female adolescents and how gender stereotypes are undergoing change. Topics include adolescents in the mainstream and those in the disadvantaged stratum; cross cultural differences in adolescents; psychological needs of the period and how they are met.

### 13 Social Psychology (3) UC:CSU

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Studies individual behavior as it affects others and as it is affected by others. Main topics include: Aggression, Attitudes, Discrimination and Prejudice, Conformity, Compliance, Obedience, Group Behavior, Interpersonal Relationships, Persuasion, Prosocial Behavior, "The Self", and Social Cognition.

### 14 Abnormal Psychology (3) UC:CSU

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Acquaints the student with dynamics of personality, adjustment mechanisms, mental mechanisms, types of emotional disorders, various theories of their origin and development, and various therapeutic approaches.

### 16 Intimacy, Marriage, and Family Relationships (3) CSU

Lecture 3 hours.

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Presents a scientific study of human behavior and experience as expressed in love, marriage, and family relationships. Such topics as the psychological motives of couples, the emotional maturity of couples, the need for an adequate frame of reference for marriage, the development of interpersonal competence and effective partner and parentage relations are studied.

### 17 The Exceptional Child (3) CSU

Lecture 3 hours.

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Considers personality, social, and cognitive development of exceptional children, that is, mentally retarded, emotionally disturbed, brain damaged, learning disabled, ADHD, sensory impaired, bilingual, creative, and gifted children. Discusses familial reaction, special educational problems and techniques, and self-image.

**26 Power and Speed Reading (3) CSU - RPT 1**

Lecture 3 hours.

Emphasizes the development of reading speed, comprehension, and vocabulary through practice with various audio-visual devices. Emphasis is placed on applying techniques to both study and leisure reading.

**32 Psychology of Women (3) UC:CSU**

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

This course should provide a better understanding of the experiences of women through exploration of cultural stereotypes, family structure, female sexuality, women's health and self-esteem issues.

**40 Psychology of Parent Child Relations (3) CSU**

Lecture 3 hours.

Presents a program for parents and others responsible for managing or raising children.

**41 Life Span Psychology: From Infancy to Old Age (3) UC:CSU**

Lecture: 3 hours.

**Advisory:** Completion of Psychology 1 or 6

An introduction to psychological development from infancy through old age, including genetic, physical, and social influences on perception, learning, memory, intelligence, personality, self-concept, and social roles; tasks, changes, and adjustments related to each phase of the life cycle.

**52 Psychological Aspects of Human Sexuality (3) UC:CSU**

Lecture 3 hours.

**Advisory:** Completion of Psychology 1

**Note:** Provider approved by the California Board of Nursing. The course awards 45 contact hours of continuing education for nurses.

Explores the psychological aspects of human sexuality. Addresses areas of sexual development and functioning as they have meaning for the individual as he/she develops his/her core awareness of self and sexual identity. Topics include male and female anatomy and function of sex organs; genesis of sexuality; myths and fallacies regarding the sexual process; its significance as a life function; dysfunction and variant behavior.

**60 Stress Management (3) CSU**

Lecture 3 hours.

Examines methods of managing environmental, organizational, social and internal stress in an effort to promote more effective coping on the part of the individual in occupational, interpersonal and everyday life situations.

**66 Introduction to Critical Thinking (3) UC:CSU**

Lecture 3 hours.

This course covers the nature of critical thinking, models and strategies, common fallacies of reasoning, self regulation in the thinking process, application of critical thinking to specific areas, and evaluation of problem solving techniques.

**69 Psychology in Film (3) CSU**

Lecture 3 hours.

**Advisory:** Completion of Psychology 1 or 6 with a grade of "C" or better.

This course will survey a variety of films that portray specific human behaviors, characteristics, and disorders as discussed in General Psychology I. A lecture/discussion will accompany each film that provides a more in depth analysis of the relevant topic than is covered in General Psychology I. Topics covered will be drawn from research methods, biological psychology, sensation & perception, states of consciousness, learning, memory, intelligence, motivation, human development, personality, emotions & stress, human sexuality & gender, social psychology, abnormal psychology, and clinical psychology.

**73 Laboratory in Physiological Psychology (1) UC:CSU**

**Prerequisite:** Psychology 2 or its college equivalent with a grade of "C" or better, or concurrent enrollment.

Introduces students to the writing of research reports and to nervous system anatomy through sheep brain dissections. Using computerized polygraph equipment explores the interrelationships between human brain and mind, e.g., differences in brain waves during relaxation and mental calculations.

**74 Research Methods in Behavioral Sciences (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** Psychology 1 or its college equivalent with a grade of "C" or better.

**Prerequisite or Corequisite:** Statistics 1 or its college equivalent with a grade of "C" or better.

An introduction to basic research concepts, designs, and statistical techniques used in psychology. Knowledge of descriptive and inferential statistics and its application to data is applied for both non-experimental and experimental studies. Understanding of ethics in research for animals and humans is addressed. Critiquing of current published research articles and disseminating of experimental and non-experimental research is discussed. Researching published articles through the use of personal computers is demonstrated. Report writing of APA-style manuscripts and presentation of a group project from data collected are required. Utilization of personal computers and the software "Statistical Package for the Social Sciences (SPSS)" will be applied throughout the course.

**185 Directed Study - Psychology (1) CSU - RPT 2****285 Directed Study - Psychology (2) CSU****385 Directed Study - Psychology (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Psychology on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Psychology (1-4) CSU**

See Cooperative Work Experience Education.

# Public Relations

**1 Principles of Public Relations (3) CSU**

Lecture 3 hours. Not offered each semester.

Evaluates public relations as a growing profession. Looks at the job opportunities for the practitioner, internal and external PR and the staff as well as the counselor tasks. Investigates relationships with the media, organizing and executing campaigns. The use of photography, graphics and marketing is studied.

**2 Public Relations Techniques (3) CSU**

Lecture 3 hours.

**Prerequisite:** A grade of "C" or better in Public Relations 1 and English 28.

**Advisory:** Completion of Journalism 100, 101 and English 101.

Builds upon the public relations writing techniques and strategic program planning taught in PR 001, while orienting the student toward the types of written products generated by public relations professionals. This advanced course will refine a student's writing skills while paying close attention to the various formats such as press releases, media advisories, crisis plans, press kits in addition to other widely used public relations tools while adhering to the ethical guidelines set by the Public Relations Society of America. The accompanying practicum gives students the opportunity to work with an on-campus or non-profit organization to create and implement a public relations plan.



## Reading

See course listing under **English** and **Psychology 26**.

## Real Estate

### 1 Real Estate Principles (3) CSU

*Lecture 3 hours.*

Introductory survey of the fundamentals and principles of real estate. Areas covered include legal descriptions, estates in land, methods of holding title, transfer of real property, encumbrances, contract law, real estate agency law, principles of real estate financing, real estate appraisal, escrow, construction, investment, California real estate license law, and landlord/tenant law. Career opportunities are also discussed. Applies toward the mandatory educational requirements for obtaining the California Real Estate Salesperson or Broker License.

### 3 Real Estate Practices (3) CSU

*Lecture 3 hours.*

**Prerequisite:** Real Estate 1.

This course covers the elements of day-to-day real estate sales and brokerage practices, emphasizing the selling process and the handling of a real estate transaction from listing to closing escrow. It offers guidelines in areas such as: listing agreements and purchase agreements, pricing property, qualifying the purchaser, agency relationships, financing and other topics. Applies towards the mandatory educational requirements for obtaining the California Real Estate Salesperson or Broker License.

### Cooperative Work Experience Education - Business (1-4) CSU

*See Cooperative Work Experience Education.*

## Recreation

911-941

### Cooperative Work Experience Education - Recreation (1-4) CSU

*See Cooperative Work Experience Education.*

## Service Learning

### 1 Introduction to Service Learning (1) CSU

*Lecture 0.5 hour; Laboratory 1 hour.*

Emphasizes the academics while nurturing a sense of social responsibility, ethics of service, and civic skills in students.

### 2 Field Work in Service Learning (1) CSU - RPT 3

*Laboratory 3 hours.*

This is an activity course in which students provide service to public and private non-profit agencies and charities. Emphasizes the academics while nurturing a sense of social responsibility, ethics of service, and civic skills in students. This course is integrated into and enhances the academic curriculum of the students, or the educational components of service learning courses.

## Sign Language

See course listing under **American Sign Language**

## Sociology

### 1 Introduction to Sociology (3) UC:CSU

*Lecture 3 hours.*

*May be offered as an honors section.*

Presents an orientation to the field of sociology including such sociological concepts and issues as culture and subculture; development of the self; gender and age roles; social class and caste; groups, communities, collectivities, and organizations; deviance; racism; human institutions: family, religion, education, government, economics; and population change in society.

### 2 American Social Problems (3) UC:CSU

*Lecture 3 hours.*

Deals with the sociological identification and analysis of contemporary social problems in the United States. Analyzes aspects of social and cultural change which include issues of personal demoralization and social disorganization. This course is also designed to introduce the student to the significance of race, class, and gender in understanding social problems in the U.S. and around the world. The course will focus on sociological theories in examining social problems.

**3 Crime and Delinquency (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

Examines the nature and extent of crime and delinquency, theories of causation, types of juvenile and adult offenses, and efforts by society to cope with law violations. Includes programs for prevention, correction, and rehabilitation.

**4 Sociological Analysis (3) UC:CSU***Lecture 3 hours.*

This course introduces students to the fundamental principles and methods of sociological research design and implementation. Students examine the key varieties of evidence—including qualitative and quantitative data, data-gathering and sampling methods, logic of comparison, and causal reasoning. The work of several scholars is evaluated and students create their own research design related to a sociological issue.

**8 Sociology of Aging (3) UC:CSU***Lecture 3 hours.*

This course examines the social structural influences on the lives of individuals and their families in an aging society. Emphasis is placed on aging as a social process, and the ways in which societies and groups are differentiated by age.

**11 Race & Ethnic Relations (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

This course examines the definitions, history, and experiences of ethnic and racial groups in this country. Attention is given to Blacks, Latinos, Native Americans, Asian Americans, and White Americans as well as women and religious minorities. What social, economic, and political factors affect majority-minority relations? What are the sources of discrimination? Of prejudice? Is social equality between different groups possible?

**13 Society and Personality (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

This course presents an investigation into the relationship between individual personality and the social environment. Analyzes recent social psychological research.

**15 Religion and American Society (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

This course is designed to introduce students to the sociological analysis of religion. It will distinguish sociological perspectives on religion from alternative approaches. It will examine the connections between religion and other aspects of social life, such as gender, class, race/ethnicity and sexual identity. It will also analyze the relationship between religion and social continuity and change. Emphasis is placed on analyzing relevant current events involving religion.

**17 Introduction to Counseling (3) CSU***Lecture 3 hours.*

This course is intended to be an introduction to the basic paradigms and techniques of counseling. It is an introductory course for those students who find themselves beginning their career in the helping profession. The purpose is to provide both a theoretical and a practical foundation of basic counseling skills and techniques. The areas of counseling include: marital, familial, sexual, emotional, ethical, legal, career, addiction, and diverse population.

**21 Human Sexuality (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

This course provides a comprehensive introduction to the social, cultural, historical, and religious influences that shape contemporary sexual values and normative beliefs in the United States. Explores the diversities of major paradigms of sociology toward sexual practices and behavior, including cross-cultural traditions, sexual attraction and response, sexual deviance, sexual orientations and the commercialization of love, sex, and eroticism.

**28 The Family: A Sociological Approach (3) UC:CSU***Lecture 3 hours.**May be offered as an honors section.*

This course presents the family as a social institution. The course examines the structure and function of the modern family, as well as the historical influences on the development of the family. The course will highlight the family life cycle from mate selection through the issues of the aging family.

**29 The U.S. and Terrorism (3) UC:CSU***Lecture 3 hours.*

This class will examine the evolution of the U.S. presence in the Middle East and Central Asia. It will also explore the development of terrorism and the U.S. response.

**35 The Labor Movement (3) UC:CSU***Lecture 3 hours.*

The course presents a sociological and historical analysis of labor movements in the United States and their effects upon American society. The course introduces students to distinctions among different forms of labor (forced and free), the role of markets and the State in regulating labor, and the effects of external factors (Industrial Revolution, abolition of chattel slavery, the Great Depression, war, globalization) and internal (to the laboring class) factors (competition among workers, ideologies, social and political organization) affecting the development of labor movements.

**37 Introduction to Political Sociology (3) UC:CSU***Lecture 3 hours.**Same as Political Science 37. Credit not given for both.*

This course is the sociological study of power, politics, and the state. In political sociology, students will examine the interrelation of politics and society by combining sociological analysis with analyses of political structure and political processes. Emphasis is placed on political sociological theories, elites and masses, the state, globalization, nationalism and social movements, media and interest groups, social and political institutions, capitalism, corporatism, and status.

**42 Educating the Educator (2)***Lecture 2 hours.*

This course includes pedagogical issues which will help facilitate the development of courses for the ENCORE program. This course consists of educational theories/practices, teaching methodologies, learning styles, testing, evaluation, and curriculum development geared towards educating the older adult.

**43 Online Teaching and Learning for Educators (2)***Lecture 2 hours.*

Introduces strategies for designing and teaching an online course. Designed so that learners will experience the various components of an online course from both student and facilitator perspectives. Basic computer, word processing knowledge, and Internet access ability are assumed. Offered pass/no-pass only.

**86 Popular Culture (3) UC:CSU***Lecture 3 hours.*

Analyzes the historical and current development and emergence of American popular culture and its relationship to social institutions, collective behavior, and roles in people's lives. Social, technological, political, and economic aspects of society are examined with regard to the adoption, maintenance, and changes in popular culture, including the consumption of mass media, fashion, music, consumerism and food. Distinction between popular culture and culture, mass culture, folk culture and its contribution to society's contemporary outlook.

**87 Sociology of Deviant Behavior (3) UC:CSU***Lecture 3 hours.*

Examines the structural and individual causes of deviant behavior in American society. Both absolutist and relativist analysis describe the very nature of why people engage in "undesirable" and socially "unacceptable" behavior. Apart from criminology, this discipline observes other behaviors that are not sanctioned by a legal body. The causes, consequences, practical data and ameliorative methods are offered.



911-941

**Cooperative Work Experience Education - Sociology (1-4) CSU**

See Cooperative Work Experience Education.

# Spanish

**1 Elementary Spanish I (5) UC:CSU**

Lecture 5 hours.

**Recommended:** Concurrent enrollment in Spanish 101.

Students with previous knowledge of Spanish should enroll in a higher level. Heritage speakers should enroll in Spanish 4, 5, or 6.

This is an introductory course designed for students who have had little or no recent formal instruction in Spanish. Upon successful completion of this course students are able to ask and answer questions in the present tense and understand and carry on simple conversations on familiar topics. This course is conducted primarily in Spanish.

**2 Elementary Spanish II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Spanish 1 with a grade of "C" or better, or equivalent high school preparation, or the appropriate skill level demonstrated in Spanish 1 by a successful score on the CAPE (Computer Assisted Placement Exam).**Recommended:** Concurrent enrollment in Spanish 101.

Students with previous knowledge of Spanish should enroll in a higher level. Heritage speakers should enroll in Spanish 4, 5, or 6.

In this class students will learn to ask and answer questions in past tenses (including the preterit and imperfect), give commands, use present subjunctive, and be able to understand more complex conversations, speak and write with greater accuracy and detail. Proficiency in listening, speaking, reading, writing and the culture of Spanish-speaking countries is evaluated. Heritage speakers should enroll in Spanish 4, 5 or 6.

**3 Intermediate Spanish I (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Spanish 2 with a grade of "C" or better, or equivalent high school preparation, or the appropriate skill level demonstrated in Spanish 2 by a successful score on the CAPE (Computer Assisted Placement Exam).**Recommended:** Concurrent enrollment in Spanish 101.

Students with previous knowledge of Spanish should enroll in a higher level. Heritage speakers should enroll in Spanish 4, 5, or 6.

Upon entering this class students should be able to ask and answer questions in past tenses (including the preterit and imperfect), give commands, use present subjunctive, and be able to understand more complex conversations and speak and write with greater accuracy and detail. In this class students learn further grammatical constructions (past subjunctive, compound tenses and passive voice). Students begin to be able to understand and carry on more detailed conversations and speak and write with a moderate degree of fluency on a variety of cultural topics. Proficiency in listening, speaking, reading, writing and the culture of Spanish-speaking countries is evaluated. This course is conducted primarily in Spanish. Heritage speakers should enroll in Spanish 4, 5, or 6.

**4 Intermediate Spanish II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Spanish 3 with a grade of "C" or better, or equivalent high school preparation, or the appropriate skill level demonstrated in Spanish 3 (ability to ask and answer questions in the present and past tenses, give commands, use present and past subjunctive, compound tenses and passive voice. Students must be able to understand and carry on more detailed conversations and speak and write with a moderate degree of fluency on a variety of topics).**Recommended:** Concurrent enrollment in Spanish 101.

Intermediate performance-based course whose major purpose is critical thinking and communicating. The five basic skills emphasized in this course are Listening, Speaking, Reading and Writing and cultural and literary awareness. Students expand their ability to perform the functions developed in Levels I-III as well as to develop the ability to understand literary issues, engage in close conversations with a critical mind, compare and contrast, explain and support an opinion and idea. This class is conducted in Spanish.

**5 Advanced Spanish I (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Spanish 4 with a grade of "C" or better or the appropriate skill levels achieved in Spanish 4.**Note:** Concurrent enrollment in Spanish 8 is strongly recommended for non-native speakers.**Recommended for native speakers, Spanish majors, and international business majors.**

Advanced performance-based course whose major purpose is critical thinking and communicating. The five basic skills emphasized in this course are Listening, Speaking, Reading and Writing and cultural and literary awareness. Students expand their ability to perform the functions developed in Levels I-IV as well as to develop the ability to understand literary issues, engage in close conversations with a critical mind, compare and contrast, explain and support an opinion and idea and convince and persuade. This class content embraces concepts of broader cultural significance, including issues, such as environment, human rights, abstract ideas concerning art, literature, politics and society. This class is conducted in Spanish.

**6 Advanced Spanish II (5) UC:CSU**

Lecture 5 hours.

**Prerequisite:** Spanish 4 with a grade of "C" or better, or the appropriate skill levels achieved in Spanish 4.**Note:** Concurrent enrollment in Spanish 8 is strongly recommended for non-native speakers.**Recommended for native speakers, Spanish majors and international business majors.**

Advanced performance-based course whose major purpose is critical thinking and communicating. The five basic skills emphasized in this course are Listening, Speaking, Reading and Writing and cultural and literary awareness. Students expand their ability to perform the functions developed in Levels I-IV as well as to develop the ability to understand literary issues, engage in close conversations with a critical mind, compare and contrast, explain and support an opinion and idea and convince and persuade. This class content embraces concepts of broader cultural significance, including issues, such as environment, human rights, abstract ideas concerning art, literature, politics and society. This class is conducted in Spanish.

**8 Conversational Spanish (2) CSU - RPT 3**

Lecture 2 hours.

**Prerequisite:** Spanish 2 with a grade of "C" or better, or equivalent high school preparation, or the appropriate skill level demonstrated upon completion of Spanish 2.**This course is offered as a credit/no credit course only.**

This is a conversation course designed for students who are able to ask and answer questions in the present and past tenses, give polite commands, use present subjunctive, and be able to understand basic conversations. Upon successful completion of this course students will begin to be able to understand and carry on more detailed conversations and speak with a moderate degree of fluency on a variety of topics. Significant amounts of time is spent engaging in oral communication and never in translation. The exclusive use of Spanish in the classroom from the beginning is done by memorization and role playing of dialogues, and prediction exercises. Students will be assigned four hours per week of homework including one mandatory hour in the Learning Center (TLC 1613).

**9 Hispanic Civilization (3) UC:CSU**

Lecture 3 hours.

This course is a cultural and literary history and an interpretation of Spanish civilization from its earliest beginnings to the present, with particular attention paid to Spanish art, literature, architecture and music. Few cultures in the world possess a comparable richness and continuity as demonstrated by the contributions of Romans, Jews, and Moors. Emphasis will be placed on the discussion of the formation of a Spanish identity and cultural consciousness through such institutions as the Inquisition, the Catholic Church, the Monarchy and the military; in addition, we will analyze the revolutionary currents of various political and social philosophies that fought the radically conservative tendencies of the aforementioned religious and political institutions.

**10 Latin American Civilization (3) UC:CSU**

Lecture 3 hours.

Same as History 23. Credit not given for both courses.

A study of the diverse cultures of Spanish and Portuguese speaking countries and peoples, together with the themes, institutions, beliefs, and symbols that have endured through time and their quest to define and understand their identity in their actions, in their memories of the past, and in their dreams of the future.

**11 Great Books of Spanish Literature (3) UC:CSU**

Lecture 3 hours.

An interpretation of Spain and Spanish culture presented through a survey of its literature, with selected readings of important writers in their historical setting, from the foundational myth of "El Cid" to writers raised during the dictatorship of Franco in contemporary Spain.

**12 Contemporary Mexican Literature (3) UC:CSU**

Lecture 3 hours.

Humanities Credit.

**Note:** Readings are in English translation. Knowledge of the Spanish language is not required.

A course exploring Mexican cultural identity through great works of Mexican literature spanning the late 19th and early 21st centuries. The works of world famous authors such as Juan Rulfo, Octavio Paz, Elena Poniatowska, and Mariano Azuela will be studied in depth.

**15 Great Books of Latin American Literature (3) UC:CSU**

Lecture 3 hours.

Humanities Credit.

May be offered as an honors section.

**Note:** Readings are in English translation. Knowledge of the Spanish language is not required.

A course that studies the diverse cultures of Latin America through its greatest literary works, covering the Conquest to contemporary times. Great movements in Latin American literature will be covered, such as Romanticism, Realism, Naturalism, and the 'magic realism' of the so-called Latin American 'boom' novels of the 1960s and 1970s. Great authors such as Gabriel Garcia Marquez, Octavio Paz, Carlos Fuentes, Isabel Allende, Jorge Luis Borges and others will be analyzed in depth.

**16 Mexican Civilization (3) UC:CSU**

Lecture 3 hours.

A study of the diverse cultures of Mexico from Pre-Columbian to present times, including its culture, history, near-constant battles for freedom, sovereignty and independence.

**21 Fundamentals of Spanish I (3) \*UC:CSU**

**Note:** Spanish 21 and 22 are equivalent to Spanish 1. Credit is given for either Spanish 1 or Spanish 21 and 22, not both.

Introductory course for students who have had little or no recent formal education in Spanish. Students learn to ask and answer questions in the present tense and understand and carry on simple conversations on familiar subjects. Proficiency in listening, speaking, reading, writing, and culture of Spanish-speaking countries is evaluated. Course covers chapters 1-3 of Espanol a lo vivo. Class assignments will require one hour per week in The Learning Center (TLC 1613).

**22 Fundamentals of Spanish II (3) \*UC:CSU**

**Prerequisite:** Spanish 21.

**Note:** Spanish 21 and 22 are equivalent to Spanish 1. Credit is given for either Spanish 1 or Spanish 21 and 22, not both.

Continuation of introductory course for students who have had little or no recent formal education in Spanish. Students learn to ask and answer questions in the present tense and understand and carry on simple conversations on familiar subjects. Proficiency in listening, speaking, reading, writing, and culture of Spanish-speaking countries is evaluated. Course covers chapters 4-6 of Espanol a lo vivo. Class assignments will require one hour per week in The Learning Center (TLC 1613). Students must pass exit proficiency exam (CAPE) with a score of 295 or better to receive credit for the course.

**24 Spanish for Medical Personnel (3) CSU - RPT 1**

**Note:** This course is taught in 1 unit modules and is offered as a credit/no credit course only.

Provider approved by the California Board of Nursing. Each of the 1-unit modules awards 15 contact hours of continuing education for nurses.

A basic course in Spanish for health service personnel serving the Spanish speaking community. Some knowledge of the basics of Spanish grammar and usage is recommended.

**25 Spanish American Short Story in Translation (3) UC:CSU**

Lecture 3 hours.

Humanities Credit.

**Note:** Readings are in English translation. Knowledge of the Spanish language is not required.

This course studies the compelling genre of the short story in the context of Latin American culture, history, politics and multi-national identity formation. Beginning during the time of the Conquest to the contemporary period, various short stories from around Latin America exemplify the stunning diversity of themes, styles, characters and the influence of various literary, artistic and social movements, such as Romanticism, Modernism, Naturalism, Surrealism and Expressionism. This course emphasizes reading and writing skills, and requires in-class essays and a longer, research paper.

**26 Understanding Latin America through Film (3) UC:CSU**

Lecture 3 hours.

Humanities credit.

This course looks at the prolific output of films from Latin America that emphasize social themes, particularly in the area of social justice and political conflict. Through film, the diverse countries of Latin America express their resistance to and engagement with repressive social and political practices that far too often seek to stifle the creative, marginalized voices of the striving individual. In addition to great films and directors of the past, we will study in depth the recent work of such gifted directors as Guillermo del Toro and Alejandro Gonzalez Inarritu.

**27 Cultural Awareness Through Advanced Conversation (3) UC:CSU**

Lecture 3 hours.

Humanities credit.

**Prerequisite:** Spanish 3 with a grade of "C" or better.

A course emphasizing fluency in both conversation and basic cultural knowledge of the Hispanic world, focusing mainly on contemporary social, cultural and political issues. Students will read a wide variety of texts for class discussion, including short stories, newspapers, magazines, essays and specialized Web pages addressing various aspects of Hispanic culture and contemporary issues. Also included in the course are guest speakers, community service projects, and student presentations.

**35 Spanish for Spanish Speakers I (5) CSU**

Lecture 5 hours

Designed to address the needs of the bilingual student. An introduction to written Spanish with an emphasis on the acquisition of a solid grammatical base, vocabulary enrichment and spelling. Addresses all four skills in Spanish (speaking, listening, reading, writing), but focuses on reading and writing. Includes readings on the geography, customs and culture of Spain and Latin America. Credit given for either Spanish 35 or Spanish 1, but not both.

**36 Spanish for Spanish Speakers II (5) CSU**

Lecture 5 hours.

A continuation of Spanish 35. Advances the study of grammar and complex vocabulary. Addresses all four skills in Spanish (speaking, listening, reading, writing), but continues to focus on the development of reading and writing skills. Further study of Spanish and Latin American cultures and civilization. Credit given for either Spanish 36 or Spanish 2, but not both.

**48 Introduction to Spanish Translation I (3) CSU**

Lecture 3 hours.

**Prerequisite:** Spanish 4 or equivalent skills.

This course is an introduction to the theory, methods, techniques, and problems involved in translation from Spanish to English. (There is also some translating from English to Spanish, and some elementary interpretation from Spanish to English). The emphasis is on general material taken from journals and newspapers, with some consideration from the fields of business, literature, and the social sciences. Required for students interested in Spanish Certificate in Translation.

**49 Introduction to Spanish Translation II (3) CSU**

Lecture 3 hours.

**Prerequisite:** Spanish 48 with a grade of "C" or better.

**Note:** Course taught in English. For students whose career options require bilingual skills.

Continues the study of basic translation theory with an emphasis on the contrastive aspects of English and Spanish grammars. Practical application of basic translation techniques and procedures to texts of a general nature. Required for students interested in Spanish Certificate in Translation.

**65 Mexican Literature and Culture (3) UC:CSU**

Lecture 3 hours.

This course will familiarize the student with Mexican civilization and literature, from the Spanish conquest to modern Mexico, as revealed through the tales of its people, art, music and writings.

**101 Spanish Language Laboratory (1) CSU - RPT 3**

Laboratory 2 hours.

**Note:** Recommended for all students enrolled in Spanish 1, 2, 3, 4, and 8.

This is a credit/no-credit course. Students receive one unit of college credit (with no letter grade) by spending at least 32 hours over the semester using the equipment and regularly handing in the lab workbook assignments to their instructor. This language workshop uses multi-media (video, audio and computers) to enhance instruction. Students must be currently enrolled in a Spanish language course.

**185 Directed Study - Spanish (1) CSU - RPT 2****285 Directed Study - Spanish (2) CSU****385 Directed Study - Spanish (3) CSU**

Conference 1 hour per unit.

Allows students to pursue Directed Study in Spanish on a contract basis under the direction of a supervising instructor.

## Special Education

See also **Learning Foundations** and **Learning Skills**

**3 Computer-Directed Writing Skills (2) (NDA) - RPT 3**

Lecture 1 hour; Laboratory 2 hours.

Formerly Learning Skills 21

**Prerequisite:** Learning Skills 185, Special Education 85.

Students will master precomposition and composition skills in order to write simple narrative/informative essays. Using IBM-based computer systems, learning disabled students will develop basic composition skills and demonstrate mastery of grammar, punctuation and spelling.

## Speech

**101 Oral Communication I (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

**Advisory:** Eligibility for English 28.

Offers training in the theory of speech communication and the practice of effective preparation and delivery of structured oral presentations.

**102 Oral Communication II (3) UC:CSU**

Lecture, 3 hours.

This course emphasizes the speech and debate process. Fundamentals of effective argumentative, persuasive, impromptu and other speech and debate speaking events are examined. Oral activities are used extensively as the primary learning method. Activities may involve participation in local debate tournaments.

**103 Business and Professional Speaking (3) CSU**

Lecture 3 hours.

This course enables students to apply speech communication skills to business settings. Students complete structured written assignments and oral presentations relevant to business communication.

**104 Argumentation (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

**Advisory:** Eligibility for English 28.

Explores the critical thinking process, emphasizing the use of logic, reasoning, and evidence in the presentation and analysis of sound arguments. Students will participate in debates.

**111 Voice and Articulation (3) CSU**

Lecture 3 hours.

This introductory course teaches effective voice production, accurate American English pronunciation and effective sound identification. The primary focus of the course is on developing the awareness and production of correct vowel and consonant articulation through the use of phonetic practice. The course covers vocabulary, phonetic and diacritical symbols, alphabet and the vocal mechanism. The development of one's natural voice coordinated with proper breathing techniques through group and individual exercises is emphasized through sense-memory techniques.

**113 English Speech as a Second Language (3) CSU - RPT 1**

Lecture 3 hours.

Stresses speaking of English, pronunciation, idiomatic expressions, phraseology; rhythmic inflections, grammar, vocabulary building, and oral composition. The course is designed for English second language learners with varying levels of English ability.

**121 The Process of Interpersonal Communication (3) UC:CSU**

Lecture 3 hours.

**Advisory:** Eligibility for English 28.

This lecture/activity/discussion course examines the theory, scope and purpose of human communication in interpersonal environments. Students participate together in oral exercises.

**122 Communication Across Cultures (3) UC:CSU**

Lecture 3 hours.

May be offered as an honors section.

Surveys the verbal and non-verbal ways cultures of the world communicate. It focuses on communication fundamentals, language, cultural origins, and methods of handling intercultural communication conflicts. Students will participate in researched oral discussions of selected cultural groups.

**185 Directed Study - Speech Communication (1) CSU - RPT 2****285 Directed Study - Speech Communication (2) CSU****385 Directed Study - Speech Communication (3) CSU***Conference 1 hour per unit.***Prerequisite:** Speech Communication 101, 102, or 104.

Allows students to pursue directed, individualized study in the field of Speech Communication on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education -Speech (1-4) CSU Communication***See Cooperative Work Experience Education.*

## Statistics

**1 Elementary Statistics I for the Social Sciences (3) \*UC:CSU***Lecture 3 hours.***Prerequisite:** Mathematics 125 or its college equivalent with a grade of "C" or better.**Note:** Students may be required to present proof of completion of Intermediate Algebra or its equivalent at the first class meeting.

Covers both descriptive and inferential statistics. Topics include methods used to collect and describe data, central tendency, variability, the normal curve, correlation, prediction, sampling distributions, probability, and hypothesis testing. The course utilizes hand calculators, personal computers, and a statistical software package (SPSS). Emphasis is on conceptualization as well as data analysis.

**7 Understanding and Applying Statistics (4) \*UC:CSU***Lecture 4 hours.**May be offered as an honors section.***Prerequisite:** Mathematics 125 or its college equivalent with a grade of "C" or better.**Note:** Recommended for honors students and behavioral science majors.

Using the computer and Statistical Package for the Social Sciences software (SPSS) to solve problems, this course emphasizes the sampling, interpretation and evaluation of statistical data. Topics include: measures of central tendency, frequency distributions, hypothesis testing, non-parametric tests including Chi square and the sign test, plus parametric tests ("z", "t", and ANOVA).

**185 Directed Study - Statistics (1) CSU - RPT 2****285 Directed Study - Statistics (2) CSU****385 Directed Study - Statistics (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Statistics on a contract basis under the direction of a supervising instructor.

**\*UC Credit Limit:** Mathematics 227; Statistics 1, 7; maximum credit, one course.

## Supervision

See Learning Skills, Personal Development and Psychology 26.

**1 Elements of Supervision (3) CSU***Lecture 3 hours.*

Introduces in general terms the total responsibilities of a supervisor in industry. Topics include organization, duties and responsibilities, human relations, grievances, training, rating promotion, quality-quantity control and management- employee relations.

## Technical Theater

**342 Technical Stage Production (2) UC:CSU - RPT 3***Laboratory 6 hours.**Same as Theater 342. Credit not given for both courses.***Advisory:** Completion of Theater 300

Provides work in all aspects of play production in terms of study and laboratory practice, including stage managing, lighting, scene construction, painting, designing, and the use of stage equipment. Offers experience in stage crew and technical production.

## Theater

**100 Introduction to the Theater (3) UC:CSU***Lecture 3 hours.*

A survey and theater appreciation course for both majors and non-majors. The class explores what theater is all about, what goes on in theater, and what it means from an audience perspective. The course seeks to supply the student with insights into the theatrical processes in order to give him or her a wider basis for evaluation and enjoyment. All aspects of play production are explored: playwrighting, producing, directing, acting, criticism, theater architecture, set design, costume design, lighting design, and the role of the audience.

**110 History of the World Theater (3) UC:CSU***Lecture 3 hours.*

Studies the development of the theater from earliest periods to the present. Play readings, films, and historical trends are discussed.

**125 Dramatic Literature (3) UC:CSU***Lecture 3 hours.**Same as English 213. Credit not given for both courses.*

Surveys the major dramatic forms in the Western World from the early beginnings to the present time. Play reading for pleasure, appreciation, and interpretation are stressed. Analysis and criticism follow.

**225 Beginning Direction (3) UC:CSU**

Lecture 3 hours.

**Advisory:** Completion of Theater 270 and one technical theater class. (Theater 300 through 400).

Leads the student from the basic script through all the elements necessary to get the play on stage: interpretation, casting, scheduling, movement, blocking, business, pace and timing. Provides firm guidance for beginning directors in the technical handling of a script from preparation of a prompt script to working out of technical plots.

**230 Acting for the Camera (3) UC:CSU**

Lecture 1 hour; Laboratory 4 hours.

**Prerequisite:** Theater 270.

Introduction to acting skills for the camera utilizing improvisational techniques, character building and in class performance of memorized prepared work, dramatic, comedic and commercial, for the camera.

**232 Play Production (2) UC:CSU - RPT 3**

Laboratory 6 hours.

**Prerequisites:** Theater 342 and 411 (may be taken concurrently)

**Advisory:** Completion of Theater 270.

Required audition will be held the first week during which casts are selected for faculty directed productions.

Represents the culmination of the student's acting experience. Here students demonstrate their ability to perform in fully staged productions for audiences of the general public, and are encouraged, wherever possible, to develop from minor roles to the creation of more demanding characterizations.

**240 Voice and Articulation for the Theater (3) UC:CSU**

Lecture 3 hours.

Deals with the fundamentals of good voice, good speech, and dynamic vocal expressiveness. Toward these goals the following elements are studied: breathing, posture, resonance, loudness, timing, pitch, and clear articulation.

**250 Children's Theater Production (2) CSU - RPT 3**

Laboratory 6 hours.

**Prerequisites:** Theater 342 or 411 (may be taken concurrently).

Required auditions are held the first week of class, during which casts are selected for faculty directed productions.

This class is identical to Theater 232, the single exception being the kind of material presented.

**265 Movement for the Actor (2) UC:CSU - RPT 1**

Lecture 1 hour; Laboratory 2 hours.

Selections from plays, poetry and prose are utilized to train the actor to approach the text from a "movement" point of view. Exercises and improvisations in sensory-motor awareness lead to flexibility, balance, energy and expressiveness on stage.

**270 Beginning Acting (3) UC:CSU**

Lecture 3 hours.

Provides instruction in the basic techniques of acting. Prepares the student for subsequent acting classes, and meets one of the requirements for the production class.

**271 Intermediate Acting (2) UC:CSU**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Theater 270.

Provides more advanced instruction in acting fundamentals through the medium of scene study. Greater depth is expected in both characterization and script analysis.

**273 Advanced Acting (2) UC:CSU - RPT 1**

Lecture 1 hour; Laboratory 2 hours.

**Prerequisite:** Theater 271.

Continues the in-depth work of Intermediate Acting utilizing scenes from mature works of drama. Presentational skills are sharpened as the student is readied for performance.

**279 Musical Theatre (2) \*UC:CSU - RPT 3**

Lecture 1 hour; Laboratory 2 hours.

A survey of Musical Theatre with emphasis on the development of singing, dancing, movement, and acting skills and techniques. Opportunities will be offered to apply these skills and techniques before a student audience.

**280 Musical Theatre Workshop (3) \*UC:CSU - RPT 3**

Laboratory 6 hours.

Practical experience using techniques and principles of acting in the musical theatre will be presented before an audience. Emphasis will focus on the development of acting, singing, and movement skills.

**291 Rehearsals and Performances (1) UC:CSU - RPT 3**

Laboratory 3 hours, plus rehearsals and performances.

**Advisory:** Completion of Theater 270, 342, or equivalent

Auditions and interviews are held the first week of classes, during which casts and technical crews are selected for productions.

In this course students are actively involved in the production of plays for college and public performances. Primary emphasis is on the ability to perform acting and stage crew assignments. Students may also work in the areas of publicity, house management, technical theater, or costuming.

**292 Rehearsals and Performances (2) UC:CSU - RPT 3**

Laboratory 6 hours, plus rehearsals and performances.

**Recommended:** Theater 270, 342, or equivalent.

Auditions and interviews are held the first week of classes, during which casts and technical crews are selected for productions.

In this course students are actively involved in the production of plays for college and public performances. Primary emphasis is on the ability to perform acting and stage crew assignments. Students may also work in the areas of publicity, house management, technical theater, or costuming.

**300 Introduction to Stage Craft (3) UC:CSU**

Lecture 3 hours.

Through lecture and laboratory demonstration, covers all phases of scene construction, painting, mounting and running of stage scenery. Also covers the use of sound, lighting equipment, and stage properties. Additional instruction is given in stage terminology and the organization and management of stage crew activities.

**310 Introduction to Theatrical Lighting (3) UC:CSU**

Lecture 3 hours.

Presents the basic principles of theatrical lighting, designed to familiarize the student with the equipment, the medium, and the design functions of stage lighting.

**315 Introduction to Theatrical Scenic Design (3) UC:CSU**

Lecture 3 hours.

**Prerequisite:** Theater 300.

Covers training and practice in the problems of designing for stage including construction and painting techniques, development of the design concept, budgeting, and modeling the design.

**320 Computer Aided Drafting and Designing for the Theatre (3)**

Lecture 1 hour; Laboratory 2 hours

This course explores the techniques and skills needed to express the art of design in lighting, scenery, sound and costume in the theatre through the medium of the computer. This course focuses primarily on the computer drafting program known as vectorworks.

**340 Theatre Management-On and Off Stage (2)**

Lecture 2 hours.

This course exposes the students to the knowledge and skills necessary to stage manage a theatrical production, and an overview of theatre administration.

**342 Technical Stage Production (6) UC:CSU***Laboratory 6 hours.*

Provides work in all aspects of play production in terms of study and laboratory practice, including stage management, lighting, sound, special effects, scenic construction, painting, designing, and the use of stage equipment. This course offers practical experience in stage crew and technical production.

**411 Costuming for the Theater (3) UC:CSU - RPT 2***Lecture 2 hours; Laboratory 2 hours.**Note: Meets prerequisite for Theater 232 and 250.*

Surveys theatrical costuming as a craft and as a design art. Introduces design principles, research methods, pattern and construction techniques, sewing equipment use and maintenance, and the functions of costume personnel in production work. Lab work may include assignments on current department productions.

**450 Beginning Stage Make-Up (2) UC:CSU***Lecture 1 hour; Laboratory 3 hours.*

Introduces students to the basic techniques and materials of theatrical make-up, and gives practice in its application. Students will learn to apply straight, corrective, middle age, old age, and fantasy make-up. The application of facial hair, scars and bruises and nose putty will also be studied. Lab work may include assignments on current department productions.

**185 Directed Study - Theater (1) CSU - RPT 2****285 Directed Study - Theater (2) CSU****385 Directed Study - Theater (3) CSU***Conference 1 hour per unit.*

Allows students to pursue Directed Study in Theater on a contract basis under the direction of a supervising instructor.

**911-941****Cooperative Work Experience Education - Theater (1-4) CSU***See Cooperative Work Experience Education.*

*\*UC Credit Limits: Theater 279 and Music 776 combined; maximum credit, one course. Theater 280 and Music 777 combined; maximum credit, one course.*

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## Welding

See course listings under **Industrial Technology - Welding**





# Faculty

## 2010-2011



# Pierce College



# Faculty

**Abbamontian, Ramela (2007)**

*Assistant Professor of Art*

B.A., M.A., Ph.D., University of California, Los Angeles

**Abels, Beth (2008)**

*Assistant Professor of Architecture*

B.A., University of Michigan

B.S., Kent State University

M.Arch., University of California, Los Angeles

**Abu-Ghazaleh, Nabil (2006)**

*Vice President, Academic Affairs*

B.A., M.S., University of California, San Diego

M.A. University of California, Los Angeles

**Accardo, Donna L. (1989)**

*Professor of English/ESL*

*Department Chairperson, English*

B.A., University of Nevada, Reno

M.A., University of Nevada, Reno

**Aguliar, Amara (2008)**

*Assistant Professor of Journalism and Multimedia*

B.A., M.A., California State University, Fullerton

**Ahmadian, Jack (1980)**

*Professor of Mathematics*

A.B., University of California, Los Angeles

M.S., University of Southern California

M.S., California State University, Los Angeles

**Ahrens, Stephen R. (1980)**

*Professor of Business*

B.S., University of Vermont

J.D., New York Law School

**Anderson, Barbara A (2001)**

*Dean, Academic Affairs*

B.A., M.A., California State University, Northridge

**Atondo, Elizabeth (2001)**

*Associate Professor of Counseling*

*Articulation Officer*

B.A., Stanford University

M.S., California State University, Los Angeles

**Bates, Maria (2006)**

*Associate Professor of English*

B.A., Ph.D., University of California, Santa Barbara

**Benne, Elizabeth (1993)**

*Director, Health Center*

B.S.N., Point Loma College, San Diego

M.A., California State University, Los Angeles

**Binsley, Jill R. (2001)**

*Associate Professor of Computer Applications  
and Office Technologies*

A.A., Pierce College

B.S., Old Dominion University

M.B.A., College of William and Mary

**Blaine, Ida (2002)**

*Director, Encore*

B.A., M.A., California State University, Northridge

**Boddicker, Kathleen (2005)**

*Director, The Learning Center*

A.A., College of the Canyons

B.A., M.A., California State University, Northridge

**Bolin, Lori A. (1999)**

*Teacher, Child Development Center*

B.A., California State University, Northridge

**Borg, Darren (2008)**

*Assistant Professor of English*

A.A., Ventura College

B.A., M.A., California State University, Northridge

**Bramlett, Lucinda (2006)**

*Assistant Professor of Nursing*

B.S.N., M.S.N., University of Phoenix

**Braun, David S. (1986)**

*Professor of Business Administration*

*Department Chairperson, Business*

*Director, Community Business Relations*

B.A., M.A., California State University, Los Angeles

**Braxton, Phyllis D. (2001)**

*Dean, Student Services*

B.A., M.S., California State University,

Fresno

**Brown, Pamela J. (2002)**

*Associate Professor of Economics*

B.A., University of Rhode Island

Ph.D., George Mason University

**Bruzzese, Anna (2006)**

*Department Chairperson, Philosophy/Sociology*

*Assistant Professor of Sociology*

B.A., M.A., Ph.D., State University of New York,

Stony Brook

**Buchbinder, Sue (1974)**

*Professor of Counseling*

B.S., University of Florida

M.Ed. Georgia State University

**Burns, Karin R. (1991)**

*Professor of English*

B.A., University of California, Los Angeles

M.A., University of California, Los Angeles

**Cain, Cassie (2009)**

*Assistant Professor of Mathematics*

B.A., University of Oklahoma

M.S., University of Oklahoma

**Carthew, John A. (1964)**

*Professor of Geography*

A.A., Los Angeles City College

B.A., M.A., Ph.D., University of California,  
Los Angeles

**Chavarría, Mary Magdalena (1984)**

*Professor of English*

B.A., M.A., California State University, Northridge

Ph.D., University of Southern California

**Clark, Lyn (1961)**

*Professor of Business*

*Department Chairperson, Computer Applications and  
Office Technologies*

B.S., M.A., Ed.D., University of California,

Los Angeles

**Cohen, Jeffrey L. (1977)**

*Professor of Psychology*

B.A., Long Island University

M.S., California State University, Los Angeles

M.A., California Graduate Institute

Ph.D. California Graduate Institute

**Connelly, Jill P. (2006)**

*Department Chairperson, Media Arts*

*Assistant Professor of Photography*

B.A., State University of New York, Plattsburgh

M.S., Boston University

**Cooper, Melody (2006)**

*Assistant Professor of Art*

B.A., California State University, Northridge

M.A., California State University, Northridge

**Cooper, Yvonne (2007)**

*Assistant Professor of English*

B.A., Cornell University

M.A., New York University

**Crossen, James R. (2000)**

*Professor of Addiction Studies*

B.A., University of British Columbia

M.A., Wayne State University

**Crozer, Norman P. (1974)**

*Professor of Special Education*

*Director, Special Services*

B.A., M.A., California State University, Northridge

**David, Peggy S. (1989)**

*Teacher, Child Development Center*

*Assistant Professor of Child Development*

A.A., Kingsborough Community College, NY

B.A., Brooklyn College, NY

M.A., California Lutheran University

**De La Garza, Marco J. (2002)**

*Dean, Student Services*

B.A., California State University, Northridge

M.A., California State University, Northridge

**Del Bosque, Monika (2009)**

*Assistant Professor of Art*

B.A., M.F.A., John F. Kennedy University

**Deutsch, Diana (1978)**

*Professor of Child Development*

*Teacher, Campus Child Development Center*

B.A., Evergreen State College

M.A., Pacific Oaks College

**Dobbertin, Monique S. (2000)**

*Associate Professor of English*

B.A., University of California, Irvine

M.Ed., TESOL, Seattle University

**Dompe, Rudy (1978)**

*Professor of Counseling*

*Department Chairperson, Counseling*

B.A., M.A., California State University, Northridge

**Drelen, Traci (2008)**

*Assistant Professor of Child Development*

B.S., M.S., California State University, Northridge

**Duxler, Mary O. (1970)**

*Professor of Speech Communication*

B.A., University of Iowa

M.A., California State University, Northridge

**Duxler, William M. (1973)**

*Professor of Physics*

*Department Chairperson, Physics & Planetary Sciences*

B.A., M.A., Ph.D., University of California,

Riverside

**Eisenlauer, Joseph (1996)**

*Professor of Anthropology and Archaeology*

B.A., Stanford University

M.A., Cal State, Hayward

Ph.D., University of California, Los Angeles

**Farris, Patricia A. (1992)**

*Professor of Biology*

B.S., M.S., California State Polytechnic University,

Pomona

**Fernandez, Jose Luis (2008)**

*Dean, Academic Affairs*

B.A. B.A., California State University, Chico

M.B.A., Monterey Institute of International Studies

**Fields, Dale (2006)***Assistant Professor of Astronomy*

B.S., University of Arizona, Tucson  
 M.S., Ph.D., The Ohio State University, Columbus

**Fink, Norma (1982)***Teacher, Child Development Center*

B.A., M.A., California State University, Northridge

**Flores-Esteves, Manuel (1989)***Professor of Counseling*

B.A., University of Puerto Rico  
 M.A., University of California, Los Angeles  
 M.S., California State University, Los Angeles

**Follett, Richard J. (1984)***Professor of English*

B.A., M.A., D.A., University of Michigan

**Follosco, David (2006)***Dean, Student Services*

A.A., Los Angeles Valley College  
 B.A., M.S., California State University, Northridge

**Forkeotes, Ann (1996)***Professor of Mathematics*

B.S., University of Illinois, Chicago  
 Ph.D., University of California, Riverside

**Fortune, Tom (2005)***Assistant Professor of Automotive Service Technology*

A.A., Pierce College

**Foster, Robert (2007)***Assistant Professor of Accounting and Business*

A.A., College of the Canyons  
 B.S., California State University, Long Beach  
 M.Ed., National University  
 M.B.A., Kennesaw State University

**Frith, Stephanie (2009)***Assistant Professor of Journalism*

B.A., University of Southern California  
 M.A., California State University, Fullerton

**Furmuly, Roya (2006)***Assistant Professor of Mathematics*

B.S., M.A., University of California, Los Angeles

**Gabrielli, Anthony (2008)***Assistant Professor of Political Science*

B.A., University of Nebraska  
 M.A., Northeastern University  
 Ph.D., University of Nebraska

**Gelardi, Katherine (2007)***Assistant Professor of Nursing*

B.S., M.S.N., A.N.P., California State University,  
 Los Angeles

**Gend, Michael (2009)***Assistant Professor of Technical Theater*

A.A., Los Angeles Pierce College  
 B.F.A., M.F.A., California Institute of the Arts

**Gibson-Lott, Anne (1987)***Professor of Library Science*

B.A., University of California, Los Angeles  
 M.S.L.S., University of Southern California

**Gibson, Denise (2008)***Assistant Professor of Dance*

A.A., Moorpark College  
 B.A., University of California, Santa Barbara  
 M.F.A., University of California, Irvine

**Gilbertson, Greg E. (2000)***Associate Professor of Art*

B.F.A., The School of The Art Institute of Chicago  
 M.F.A., University of Southern California

**Giles, Melva T. (1989)***Professor of Nursing*

A.A., Catonsville Community College  
 B.S.N., California State University,  
 Los Angeles  
 M.S.N., California State University,  
 Dominguez Hills  
 Ed.D., Pepperdine University

**Gillis, Art (2004)***Director, PACE*

B.S.D.A., Roosevelt University, Chicago  
 M.S., Golden Gate University, San Francisco  
 Ed.D., Southeastern University, Fort Lauderdale

**Gillis, Cara (2009)***Assistant Professor of Philosophy*

B.A., University of Western Ontario  
 M.A., California State University, Long Beach  
 M.A., University of California, Irvine

**Gonzales, David P. (2002)***Associate Professor of English*

B.A., University of California, Santa Barbara  
 M.A., Texas A&M University

**Goodman, Isidore I. (1984)***Professor of Chemistry**Department Chairperson, Chemistry*

B.S., State University of New York, Albany  
 Ph.D., University of California, Los Angeles

**Gottlieb, Miriam (1992)***Professor of Special Education*

B.A., University of California, Santa Barbara  
 M.A., California State University, Northridge

**Grear, Valorie L. (1979)***Professor of Theater Arts*

B.F.A., Memphis State University  
 M.F.A., Cornell University

**Greenberg, Lionel (1966)***Professor of Music*

B.A., B.Ped., University of Manitoba  
 M.M., University of California

**Grogan, Robert (1997)***Professor of Computer Science and Information Technology*

A.S. Los Angeles Valley College  
 B.S. California State University Northridge

**Hamilton, Christianne (1997)***Associate Professor of Nursing*

A.D.N., Pierce College  
 M.N., University of Phoenix

**Hart, Robert R. (2002)***Associate Professor of Computer Science and Information Technology*

B.S., University of California, Riverside  
 M.S., University of California, Irvine

**Hennessey, Anne (2006)***Assistant Professor of Psychology*

B.A., Goucher College  
 M.A., Ph.D., Emory University

**Herbst, Cynthia L. K. (1979)***Professor of American Sign Language/**Interpreter Education*

B.A., California State University, Northridge  
 M.S., Western Maryland College

**Hoshair, Mitra (2005)***Assistant Professor of Sociology*

B.A., Tehran University, Iran  
 M.A., California State University, Northridge

**Hoskinson, Marjorie H. (1969)***Professor of English*

B.A., M.A., University of California,  
 Los Angeles

**James, John Robert (1989)***Professor of Counseling**Assistant Director of EOP&S*

B.A., California State University, Long Beach  
 M.S., University of Southern California

**Johnson, Jodi A. (1986)***Professor of English*

B.A., M.A., California State University,  
 Northridge

**Karamian, Martin (2009)***Assistant Professor of Business*

B.A., San Francisco State University  
 M.B.A., California State University, Northridge

**Kelly, Diane R. (2006)***Assistant Professor of Physical Education*

B.S., George Washington University  
 M.S., University of West Florida

**Kocs, Constance (2002)***Associate Professor of Art*

B.A., Scripps College  
 M.F.A., Northern Illinois University

**Koller, Evelyn M. (1986)***Professor of Biology**Department Chairperson, Life Sciences*

B.A., M.S., California State University, Northridge

**Kozeracki, Carol A. (2005)***Dean, Academic Affairs*

B.A., Fordham University  
 M.A., Ph.D., University of California, Los Angeles

**Kramer, Craig (2006)***Assistant Professor of English*

B.A., University of California, Santa Barbara  
 M.A., University of Michigan

**Kraus, Larry (1975)***Associate Vice President, Administrative Services*

B.A., M.B.A., Woodbury University

**Krikorian, Lawrence V. (1988)***Professor of English*

B.A., Point Loma College  
 M.A., University of California, Los Angeles

**Krimm, Susan (1982)***Professor of Computer Science and Information Technology*

B.A., University of California, Los Angeles

**LaChance, Harry (2009)***Assistant Professor of Horticulture*

A.A., Los Angeles Pierce College  
 B.S., California State Polytechnic University,  
 Pomona

**Lakin, Karen H. (1996)***EOPS Counselor/CARE Coordinator*

B.A., Cal State, Dominguez Hills  
 M.A., Cal State, Dominguez Hills

**Larson, Eugene S. (1970)***Professor of History**Department Chairperson, History and Humanities*

B.A., Occidental College  
 C. Phil., University of California, Los Angeles

**Lee, Stephen (1984)***Professor of Geology*

B.S., University of Illinois  
 C. Phil., University of California, Los Angeles

**Lehavi, Sheri (2007)***Assistant Professor of Mathematics*

B.A., University of California, Berkeley  
 M.S., California State University, Northridge

**Lemus, Bonnie (2008)***Assistant Professor of Nursing*

B.A., M.A., Occidental College  
 M.B.A., California State University, Northridge  
 M.S.N., California State University, Los Angeles

**LeRoy, Martie F. (2001)***Teacher, Child Development Center*

B.A., California State University, Los Angeles

**Levick, Sharon L. (2002)***Associate Professor of Economics*

B.S., Georgetown University  
 M.A., Ph.D., Indiana University

**Levine, Diane (1998)***Professor of Anthropology**Department Chairperson, Anthropological and Geographical Sciences*

B.A., San Francisco State University  
 M.A., California State University, Northridge

**Lim, Raymond (2006)***Assistant Professor of Psychology**Department Chairperson, Psychology*

B.A., California State University, Los Angeles  
 M.S., Ph.D., North Carolina State University

**Lindsay-Sawyer, Robin (1995)***Professor of Counseling*

B.S., Arizona State University  
 M.S., California State University, Los Angeles

**Lofrano, Robert J. (1989)***Director of Athletics**Professor of Physical Education*

B.A. California State University, Northridge

**Longmore, Stacey Lee (2006)***Assistant Professor of Child Development*

B.S., M.S., California State University, Northridge

**Loveridge, Lee (2009)***Assistant Professor of Physics*B.S., Brigham Young University  
M.A., University of California, Berkeley  
Ph.D., University of California, Los Angeles**Low, Teresa (2007)***Assistant Professor of Biology*B.A., University of California, Davis  
M.S., University of California, Los Angeles**Lyns, Robert M. (1964)***Professor of Business Education**Director of Athletics*

B.S., M.B.A., University of California, Los Angeles

**Manner, Kimberley (2009)***Assistant Professor of English*

B.A., M.A., Ph.D., University of Southern California

**Marano, Damiano A. (1989)***Professor of Modern Languages*B.A., Hunter College  
M.A., M.B.A., University of California, Los Angeles**Martinez, Jennifer (1996)***Professor of Mathematics*B.A., California State University, Long Beach  
M.S., University of California, Irvine**Martinez, Robert M. (1992)***Department Chair, Mathematics**Professor of Mathematics*

B.A., M.S., California State University, Northridge

**McCaslin, Joy (1988)***President of the College*B.A., University of California, Santa Barbara  
M.A., University of California, Riverside  
Ph.D., University of California, Los Angeles**McHargue, D. Steven (2002)***Professor of History*B.A., M.A., Occidental College  
M.A., J.D., Pepperdine University**McKeever, (James) Arthur (2009)***Assistant Professor of Sociology*A.A., Los Angeles Valley College  
B.A., California State University, Los Angeles  
M.A., University of Southern California**McMillan, Richard B. (1996)***Professor of History*

B.A., M.A., California State University, Northridge

**Meyer, Cari (2007)***Assistant Professor of Chemistry*

B.S., Ph.D., University of California, Los Angeles

**Meyer, W. Craig (1975)***Professor of Geology*B.S., Tulane University  
M.S., University of Southern California**Miller Fleming, Alyce (2006)***Assistant Professor of Counseling*B.A., Loyola Marymount University  
M.S., California Lutheran University**Moffatt, Constance J. (1992)***Professor of Art*B.A., California State University, Northridge  
M.A., University of Notre Dame  
M.A., Ph.D., University of California, Los Angeles**Moran, Mary K. (1997)***Associate Professor of Nursing*Diploma, Evangelical School of Nursing  
B.S.N., University of Arizona  
M.N., University of California, Los Angeles**Nabulsi, Kassem (2009)***Assistant Professor of Political Science*A.A., Los Angeles City College  
B.A., California State University, Northridge  
M.A., Ph.D., University of Southern California**Nantrou, Sherry L. (2001)***Associate Professor of Nursing*A.S.N., Moorpark College  
B.S.N., California State University,  
Dominguez Hills  
M.S.N., California State University,  
Dominguez Hills**New, Dennis (1984)***Professor of Mathematics*B.S., California Institute of Technology  
M.A., University of California, Los Angeles**Noor, Mita (2006)***Assistant Professor of Counseling*

B.A., M.S., California State University, Northridge

**Norton, William A. (1989)***Department Chairperson, Physical Education**Professor of Physical Education*B.S., Southern Utah State University  
M.A., Azusa Pacific University**Obayani, Kambon (1991)***Professor of English*B.A., Brown University  
M.F.A., University of Iowa**Oborn, Kathy (1994)***Professor of Administration of Justice**Department Chairperson, Political Science/Economics*A.A., Pierce College  
B.A., M.S., California State University, Northridge**Ogar, George W. (1989)***Professor of Chemistry*B.S., M.A., University of Lowell  
Ph.D., Brown University**O'Hanlon, Lynne (1969)***Professor of Computer Science and Information Technology**Department Chairperson, Computer Science and**Information Technology*

B.A., M.A., California State University, Northridge

**Oleas, Fernando (2006)***Assistant Professor of Spanish**Department Chairperson, Modern Language*

B.A., M.A., University of California, Los Angeles

**O'Neil, Robert B. (1989)***Professor of Journalism*B.A., Creighton University  
M.A., Syracuse University**Ono, Robert K. (1981)***Professor of Chemistry*B.S., University of California, Los Angeles  
M.S., California State University, Long Beach  
Ph.D., University of California, Irvine**Oshima, David J. (1997)***Professor of Art**Department Chairperson, Art*B.F.A., Art Center College of Design  
M.A., California State University, Northridge**Oxyzoglou, Alex (2002)***Associate Professor of Chemistry*B.S., Reed College  
Ph.D., University of Southern California**Paggi, Paula (2008)***Assistant Professor of Library Science*B.A., California State University, Northridge  
M.L.S., San Jose State University**Partington, Alfred M. (1978)***Professor of Business Administration*B.B.A., University of Miami  
C.P.A., Florida and California**Pawlicki, Michael J. (1976)***Professor of Music*B.A., State University of New York at Binghamton  
M.A., University of California, Los Angeles**Penton, Jennifer (2009)***Assistant Professor of Cinema*B.A., University of California, Los Angeles  
M.A., California Institute of the Arts**Perkins, Wayne (2006)***Assistant Professor of Music*A.A., Los Angeles City College  
B.M., California State University, Northridge  
M.M., California State University, Northridge  
M.A., University of California, Los Angeles**Perret, Joseph (2008)***Assistant Professor of Computer Applications and Office Technology*B.S., M.S., California State University, Northridge  
M.S., California Lutheran University**Perser, Maria (2010)***Assistant Professor of Psychology*

B.S., M.A., California State University, Northridge

**Phoenix, David D. (1986)***Professor of Special Education*

B.A., M.A., Ed.S., University of Nevada, Reno

**Piazza, Stephen Paul (1978)***Professor of Music**Department Chairperson, Music*

B.M., M.M., University of Southern California

**Pillado, Margarita (2009)***Assistant Professor of Spanish*B.A., Colorado State University  
M.A., University of Washington  
Ph.D., Washington University**Pitts, Michael (2008)***Professor of English*A.A., Los Angeles City College  
B.S., M.F.A., M.S., University of Southern California**Pregerson, Bernardine S. (1976)***Professor of Microbiology*B.A., University of California, Berkeley  
M.S., California State University, Northridge**Putnam, Gene E. (1989)***Professor of Theater Arts**Department Chairperson, Theater Arts & Dance*B.A., California State University, Fullerton  
M.E.D., Whittier College  
M.F.A., California State University, Fullerton**Putnam, Thomas C. (1992)***Professor of Mathematics*B.S., M.A., Ph.D., University of California,  
Santa Barbara**Reiter, Kathleen L. (1975)***Professor of Child Development**Director, Campus Child Development Center*

B.A., M.A., California State University, Northridge

**Reynoso, Aurora (2006)***Assistant Professor of English*B.A., University of California, Berkeley  
M.A., University of California, Santa Barbara**Robbins, Kent (2009)***Assistant Professor of Anatomy/Physiology*B.S., University of California, Irvine  
M.D., Drexel University School of Medicine**Roberson, Joseph (2009)***Assistant Professor of Counseling*A.A., Los Angeles Pierce College  
B.A., M.S., California State University, Northridge**Robin, Florence K. (1975)***Professor of Library Science**Department Chairperson, Library*B.A., University of California, Los Angeles  
M.L.S., University of Southern California**Rodriguez, Christina (2006)***Assistant Professor of Counseling*B.A., University of California, Los Angeles  
M.A., Loyola Marymount University**Rosdahl, Thomas (1986)***Professor of Industrial Technology*A.A., Pierce College  
B.A., California State University, Los Angeles**Rose, Jacquinta (2007)***Dean, Academic Affairs*A.A., Tulsa Junior College  
B.A., M.A., University of Tulsa  
Ph.D., University of Oklahoma, Norman

- Rosenberg, Jennifer A. (2001)**  
*Associate Professor of Speech Communication*  
*Department Chairperson, Speech*  
B.A., California State University, Sacramento  
M.A., California State University, Northridge
- Rosky, Bruce (2006)**  
*Associate Vice President, Administrative Services*  
B.Arch., California State University, San Luis Obispo  
M.B.A., Loyola Marymount University
- Roth, Sheldon (1989)**  
*Professor of Counseling*  
B.A., M.S., California State University, Los Angeles
- Rowe, Bruce M. (1971)**  
*Professor of Anthropology*  
B.A., M.A., University of California, Los Angeles
- Rudin, Brenda (1995)**  
*Professor of Mathematics*  
B.A., Hunter College/City University of N.Y.  
M.S., M.A., California State University, Northridge
- Salter, Sunday (2009)**  
*Assistant Professor of Counseling*  
A.A., Cuesta College  
B.A., San Francisco State University  
M.A., University of Southern California
- Schamus, David (2007)**  
*Assistant Professor of Computer Science and Information Technology*  
B.S., University of Phoenix  
M.A., Pepperdine University
- Schneider, Joan (1997)**  
*Department Chairperson, Nursing*  
*Professor of Nursing*  
A.D.N., Los Angeles Valley College  
B.S.N., University of Phoenix  
M.N., University of Phoenix
- Schneider, John (1980)**  
*Professor of Music*  
B.A., University of California, Santa Barbara  
M.A., Ph.D., University of Wales, Cardiff  
A.R.C.M., Royal College of Music, London
- Schneider, Sandra (1991)**  
*Professor of English*  
B.A., University of California, Irvine  
M.A., Claremont Graduate School
- Schutzer, David L. (1985)**  
*Professor of Anthropology*  
A.A., Pierce College  
B.A., California State University, Northridge  
M.A., University of California, Los Angeles
- Sehati, Sadaf (2009)**  
*Assistant Professor of Chemistry*  
B.S., Ph.D., University of California, Los Angeles
- Shapiro, Leland S. (1976)**  
*Professor of Animal Science*  
B.S., M.S., California Polytechnic State University, San Luis Obispo  
Ph.D., Oregon State University  
Licensed Pasteurizer, State of California  
Registered Small Animal Dietitian
- Sharpe, Kenneth J. (1984)**  
*Professor of Electronics*  
B.S., California State Polytechnic University, Pomona  
M.A., California State University, Los Angeles
- Sheff, Eileen T. (1979)**  
*Professor of Counseling*  
*Professor of Psychology*  
B.S., Ohio State University  
M.S., California State University, Long Beach
- Sheldon, Charles C. (1988)**  
*Professor of English*  
B.A., University of California, Santa Barbara  
M.Litt., University of Edinburgh, Scotland
- Sirott, Amy (2009)**  
*Assistant Professor of Computer Applications and Office Technologies*  
B.A., California State University, Northridge  
M.B.A., California Lutheran College
- Skidmore, Richard D. (1975)**  
*Professor of Business*  
*Director of Job Center*  
B.S., M.S., California Polytechnic State University, San Luis Obispo
- Smetzer, Ronald D. (1981)**  
*Professor of Industrial Technology*  
*Director, Cooperative Education/Work Experience Program*  
A.A., A.S., Pierce College  
B.A., University of State of New York  
CMfGE (Certified Manufacturing Engineer), Society of Manufacturing Engineers
- Smith, Benjamin (2009)**  
*Assistant Professor of Mathematics*  
B.S., M.S., California State Polytechnic University, Pomona
- Snow, Chadwick (2007)**  
*Assistant Professor of Psychology*  
B.A., Skidmore College  
M.A., Ph.D., University of Southern California
- Snow, Lila (2006)**  
*Assistant Professor of Child Development*  
B.S., M.A., California State University, Northridge
- South, Richard W. (1976)**  
*Professor of Horticulture*  
*Department Chairperson, Agriculture and Natural Resources*  
B.S., Southern Illinois University  
M.S., California Polytechnic State University, San Luis Obispo
- Sparks, Donald M. (1989)**  
*Professor of Physics*  
B.S., Humboldt State University  
M.S., M.A., California State University, Northridge
- Sterk, Jack L. (2007)**  
*Professor of Speech*  
B.A., M.A., California State University, Northridge
- Strother, Elizabeth (2007)**  
*Director, Honors Program*  
*Assistant Professor of Counseling*  
B.A., M.A., M.S., California State University, Los Angeles
- Sutton, Daryl Lynn (1979)**  
*Professor of Nursing*  
B.S., University of California, Los Angeles  
M.S.N., University of California, San Francisco  
Ed.D., Nova Southeastern University
- Tabatabai, Zhila (2002)**  
*Associate Professor of Mathematics*  
B.E., Youngstown State University  
M.S., University of Cincinnati  
M.S., University of Arkansas
- Takeda, Kenneth (2007)**  
*Vice President, Administrative Services*  
B.A., M.A., University of California, Los Angeles
- Taylor, Jamie (2009)**  
*Assistant Professor of Life Science*  
A.A., Moorpark College  
B.S., University of California, Los Angeles  
M.S., California State University, Northridge
- Thorne, Kirsten (2006)**  
*Assistant Professor of Spanish*  
B.A., Scripps College, Claremont  
M.A., Ph.D., Yale University, New Haven
- Thouin, Laurence G. Jr. (1982)**  
*Professor of Biology*  
B.A., Occidental College  
M.S., Ph.D., University of Southern California
- Tishler, Roger (1984)**  
*Professor of Mathematics*  
B.A., Boston University  
M.S., Tulane University
- Tiu, Concepcion (2005)**  
*Assistant Professor of Nursing*  
B.S.N., Pamantasan Ng Manila  
M.S.N., California State University, Dominguez Hills
- Trester, Judith (2002)**  
*Director, Economic & Workforce Development*  
B.A., Loyola Marymount University  
M.A., California Lutheran University
- Valdes, Lauren E. (2000)**  
*Associate Professor of Library Science*  
B.A., California State University, Long Beach  
M.L.I.S., San Jose State University
- Van Dyke, Michael (2009)**  
*Assistant Professor of Automotive Technology*  
A.A., Los Angeles Pierce College
- van Tamelen-Hall, Victoria (1991)**  
*Professor of Counseling*  
B.A., California State University, Northridge  
M.Ed., Colorado State University
- Villanueva, Donna-Mae (2000)**  
*Dean, Academic Affairs*  
B.A., CUNY/Brooklyn College  
M.A., New York University  
Ph.D., Claremont Graduate University
- Voss-Rodriguez, Joleen (2001)**  
*Department Chairperson, Child Development*  
*Professor of Child Development*  
B.A., M.A., California State University, Northridge
- Walsh, Brian (2008)**  
*Assistant Professor of History*  
B.A., American University, Washington DC  
M.A., Monmouth University
- Warner, Patricia (2009)**  
*Assistant Professor of Equine Science*  
A.S., Pierce College
- Weiser, Marian S. (1963)**  
*Professor of Dance*  
B.S., University of Wyoming  
M.A., Mills College
- Wells, Raymond A. (1985)**  
*Professor of Biology*  
B.A., M.S., California State University, Northridge  
Ph.D., University of Southern California
- Wessling, Margaret E. (2005)**  
*Assistant Professor of Physics*  
B.A., Amherst College  
M.S., Ph.D., California Institute of Technology
- Whalen, Paul L. (1985)**  
*Dean, Academic Affairs*  
A.A., East Los Angeles College  
B.A., California State University, Los Angeles  
B.S., M.S., North Texas State University
- White, Elizabeth G. (1982)**  
*Professor of Veterinary Technology*  
A.S., Pierce College  
A.H.T., State of California
- Williams, Sheila M. (1990)**  
*Professor of History*  
B.A., M.A., California State University, Northridge
- Wittman, Darlene K. (1979)**  
*Professor of America Sign Language*  
*Interpreter Education*  
B.A., M.A., California State University, Northridge
- Wood, Mia (2007)**  
*Assistant Professor of Philosophy*  
B.A., Pepperdine University  
M.A., University of South Carolina
- Yamada, Katsuya (1989)**  
*Professor of Physics*  
B.S., Tokyo Denki Daigaku, Tokyo  
M.S., Ph.D., University of Tennessee
- Yates, Rebecca (2006)**  
*Assistant Professor of Animal Science*  
B.A., California State University, Humboldt  
M.A., California State University, Dominguez Hills  
D.V.M., University of California, Davis
- Yoder, Kathie A. (1988)**  
*Professor of Mathematics*  
B.A., Mount St. Mary's College  
M.A., University of California, Santa Barbara  
M.S., California State University, Northridge

**Yoshiwara, Bruce W. (1989)***Professor of Mathematics*

B.A., M.A., Ph.D., University of California, Los Angeles

**Yoshiwara, Katherine (1980)***Professor of Mathematics*B.S., Michigan State University  
M.A., University of California, Los Angeles**Young, Sylvie (2009)***Assistant Professor of French*B.A., Institut d'Etudes Politiques, Lyon, France  
M.S., Ph.D., University of California, Los Angeles**Zayac, John (2007)***Assistant Professor of Geology*B.S., University of California, Santa Cruz  
M.S., University of California, Santa Barbara**Zimring Towne, Joanna (2009)***Assistant Professor of Counseling*B.A., University of Wisconsin-Madison  
M.S.W., M.P.A., University of Southern California**Zitzelberger, John F. (1987)***Professor of Electronics*A.S., Don Bosco Technical Institute  
B.S., California State Polytechnic University, Pomona  
M.S., California State University, Los Angeles**EMERITI**Adelson, Ben H.; 1965-1981;  
Professor of JournalismAlberti, Leo; 1956-1980;  
Professor of ChemistryAllocco, Brenda K.; 1986-2001;  
Professor of NursingAlvarez, E.C.; 1955-1983;  
Professor of Computer ScienceAminoff, Susan; 1996-2010;  
Professor of SociologyAnderson, Arthur J.; 1955-1980;  
Professor of Business AdministrationAnderson, Donald; 1962-1995;  
Professor of PhilosophyAnderson, Ellen S.; 1965-1993;  
Professor of BusinessAnderson, Marcia; 1989-2006;  
Professor of NursingAnderson, Richard; 1964-2004;  
Professor of Counseling;  
Professor of PsychologyAnderson, Roger; 1994-1995;  
Professor of MathematicsAndré, Lawrence; 1998-2009;  
Professor of PhilosophyAndrino, Ruben D.; 1966-1993;  
Professor of Modern LanguagesAter, Leroy Earl, Jr.; 1966-1989;  
Professor of EnglishBaker, Robert S.; 1985-1995;  
Professor of Theater ArtsBall, Odis C.; 1975-1995;  
Professor of Theater  
Professor of Physical Education;Barlow, John D.; 1949-1984;  
Professor of Animal ScienceBasil, Kathleene L.; 1965-2001;  
Professor of Business  
Department Chairperson, Office AdministrationBayer, Diana E.; 1967-1984;  
Professor of Special Reading/EnglishBell, Michael R.; 1968-2004;  
Professor of Physical Education;  
Department Chair, Physical Education Men'sBeller, Anthony; 1968-1998;  
Professor of Business AdministrationBeyer, Frank; 1968-2002;  
Professor of English  
Department Chair, EnglishBird, Billy G.; 1968-1995;  
Professor of Floral DesignBixler, Margaret L.; 1979-1993;  
Teacher, Campus Child Development CenterBoyd, Barbara J.; 1966-1973;  
Assistant Professor of Physical EducationBravo, Edward; 1970-1991;  
Professor of Physical EducationBrown, Roger A.; 1971-2004;  
Professor of CounselingCameron, Catherine M.; 1973-1994;  
Professor of Nursing;  
Acting Dean, AdministrationCampbell, E. Dudley; 1975-1999;  
Professor of PsychologyCampbell, Thomas R.; 1975-2006;  
Professor of BiologyCarrillo, A. Alexander; 1968-1989;  
Professor of ArtCavanaugh, Jane T.; 1970-1982;  
Professor of PsychologyChambers, James V.; 1968-1983;  
Professor of EnglishChambers, Robert D.; 1957-1989;  
Professor of Physical EducationChapman, Norman C.; 1957-1968;  
1977-1982;  
Professor of Music;  
Dean of InstructionChase, Robert; 1971-1985;  
Dean of Academic AffairsChristensen, Audrey; 1965-2001;  
Professor of Speech CommunicationChristie, Evelyn G.; 1965-1997;  
Professor of ChemistryCluff, John M.; 1966-1989;  
Professor of Political ScienceCohen, Sylvia L.; 1965-1995;  
Professor of PsychologyCook, Leslee; 1979-2009;  
Professor of CounselingCorbeil, John W.; 1965-1992;  
Professor of ArtCornner, Mike; 1975-2006;  
Assistant Professor of JournalismCrandall, James W.; 1965-1991;  
Professor of ArtCrawford, Roger C.; 1971-1999;  
Professor of PhysicsCurby, J. C. (Suzette); 1971-2001;  
Professor of Physical EducationDaruty, Kathy; 1979-2010;  
Professor of Business Administrationde Champlon, John S.; 1965-1984;  
Professor of Foreign LanguagesDeLaney, Gertrude Anne; 1980-1997;  
Professor of Computer Science and Information TechnologyDe Leon, Ralph; 1961-1986;  
Professor of Physical EducationDelgado, Carole Ann; 1977-2008;  
Associate Dean, Academic AffairsDelling, Leonard V.; 1974-1994;  
Professor of ElectronicsDe Martin, Albert; 1963-1997;  
Professor of ElectronicsDengler, Ben; 1968-1993;  
Professor of ArchitectureDeonik, Walter A.; 1957-1988;  
Associate Professor of Engineeringde Rubertis, William A.; 1970-2010;  
Professor of Political ScienceDesMarreau, Philip D.; 1976-92;  
Professor of Animal ScienceDixon, James; 1949-1982;  
Professor of Horticulture;  
Coordinator of Administrative ServicesDoctor, Charlotte B.; 1989-2007;  
Professor of English;  
Dean, Academic AffairsDrooyan, Irving; 1956-1983;  
Professor of MathematicsDrummond, Patricia A.; 1991-1995;  
Professor of CounselingEhrhardt, Luise; 1989-2009;  
Associate Professor of Library ScienceEisenbart, Gordon J.; 1975-2005;  
Professor of HistoryElman, Sidney H.; 1961-1995;  
Professor of Political ScienceEnger, Robert R.; 1988-1996;  
Assistant Professor of BusinessEnkema, Patricia; 1967-1987;  
Professor of BiologyEpstein, Allen; 1999-2009;  
Professor of MathematicsEskelin, Gerald Ray; 1973-2001;  
Assistant Professor of MusicFarhood, John N.; 1986-1991;  
Dean of Academic AffairsFarrar, Ronald D.; 1968-1989;  
Professor of Foreign Languages;  
Department Chairperson, Foreign LanguagesFeldman, Bernard; 1967-1983;  
Professor of MathematicsFiorello, Geraldine Y.; 1961-1990;  
Professor of Physical EducationFish, Barbara; 1977-2006  
Professor of CounselingFisk, Richard; 1985-1995;  
Professor of MusicFitzGerald, Richard E.; 1970-1995;  
Professor of EnglishFoster, Harold; 1963-1984;  
Professor of PsychologyFox, Stuart; 1986-2006;  
Professor of Life ScienceFriedrich, Linda B.; 1987-1995;  
Professor of NursingFujimoto, Jack; 1996-1996;  
President of the CollegeFurman, Mildred; 1971-1986;  
Professor of Health EducationGani, Scarlett; 1985-2003;  
Professor of Modern LanguagesGarber, Robert; 2006-2009;  
President of the CollegeGechtman, Murray; 1956-1989;  
Lecturer in Mathematics;  
Department Chairperson, MathematicsGelber, Martin B.; 1965-2003;  
Professor of ArchitectureGerstl, Shelly; 1981-2008;  
Dean, Admissions and RecordsGirgis, Amal Y.; 1976-2007;  
Professor of ChemistryGoerss, Harold; 1971-2006;  
Professor of EconomicsGoldbloom, Erwin M.; 1965-1995;  
Professor of Physical EducationGoldblum, Sheldon M.; 1970-1995;  
Professor of HistoryGonzalez, Margarita L.; 1984-2005;  
Professor of CounselingGottlieb, Seymour; 1970-2003;  
Professor of MathematicsGreer, Fontaine; 1989-2002;  
Professor of EnglishGuffey, Mary Ellen; 1975-1994;  
Professor of Office AdministrationHabib, Nicholas; 1976-2008;  
Department Chairperson,  
Philosophy/Sociology  
Professor of PhilosophyHaile, Lynne H.; 1968-1998;  
Professor of Physical EducationHall, Fay K.; 1986-1989;  
Professor of NursingHankammer, Larry; 1968-1995;  
Professor of Physical EducationHardesty, James N.; 1965-1995;  
Professor of MathematicsHarwick, Betty C. B.; 1966-1995;  
Professor of SociologyHaskell, Barry S.; 1958-1999;  
Professor of GeologyHayworth, Edward; 1963-1993;  
Professor of Business AdministrationHeckel, Russel H.; 1969-1995;  
Professor of HistoryHoffmann, Edmund C.; 1970-1999;  
Professor of Computer Science and Information TechnologyHoliday, Jay E.; 1956-1964;  
Assistant Professor of Psychology;  
Department Chairman,  
Behavioral ScienceHopper, Barbara K.; 1968-1982;  
Professor of BiologyHorn, Larry; 1976-2007;  
Professor of SociologyHorne, Janet B.; 1979-2005;  
Professor of Computer Applications and Office TechnologiesHorst, Donald P.; 1970-1988;  
Professor of TheaterHorstein, Charlotte G.; 1986-1997;  
Professor of NursingHorvath, Rozsa J.; 1981-2010;  
Professor of Theater ArtsHoughten, Sadako H.; 1966-1986;  
Professor of BiologyHouston, Ann H.; 1969-1999;  
Professor of Biology  
Department Chairperson,  
Life ScienceHuber, William A.; 1965-1989;  
Professor of Chemistry;  
Department Co-Chairperson,  
ChemistryHubbell, John L.; 1965-1984;  
Professor of Foreign LanguagesHume, Carlyle M.; 1975-2000;  
Department Chairperson, Music  
Professor of MusicHutner, Lavina; 1998-2006;  
Associate Professor of CounselingHylton, Wallace; 1985-1989;  
Professor of ArtIkkanda, J. Martin; 1971-2007;  
Professor of BiologyJames, Anna Gale; 1966-1999;  
Articulation Officer  
Professor of PsychologyJohnson, J. Thomas; 1972-2001;  
Professor of PhilosophyJohnson, Ray; 1964-1973;  
Dean of InstructionJones, Edwards; 1986-2008;  
Professor of Political ScienceJones, Harry; 1963-1994;  
Professor of ElectronicsKamuk, John; 1985-1989;  
Lecturer of Industrial Education

- Khasigian, Amos; 1965-1983;  
Professor of Economics
- Kinchloe, Ralph; 1970-2001;  
Professor of Biology
- Kiner, Nolan W.; 1950-1976;  
Professor of Horticulture
- Kistel, Paul D.; 1977-2004;  
Professor of English
- Klass, Bernard M.; 1965-2001;  
Professor of History
- Kleeb, Jane; 1963-1986;  
Professor of English
- Kostanick, Celeste B.; 1957-1983;  
Professor of Geography
- Kramer, G. Thomas; 1971-1999;  
Professor of Journalism
- Krause, Gary B.; 1979-2005;  
Professor of Landscape Architecture
- Kubach, Kathleen L.; 1995-2010;  
Professor of Biology
- Kuczynski, John; 1968-2000;  
Professor of Art
- Kuljian, Ernest S.; 1951-1984;  
Professor of Chemistry
- Lagerstrom, James; 1966-1997;  
Professor of Speech Communication  
Department Chairperson,  
Speech Communication
- Landau, William; 1966-1989;  
Professor of English
- Lange, Donna L.; 1975-2003;  
Professor of Physical  
Education/Health  
Department Chair, Physical  
Education Women's
- Lenier, Minnette G.; 1984-2001;  
Professor of English
- Leventhal, Robert M.; 1963-1995;  
Professor of History
- Levy, Norman S.; 1985-2010;  
Professor of Political Science
- Lewis, Henry E.; 1963-2004;  
Professor of Physical Education
- Lewis, William E.; 1981-1984;  
Dean, Student Services;  
Associate Professor of Business  
Administration
- Lieu, Sandi; 1985-2007;  
Professor of Mathematics
- Logan, Barrie; 1972-2006;  
Professor of Chemistry
- Lopez, Henry P.; 1966-1999;  
Professor of Modern Languages
- Loucks, Jean; 1971-1990;  
Vice President, Academic Affairs
- Luke, Roy; 1964-1995;  
Professor of Mathematics
- MacMaster, Joan H.; 1969-1995;  
Professor of History;  
Department Chairperson,  
History/Humanities
- Madson, Derald L.; 1969-1995;  
Professor of Biology
- Majer, Lincoln; 1972-1975;  
Lecturer in Vocational Education
- Martinez, Carlos; 1992-2006;  
Dean, Academic Affairs
- Mason, Joyce; 1967-1990;  
Professor of Business
- Mazeika, Edward R.; 1986-2010;  
Professor of Psychology
- McCarty, Marcella A.; 1961-1981;  
Professor of Health Services
- McClatchey, William D.; 1986-1989;  
Professor of Anthropology
- McCrackin, Russell; 1963-1983;  
Professor of Physics
- McCutcheon, Thomas; 1983-1994;  
Associate Professor of Mathematics
- McWilliams, Marian; 1958-1995;  
Professor of Physical Education
- Means, Daniel G.; 1989-1991;  
Professor of Educational Guidance;  
President of the College
- Mehlman, Mary R.; 1964-1995;  
Professor of Mathematics
- Meyers, Paul A.; 1974-2005;  
Professor of Biology
- Meziere, Mary J.; 1965-1995;  
Professor of English
- Migliore, Barbara; 1989-2006;  
Professor of Nursing
- Moore, Anna; 1957-1989;  
Lecturer in Physical Education
- Muir, John K.; 1964-1989;  
Lecturer in Physical Education
- Mull, Charles H.; 1982-1998;  
Professor of Industrial Technology
- Mundsack, Allan; 1995-2003;  
Professor of Mathematics
- Munsey, Robert E., Jr.; 1965-1995;  
Professor of Industrial Technology
- Nabi, Hosni; 2001-2002;  
Professor of Biology
- Nardin, Barbara; 1976-1988;  
Associate Professor of Geology
- Nicklin, John R.; 1970-1973;  
Acting President of the College
- Nordberg, Paul C.; 1976-1999;  
Associate Professor of Art
- Obrecht, Frederick P.; 1992-1995;  
Professor of English
- O'Connor, Robert; 1965-1994;  
Professor of Health Education
- O'Dea, Marcia C.; 1991-2005;  
Professor of Modern Languages
- O'Dea, Thomas F.; 1985-2005;  
Professor of Modern Languages
- Odegard, Patricia; 1979-1989;  
Professor of Nursing
- Odello, Elizabeth; 1980-2009;  
Department Chairperson,  
Philosophy/Sociology  
Professor of Philosophy
- Oliver, Tim; 1999-2006;  
Vice President, Administration
- Oliver, Tom; 2000-2006;  
Vice President, Development
- Osborne, Philip R.; 1980-1999;  
Professor of Vocational Education  
Director, Cooperative Education
- Pam, Irene S.; 1974-1995;  
Professor of Counseling
- Pandey, Carol J.; 1971-2005;  
Professor of Psychology
- Paulman, Jack S.; 1967-1977;  
Professor of Computer Science
- Pence, Robert L.; 1969-1995;  
Professor of Anthropology
- Pendleton, James; 1970-1989;  
Professor of Physical Education
- Penrod, Richard, G.; 1970-2008;  
Professor of History
- Perry, Gerald E.; 1964-1995;  
Professor of Physical Education  
Department Co-Chairperson,  
Physical Education-Men
- Peterson, Lynne; 1976-2006;  
Professor of Psychology
- Peterson, Philip E.; 1975-1994;  
Professor of Mathematics
- Phifer, Elaine E.; 1989-2002;  
Professor of Nursing
- Pickard, Dean; 1983-2004;  
Professor of Philosophy/Humanities  
Professor of Physical Education
- Pill, Beatrice L.; 1955-1982;  
Professor of Chemistry
- Pinkston, Howell; 1970-2001;  
Professor of Art
- Ponsor, Judith; 1980-2003;  
Professor of Nursing
- Powell, Mark L.; 1967-1995;  
Professor of Geography  
Department Chairperson, Earth  
Science/Physics
- Raboy, Joseph; 1968-1989;  
Professor of English
- Ramirez, Lucia; 1984-2004;  
Professor of Counseling
- Ravetch, Herbert; 1958-1970;  
1978-1985;  
President of the College;  
Associate Professor of English
- Reidy, James B. Jr.; 1976-1989;  
Professor of Computer Science;  
Department Chairperson,  
Computer Science and  
Information Technology
- Renzi, Joseph; 1971-1983;  
Professor of Vocational Education
- Richards, James R.; 1986-1991;  
Professor of Psychology
- Rikel, James E.; 1977-2010;  
Professor of Biology
- Rinnander, Elizabeth A.; 1981-2004;  
Associate Dean, Academic Affairs
- Rooney, Colleen; 1975-2006;  
Professor of Counseling
- Rosemark, Erika; 1974-1989;  
Assistant Professor of Early  
Childhood Education Director,  
Campus Children's Center
- Rosen, William J.; 1976-1988;  
Assistant Professor of Mathematics
- Ross, Bernice; 1986-2006;  
Professor of Psychology
- Ross, D. Lee; 1971-1986;  
Dean, Academic Affairs
- Rothe, Morris; 1957-1978;  
Professor of Mathematics
- Rupert, Dorothy; 1994-2008;  
Dean, Academic Affairs
- Russell, William H.; 1984-2009  
Professor of Geography
- Scheibel, Barbara G.; 1976-1989;  
Professor of Special Reading/English
- Scheibel, Robert W.; 1969-1989;  
Professor of Journalism
- Schneiderman, Beth; 1971-1991;  
Professor of English
- Schulman, Benson R.; 1966-1989;  
Professor of English
- Schulman, Florence W.; 1968-1987;  
Professor of Health, Physical  
Education,  
Leisure Management
- Schulman, Sandra; 1972-1989;  
Director, Study Skills Center;  
Professor of Special Reading/English
- Sears, Malcolm G.; 1976-2005;  
Professor of Natural Resources  
Management
- Shaver, James R.; 1987-1995;  
Professor of Sociology
- Shaw, William L.; 1958-1995;  
Professor of Electronics
- Shepherd, Henny B.; 1970-2005;  
Professor of Physical Education
- Sherman, Arthur A.; 1984-2002;  
Professor of Computer Science and  
Information Technology
- Shocket, Sol; 1959-1992;  
Professor of Economics
- Siemens, David F., Jr.; 1966-1986;  
Professor of Philosophy
- Silver, Constance R.; 1969-1988;  
Counselor
- Sirakides, Leo N.; 1973-1995;  
Professor of Business
- Siskin, Burton F.; 1986-1995;  
Professor of Anthropology
- Slattery, Eugene R.; 1950-1993;  
Professor of Mathematics
- Small, Laurence; 1974-2007;  
Professor of Mathematics
- Smith, Richard A.; 1986-2003;  
Professor of Psychology
- Smith, Thomas; 1964-1987;  
Professor of Library Services
- Smith, Walter Henry; 1956-1995;  
Professor of Art
- Snooks, A. Nancy; (1971)  
Professor of Art
- Soccoccio, Joseph M.; 1977-1999;  
Professor of Photography  
Department Chairperson,  
Media Arts
- Solomon, Marcia S.; 1976-2004;  
Professor of Nursing  
Department Chairperson, Nursing
- Stanley, Kenneth; 1966-2002;  
Professor of Physical Education
- Stein, Philip L.; 1965-2009  
Professor of Anthropology  
Department Chairperson,  
Anthropological and Geographical  
Sciences
- Sutherland, Miriam M.; 1976-1989;  
Professor of Nursing
- Thomas, Louise B.; 1975-2001;  
Professor of Nursing
- Thompson, Terry; 1966-2006;  
Professor of Business Administration
- Thomsen, Mary Joan M.; 1964-1999;  
Professor of Psychology
- Tontsch, John W.; 1965-1995;  
Professor of Computer Science and  
Information Technology
- Topik, Fred S.; 1959-1977;  
Professor of Foreign Languages
- Toyoshima, Joe; 1964-1989;  
Lecturer in History
- Trincher, Bart L.; 1968-2000;  
Professor of Industrial Technology
- Turney, Kay E.; 1965-1995;  
Professor of Physical Education  
Department Chairperson,  
Physical Education/Women
- Van Auken, Alfred J.; 1961-1986;  
Professor of Art
- Van Voorhis, James C.; 1964-1989;  
Professor of Architecture
- Vernon, James Y.; 1971-1986;  
Professor of Meteorology
- Vree-Brown, Marion F.; 1958-1985;  
Professor of Music
- Waldron, Jill R.; 1971-1998;  
Professor of English
- Walker, John Michael; 1973-1989;  
Lecturer of Horticulture
- Wechsler, Ron; 1978-2006;  
Professor of Animal Science
- Whitman, Orene; 1972-1989;  
Professor of Nursing
- Wilkinson, Jean; 1964-1984;  
Associate Professor of English
- Williams, Charles R.; 1974-1995;  
Assistant Professor of Physical  
Education
- Williams, Robert L.; 1969-1980;  
Associate Professor of History
- Wilson, Charles C.; 1961-1984;  
Professor of Journalism
- Wilson, Gussie Edwards; 1964-1975;  
Professor of Business
- Woods, Dorris S.; 1989-1995;  
Associate Professor of Nursing
- Wynns, John; 1957-1978;  
Professor of Philosophy
- Zappala, Robert R.; 1976-2002;  
Professor of Astronomy
- Zeitlin, Herbert; 1980-1989;  
Counselor;  
Professor of Education

## GLOSSARY OF TERMS

**Academic Probation** - After attempting 12 units, a student whose cumulative grade point average (beginning Fall 1981) falls below 2.00 is placed on academic probation. A student whose cumulative grade point average falls below 2.00 for three consecutive semesters is subject to dismissal from the College.

**Academic Renewal** - Removal of substandard grades from a student's academic record for purposes of computing the grade point average; special conditions must be met.

**Add Permit** - A card issued by an instructor upon presentation of a valid Registration/Fee Receipt which permits the student to add the class if the instructor determines that there is room. Enrollment in the class is official only if the Add Permit is processed by Admissions & Records before the published deadline.

**Admissions and Records** - The office and staff that admits a student and certifies his or her record of college work; also provides legal statistical data for the College.

**Administration** - Officials of the College who direct and supervise the activities of the institution.

**Application for Admission** - A form provided by the College on which the student enters identifying data and requests admittance to a specific semester or session. A student may not register and enroll in classes until the application has been accepted and a Permit to Register issued.

**Assessment Tests** - Tests given prior to admission which are used to determine the student's assignment to the most appropriate class level.

**A.S.O.** - Organization to which all enrolled students are eligible to join called the Associated Student Organization.

**Associate Degree (A.A. or A.S.)** - A degree (Associate in Arts or Associate in Science) granted by a community college which recognizes a student's satisfactory completion of an organized program of study consisting of 60 to 64 semester units.

**Bachelor's Degree (B.A., A.B., B.S.)** - A degree granted by a four-year college or university which recognizes a student's satisfactory completion of an organized program of study consisting of 120 to 130 semester units.

**Certification of Completion** - A certificate granted by a community college upon satisfactory completion of a formal program of vocational study of 16 to 45 units.

**Community College** - A two-year college offering a wide range of programs of study, many determined by local community need.

**Concurrent Enrollment** - Enrollment in two or more classes during the same semester. Also, enrollment of a student attending a K-12 school and a community college at the same time.

**Continuing Student** - A student registering for classes who attended the College during one of the previous two semesters. A student registering for the fall semester is a continuing student if he or she attended the College during the previous spring or fall semesters; attendance during the summer session is not included in this determination.

**Corequisite** - A requirement that must be satisfied at the same time a particular course is taken; usually a corequisite is concurrent enrollment in another course.

**Counseling** - Guidance provided by professional counselors in collegiate, vocational, social, and personal matters.

**Course** - A particular portion of a subject selected for study. A Course is identified by a Subject Title and Course Number; for example: Accounting 1.

**Course Title** - A phrase descriptive of the course content, for example the course title of Accounting 1 is "Introductory Accounting I."

**Credit by Examination** - Course or unit credit granted for demonstrated proficiency through testing.

**Dismissal** - A student on academic or progress probation for three consecutive semesters may be dismissed from the College. Once dismissed the student may not attend any college within the Los Angeles Community College District for a period of one year and must petition for readmittance at the end of that period of time.

**Educational Program** - A planned sequence of credit courses leading to a defined educational objective such as a Certificate of Completion or Associate Degree.

**Electives** - Courses which a student may choose without the restriction of a particular major program-curriculum.

**Enrollment** - That part of the registration process during which students select classes by ticket number to reserve a seat in a selected class and be placed on the class roster. A student may also enroll in a class by processing an Add Permit obtained from the instructor of the class.

**Full-time Student** - A student may be verified as a full-time student if he/she is enrolled and active in 12 or more units, during the Fall or Spring semester.

**General Education Requirements** - (also called Breadth Requirements). A group of courses selected from several disciplines which are required for graduation.

**Grade Points** - The numerical value of a college letter grade: A-4, B-3, C-2, D-1, F-0.

**Grade Point Average** - A measure of academic achievement used in decisions on probation, graduation, and transfer. The GPA is determined by dividing the total grade points earned by the number of attempted units.

**Grade Points Earned** - Grade points times the number of units for a class.

**INC** - Incomplete. The administrative symbol "I" is recorded on the student's permanent record in situations in which the student has not been able to complete a course due to circumstances beyond the student's control. The student must complete the course within one year after the end of the semester or the "I" reverts to a letter grade determined by the instructor. Courses in which the student has received an Incomplete ("I") may not be repeated unless the "I" is removed and has been replaced by a letter grade. This does not apply to courses which are repeatable for additional credit.

**IP** - In Progress. An "IP" is recorded on the student's permanent record at the end of the first semester of a course which continues over parts or all of two semesters. The grade is recorded at the end of the semester in which the course ends.

**Lower Division** - Courses at the freshman and sophomore level of college.

**Major** - A planned series of courses and activities selected by a student for special emphasis which are designed to teach certain skills and knowledge.

**Matriculation** - A process designed to assist students to achieve their educational goals.

**Minor** - The subject field of study which a student chooses for secondary emphasis.

**NDA** - Non-degree applicable.

**Non-penalty Drop Period** - The first four weeks of a regular semester during which a student's enrollment in a class is not recorded on the student's permanent record if the student drops by the deadline. This deadline will be different for short-term and summer session courses.

**Parent Course** - A course which may be offered in modules. Credit for all modules of a parent course is equivalent to credit for the parent course. Parent courses are all courses without letters in the course number field.

**Pass/ No Pass (formerly Credit/No Credit)** - A form of grading whereby a student receives a grade of CR or NCR instead of an A, B, C, D, or F. A CR is assigned for class work equivalent to a grade of C or above.

**Permit to Register** - A form listing an appointment day and time at which the student may register. The permit is issued to all new students upon acceptance to the College, and to all continuing students.

**Prerequisite** - A requirement that must be satisfied before enrolling in a particular course usually a previous course with a grade of "C" or better, or a test score.

**Progress Probation** - After enrolling in 12 units a student whose total units for which a W, NCR, or I has been assigned equals 50 percent or more of the units enrolled is placed on progress probation. A student whose cumulative number of units (beginning Fall 1981) for which a W, NCR, or I has been assigned equals 50 percent or more for three consecutive semesters is subject to dismissal from the College.

**RD** - Report Delayed. This temporary administrative symbol is recorded on the student's permanent record when a course grade has not been received from the instructor. It is changed to a letter grade when the grade report is received.

**Registration** - The process whereby a continuing student or a new or reentering student whose application has been accepted formally enters the College for a specific semester and receives a Registration/Fee Receipt. The student may enroll in open classes as part of the registration process.

**Returning Student** - A former Pierce student registering for classes who did not attend the College during the previous two semesters. A student registering for the fall semester is a returning student only if he or she did not attend the College during the previous spring or fall semesters; attendance during the summer session is not included in this determination. Returning students must file a new Admissions Application.

**Schedule of Classes** - A booklet used during registration giving the Subject Title, Course Number, Course Title, Units, Time, Instructor, and Location of all classes offered in a semester.

**Section** - A group of registered students meeting to study a particular course at a definite time. Each section has a section number listed in the Schedule of Classes before the scheduled time of class meeting.

**Section Number** - See "Section", above.

**Semester** - One-half of the academic year, usually 16 weeks.

**Subject** - A division into which knowledge customarily is assembled for study, such as Art, Mathematics, or Psychology.

**Subject Deficiency** - Lack of credit for a course or courses required for some particular objective, such as graduation or acceptance by another institution.

**Transfer** - Changing from one collegiate institution to another after having met the requirements for admission to the second institution.

**Transferable Units** - College units earned through satisfactory completion of courses which have been articulated with four-year institutions.

**Transcript** - An official list of all courses taken at a college or university showing the final grade received for each course.

**Transfer Courses** - Courses designed to match lower division courses of a four-year institution and for which credit may be transferred to that institution.

**Units** - The amount of college credit earned by satisfactory completion of a specific course taken in one semester. Each unit represents one hour per week of lecture or recitation, or a longer time in laboratory or other exercises not requiring outside preparation.

**Units Attempted** - Total number of units in the courses for which a student received a grade of A, B, C, D, or F.

**Units Completed** - Total number of units in the courses for which a student received a grade of A, B, C, D, or CR.

**W** - An administrative symbol assigned to a student's permanent record for all classes which a student has dropped or has been excluded from by the instructor after the end of the non-penalty drop date but before the last day to drop.

**Withdrawal** - The action a student takes in dropping all classes during any one semester and discontinuing coursework at the College.

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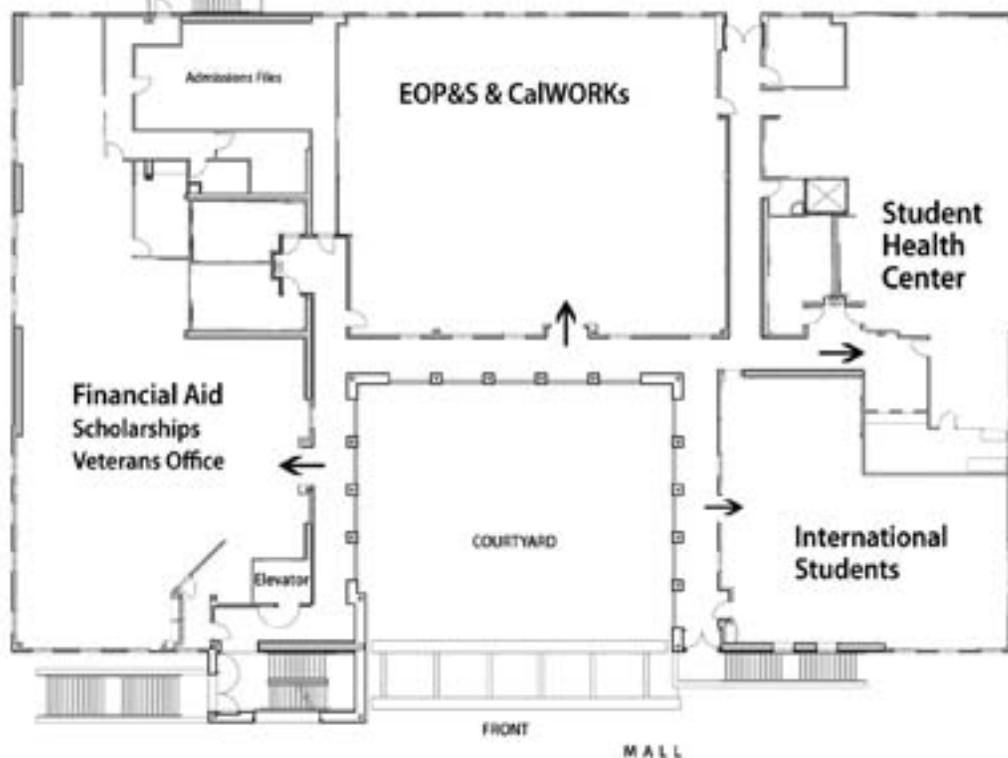
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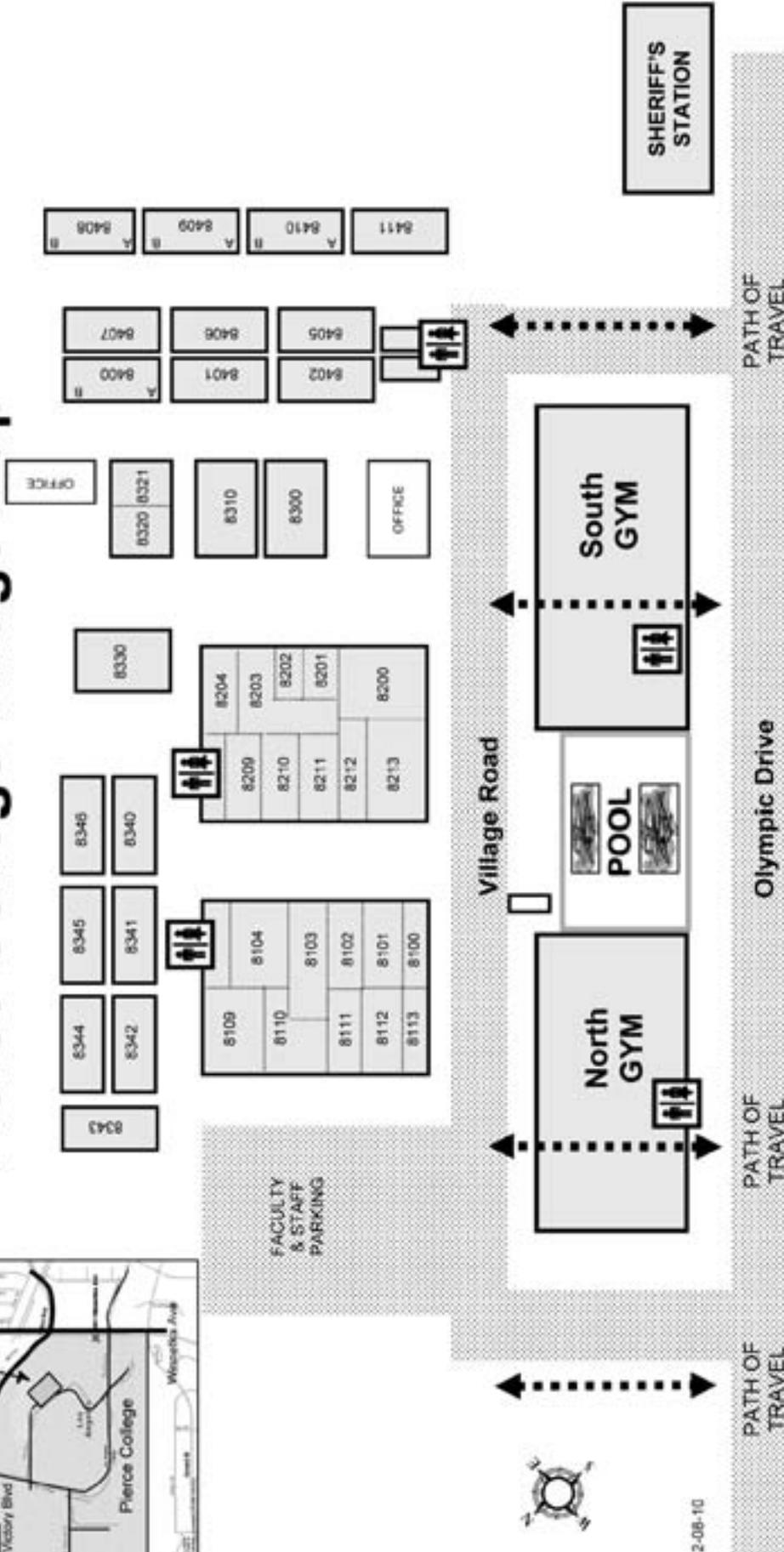
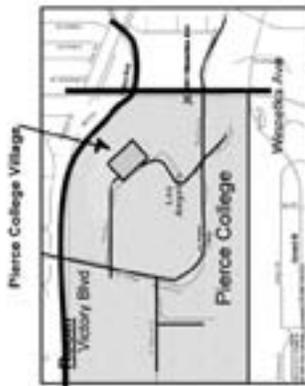
### STUDENT SERVICES BUILDING - 1ST FLOOR



### STUDENT SERVICES BUILDING - 2ND FLOOR



# Pierce College Village Map



# PIERCE COLLEGE CAMPUS

6201 Winnetka Avenue, Woodland Hills (818) 347-0551

## Campus Map

## PIERCE COLLEGE

MTA - De Soto

Mason Avenue entrance

MTA Orange Line

N

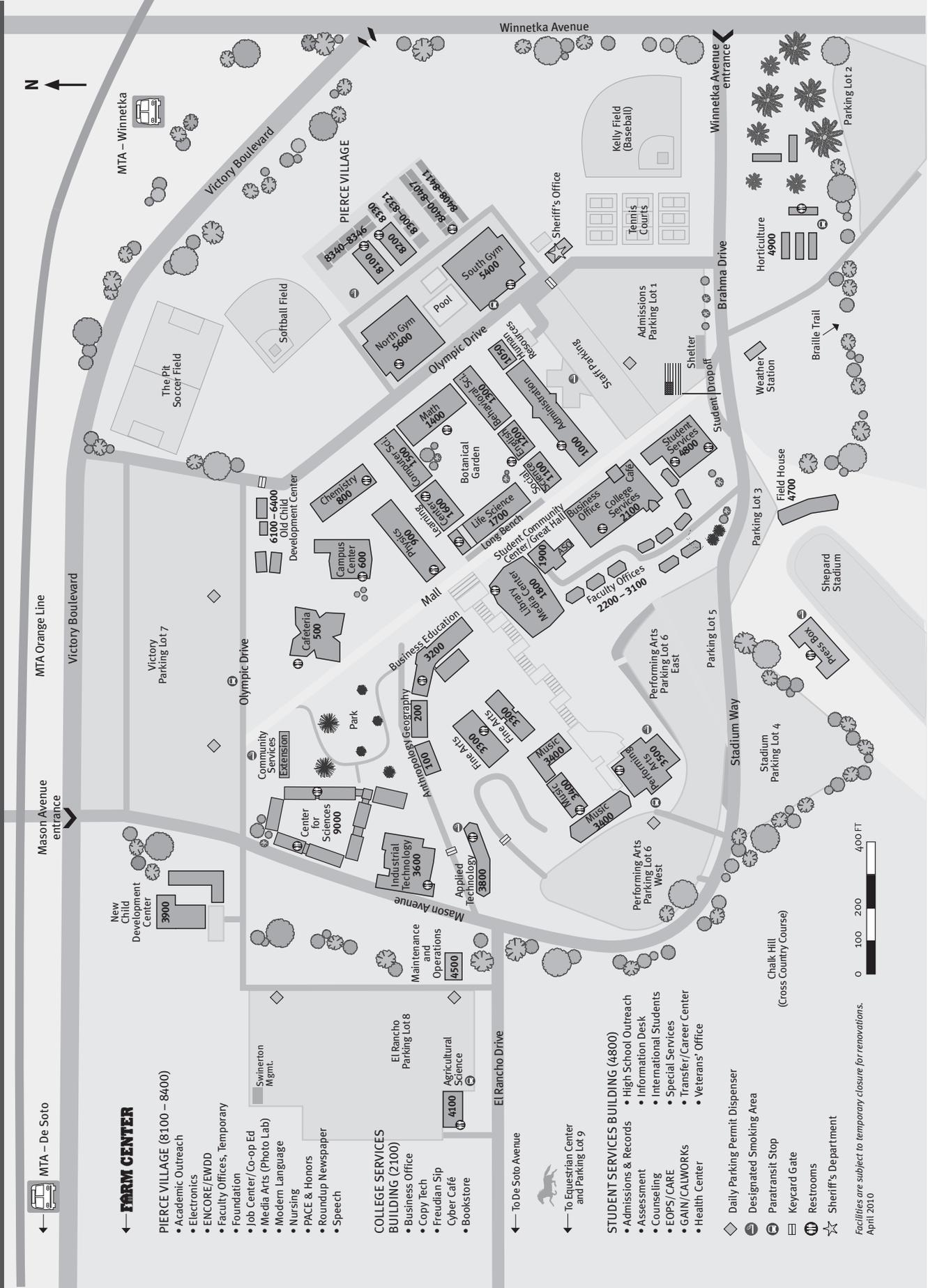
### FARM CENTER

- PIERCE VILLAGE (8100 - 8400)**
- Academic Outreach
  - Electronics
  - ENCORE/EWDD
  - Faculty Offices, Temporary
  - Foundation
  - Job Center/ Co-op Ed
  - Media Arts (Photo Lab)
  - Modern Language
  - Nursing
  - PACE & Honors
  - Roundup Newspaper
  - Speech

- COLLEGE SERVICES BUILDING (2100)**
- Business Office
  - Copy Tech
  - Freudian Sip
  - Cyber Café
  - Bookstore

- STUDENT SERVICES BUILDING (4800)**
- Admissions & Records
  - Assessment
  - Counseling
  - EOPS/ CARE
  - GAIN/CALWORKS
  - Health Center
  - High School Outreach
  - Information Desk
  - International Students
  - Special Services
  - Transfer/Career Center
  - Veterans' Office

- ◆ Daily Parking Permit Dispenser
- Ⓜ Designated Smoking Area
- Ⓜ Paratransit Stop
- Ⓜ Keycard Gate
- Ⓜ Restrooms
- ★ Sheriff's Department



Facilities are subject to temporary closure for renovations.  
April 2010