Calendar

2011-2012

Fall 2011

REGISTRATION DATES

On-line applications accepted for Fall 2011 semester..... October 1- August 25
In person applications.....August 29
Continuing student internet registration (by appointment) ..... May 5
New student internet registration (by appointment) ..... May 31

GENERAL CALENDAR DATES

Day and Evening Classes Begin .....August 29
Saturday Classes Begin..... September 3
Last Day of Instruction.....December 11
Final Examinations ..... December 12 - 18

HOLIDAYS - NO CLASSES

Labor Day, college closed..... September 5
Veteran's Day, college closed ..... November 11
Thanksgiving, college closed .....November 24 - 25
Winter Break, college closed ..... December 23 - January 2

Spring 2012

REGISTRATION DATES

On-line applications accepted for Spring 2012 semester .....October 1 - February 2
In person applications ..... February 6
Continuing student internet registration (by appointment) ..... November 22
New student internet registration (by appointment) .....December 12

GENERAL CALENDAR DATES

Day and Evening Classes Begin ..... February 6
Saturday Classes Begin..... February 11
Last Day of Instruction.....May 27
Final Examinations ..... May 29- June 4

HOLIDAYS - NO CLASSES

Martin Luther King Jr. Day, college closed.....January 16
Presidents Birthdays, college closed..... February 17 - 20
Spring Break ..... April 2 - April 9
Cesar Chavez Day, college closed.....March 31
Memorial Day, college closed.....May 28

Pierce College

One Of Nine Los Angeles Community Colleges

General Catalog 2011-2012

Volume 63

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

Pierce College Website:
www.piercecollege.edu

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:
Mike Cuellar, 23 is among the first generation of his family to attend college. He studied arts and humanities at Pierce and is transferring to CSUN this fall as a political science major. He hopes to one day become a congressman or senator.

Photograph by
Yvonne K. Kleiman

Publication Coordinator
Paula Hoover

Los Angeles Community College District

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A Message From The President

Welcome to the 2011-12 school year at Pierce College.

For 64 years students have enrolled at Pierce College to pursue their dreams. Many come just out of high school to start earning their degrees; others, to build job skills. Some are veterans returning from war, or parents who put their own educations on hold to raise children.

All are an important part of our community, and we strive to give them the best foundation we can. To do this in an increasingly complex world, we must continually review our programs and services and measure how we can improve.

In this effort, we have taken on a new challenge as we become one of 30 colleges nationwide to join "Achieving the Dream." Under this program we will identify strategies to improve student success, close achievement gaps, and increase our students' chances of staying in school and completing their educations. We will analyze our strengths and weaknesses, share information among our 30 cohorts, then develop and implement new policies and practices all aimed at improving student success.

As we commit to improving ourselves, we hope you will benefit, and that we will assist you along the path to achieving your dreams.

Sincerely,

Kathleen Burke-Kelly
President

Equal Opportunity Policy/Prohibited Discrimination and Harassment

All programs, activities, services, and employment of the Los Angeles Community College District and Pierce College 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. [LACCD Board Rules, 15001-15022] Please direct inquiries or complaints to the College Compliance Officer, Sylvia Silva, at (818) 710-2508 and compliance@piercecollege.edu, or Gene Little, LACCD Director of Diversity Programs, at (213) 891-2315. Additional information may be obtained at www.piercecollege.edu/offices/compliance.

Americans with Disabilities Act (ADA) And California State Law

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 , the Fair Employment & Housing Act (FEHA), Government Code Section 11135, and other applicable codes, the Los Angeles Community College District and Pierce College do not discriminate against individuals on the basis of disability in its services, programs, or activities.

In order to ensure that people with disabilities have an equal opportunity to participate in all of its **programs, services, and activities**, Pierce College will make reasonable modifications to policies and practices, as well as, provide appropriate aids and services leading to effective communication, including sign language interpreters, documents in Braille and other alternate formats to ensure information is accessible to people who have speech, hearing, vision, or cognitive impairments.

Anyone who requires auxiliary aides and services for effective communication, or a modification or policies or procedures should communicate with the responsible department or event contact as soon as possible, but no later than three (3) days before the scheduled event. No surcharge will be placed to cover the cost of providing auxiliary aids or making reasonable modifications to create access.

In terms of **employment**, Pierce College does not discriminate on the basis of disability in its hiring or employment practices and will comply with the Fair Employment and Housing Act, as well as, the ADA Title I including the regulations promulgated by the U.S. Equal Employment Opportunity Commission (EEOC) and the requirement to provide reasonable accommodation.

The Office of College Compliance has been designated to coordinate the College's compliance with the ADA and with sections 504 and 508 of the Rehabilitation Act of 1973. Neither the ADA, nor state law, requires Pierce College to take action that would fundamentally alter the nature of its programs, activities or services or impose an undue financial or administrative burden. Complaints that a program, activity or service of Pierce College is not accessible should be directed to the Compliance Officer/ ADA Coordinator, Sylvia Silva, HR Office, (818) 710-2508 (voice), (818) 710-4220 (TTY) or compliance@piercecollege.edu. Additional information may be obtained by visiting the Compliance website at www.piercecollege.edu/offices/compliance.

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 2011-2012 the fall semester will run from August 29 to December 18, 2011. The spring semester will follow from February 6 to June 4, 2012.

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
  (800) 248-2862 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
- California Association of Alcohol and Drug Educators (CAADE)
  P.O. Box 7152 Oxnard, CA 93031-7152
  (805) 485-5247 www.caade.org 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
- 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 or compliance@piercecollege.edu.

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 10, 2011 through May 13, 2011
Spring Semester	May 2, 2011 through October 14, 2011

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. A copy of your valid passport ID page
7. Students applying from within the U.S.A. must provide a copy of their current visa and I-94
8. Transfer students must have our Student Status Verification Form completed by their current school and provide a copy of your current I-20A
9. 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 apply for 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 before 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, and graduated from a California high school, and 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 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. 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:

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. 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.

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/. 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.

5. Registration

Enroll in classes on line at 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

If you pay online or by 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. 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.

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/. 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 online 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.

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 admissions applications as early as possible.

Students may register at their appointment time or anytime after through the day prior to the start of the semester for regular length classes.

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

4. The student has the documented knowledge or ability to succeed in the course without meeting the prerequisite.
5. 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:

1. 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
2. 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.
3. 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:

1. 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.
2. Students auditing a course shall not be permitted to change their enrollment in that course to receive credit for the course.
3. Priority in class enrollment shall be given to students desiring to take the course for credit.
4. Permission to enroll in a class on an audit basis is at the instructor's discretion.
5. 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.
6. Concurrently enrolled high school students must pay any audit fees.
7. Financial aid does not cover auditing.
8. 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 ($36) per unit per semester with no maximum per semester. If you take ten units, the cost will be $360. If you take fifteen units, the cost will be $540 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.

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 2010 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

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

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, 2011)

TYPE OF FEE	**AMOUNT**	**REFUND DEADLINE**
Enrollment Fee Subject to change by the California Legislature	$36 per unit	End of the second week of the semester (Deadline for short term classes will be different for each class)
Non-resident Tuition (All non-resident students must pay the $36 per unit enrollment fee in addition to non-resident tuition. Non resident tuition is due upon registration.)		
Students from another State:	$190 per unit	End of the second week of the semester
Students from another country:	$207 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.
Health Services Fee	$11.00	End of the second week of the semester
Audit Fee	$15 per unit (Students who have enrolled in 10 units or more may audit up to 3 units without charge)	NOT REFUNDABLE OR TRANSFERABLE
Student Representation Fee	$1	End of the second week of semester when student withdraws from all classes
Parking Fee	$20	End of the second week of the semester
Associated Students Organization Membership Fee	$7	End of the second week of the semester - $7

Other Fees

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.

Pierce College does NOT require vaccinations to enroll; however, some programs may require certain immunizations. Please call the Health Center at 818-710-4270 for specific vaccines available or check our website at www.piercecollege.edu/offices/health_center for additional information.

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 2011-12 tuition fee for non-resident students is $190 per semester unit for students who are non-residents from another state; $207 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
Regular Length (Fall, Spring, Summer)	Through second week of instruction	Full Tuition
	After second week of instruction	No Refund
Short Term (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

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

Summer and Winter Session Parking Permit Fees

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

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
A	Excellent	**4**
B	Good	**3**
C	Satisfactory	**2**
D	Passing, less than satisfactory	**1**
F	Failing	**0**
P	Pass (formerly Credit) (at least equal to a "C" grade or better – units awarded are not counted in GPA)	
CX	Passed Credit-by-Exam (equal to an "A", "B", or "C"not counted in GPA)	
NP	No Pass (formerly No-Credit) (equal to a "D" or "F" grade –units are not counted in GPA)	
NCX	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 by the instructor, 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, use the online system or the Pierce College 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 can download the petition online in the Admissions website under forms. 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 "pass/no pass" 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 pass/no pass 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.

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, electronically 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 online. 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

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

Students should make an appoitment 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 appoitment 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, 133

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: 2011-2012

Advanced Placement Information

Important Information:

1. 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 University of California Advanced Placement Policy can be found on their website: www.universityofcalifornia.edu/educators/counselors/adminfo/freshman/advising/credit/aptest.html.

   The California State University Advanced Placement Policy can be found on their website: 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.

2. 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

   IGETC AP Policy: Complete details of the official IGETC AP Policy can be found in the IGETC Standards: www.ccctransfer.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 2009‡)	6 sem units

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
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
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

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 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
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^ 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^ 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

@ 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

† 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 <u>not</u> applicable to Pierce College Associate Degree general education requirements or units awarded. For this information, reference the AP chart on the previous pages. <u>Additionally, Pierce course credit is in no way related to the AP policy of the CSU GE Breadth Certification Plan or the IGETC.</u> 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 Rights and Legal Protection

Equal Opportunity Compliance

The Office of College Compliance ensures Pierce College's commitment to provide a quality education, as well as equal opportunity employment, to all the communities - students, faculty and staff - it serves by maintaining an environment free from harassment and discrimination.

The OCC website can be accessed through the college's site at www.piercecollege.com under Faculty and Staff or directly at www.piercecollege.com/usr/compliance.

For more information, contact the College Compliance Officer at (818) 710-2508. In addition, inquiries may be directed to the District Office of Diversity Programs at (213) 891-2315.

Nondiscrimination Policy

All programs and activities of the Los Angeles Community College District shall be operated in a manner which is free of discrimination on the basis of race, color, national origin, ancestry, religion, creed, sex, pregnancy, marital status, medical condition (cancer related), sexual orientation, age, disability or veteran's status (Reference: Board Rule 1202).

Americans with Disabilities Act (ADA)

Pierce College is committed to providing reasonable accommodations to students, faculty and staff with disabilities in compliance with the Americans 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@piercecollege.edu or visiting the OCC website at www.piercecollege.edu/offices/compliance.

Student Directory Information

Los Angeles Pierce College considers the following information relating to a student to be "directory information": name, city of residence, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees and awards received, dates of attendance, and most recent previous educational agency or institution attended by the student. Students who do not wish the above categories of information to be given out should so indicate on the Release of Directory Information form in the Admissions Office.

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.

Privacy of Student Information

The Los Angeles Community College District is committed to protecting student privacy. Social security numbers are not used as the primary method of student identification.

Family Education Rights And Privacy Acts

The Family Educational Rights and Privacy Act (FERPA) affords students the following rights with respect to their educational records:

(1) The right to inspect and review the student's education records within 45 days of the day the college receives a request for access.

Students may submit to the College Admissions Office written requests that identify the specific record(s) they wish to inspect. Within 45 days, the College Admissions Office will make arrangements for access and will notify the student of the time and place where the records may be inspected.

Educational records are those records that are directly related to students and are maintained by the College. Students may not inspect education records pertaining to parents' financial records and certain confidential letters or recommendations.

(2) The right to request an amendment of the student's educational records which the student believes to be inaccurate, misleading or otherwise in violation of the student's privacy rights.

With the exception of grade grievances, which are handled through Administrative Regulation E-55, students may ask the College President, or his/her designee to amend a record that they believe is inaccurate, misleading, or in violation of their privacy rights. A student seeking to amend an educational record should write to the College President and clearly identify the part of the record he/she wants changed, and specify why it is inaccurate, misleading, or in violation of his/her privacy rights.

If the College President, or his designee, decides not to amend the record as requested by the student, the College, in accordance with section 99.21 of the Code of Federal Regulations and section 76232 of the Education Code, will notify the student of the decision and of his/her right to a hearing.

(3) The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA and California law authorize disclosures without consent.

If a student authorizes the release of his/her education record to a third party, he/she shall provide a dated written consent to the College Admissions Office authorizing said release with a specific list of the information to be released.

Federal and California law authorize certain disclosures of personally identifiable information without a student's written consent. One such exception is the disclosure of personally identifiable information to school officials with legitimate educational interests. School officials with legitimate educational interests are employees or agents of the Los Angeles Community College District who need to review educational records in order to fulfill their professional responsibilities.

(4) The right to restrict disclosure of personally identifiable information that the College has designated as directory information which may be released without the written consent of the student.

Directory information may be disclosed without a student's consent unless the student has notified the college that he/she does not want all or portions of the directory information released. To do so, the student must submit the appropriate District form to the College Admissions Office requesting that some or all of the categories of directory information not be released without his/her consent. This form must be submitted in accordance with College policy.

Pursuant to Board Rule 5201.10, the Los Angeles Community College District has designated the following student information as directory information:

(a) 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 previous educational agency or institution attended by the student;

(b) Student employee records may be released in order to comply with collective bargaining agreements;

(c) The names, addresses and telephone numbers of students or former students may be released to the foundation for each college for college-related activities at the discretion of the College President, unless the student or former student has informed the College that such information should not be released. The release of this information is conditioned upon the foundation's agreement that such information will be released in accordance with District policy and that information will not be released to third parties;

(d) At the discretion of the College President, the names, addresses and telephone numbers of students from the College may be released to heads of private and/or public institutions of higher education, or their designees, for the purpose of providing information to students regarding transfer opportunities to those institutions, unless the student has indicated that such information should not be released. The release of this information will be conditioned upon the institution's agreement that student privacy rights under federal and state law will be protected and that information will not be released to third parties.

(5) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA.

The name and address of the Office that administers FERPA are:
Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

Unauthorized Release of Student Records

Release of student records by faculty members to third parties, which includes parents and other family members, without a student's written permission or in the absence of a judicial order is prohibited by the California Constitution and the Education Code.

Los Angeles Community College District Records shall be developed, maintained and disposed of according to the requirements of law and this Board policy.

Sexual Harassment Policy

The policy of the Los Angeles Community College District is to provide an educational, employment and business environment free from unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment. Employees, students or other persons acting on behalf of the District who engage in sexual harassment as defined by the District's policy or by state or federal law shall be subject to discipline, up to and including discharge, expulsion or termination of contract.

The specific rules and procedures for reporting charges of sexual harassment and for pursuing available remedies are incorporated in the LACCD Board Rules, Chapter 15. Copies of the policy may be obtained from the College Compliance Officer at (818)710-2508, and the District Office of Diversity Programs at (213) 891-2315.

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 or legal compulsion. Victims of sexual assault may obtain a list of referrals to community agencies from the campus police office.

Notice to Sex Offenders

California law requires that certain statutorily defined sex offenders notify community college law enforcement officials that they are present on campus in specific capacities. If you fall into this category, you must register with the College's Sheriff's Office.

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

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

Penalties for Copyright Infringement and Illegal File Sharing

Unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject students to civil and criminal liability. Civil liability for copyright infringement may include payment of monetary damages to the copyright owner. Criminal penalties for copyright infringement may include fines up to $250,000 and imprisonment up to ten years. Students who violate the District's computing facilities usage policy ***(LACCD Administrative Regulation B-28)*** may also be subject to college disciplinary action, including, but not limited to, suspension or expulsion.

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. 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

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?

The purpose of the financial aid program is to provide financial assistance to students who, without such aid, would be unable to attend college. Although it is expected that students and parents will make a maximum effort to meet the cost of education, financial aid is available to fill the gap between family resources and the annual educational expenses. Financial aid is meant to supplement the family's existing income/financial resources and should not be depended upon as the sole means of income to support other non-educational expenses.

Financial aid is available from various sources such as federal, state, institutional, community organizations and individual donors. Financial aid can be awarded in the form of grants, loans, work-study, scholarships, or a combination of these.

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).
- Not be convicted of possessing or selling illegal drugs while enrolled and receiving federal financial aid from any college or university.
- 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***
- 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.

When to Apply

- **January 1, 2011:** FAFSA application available on-line at www.fafsa.ed.gov
- **March 2, 2011:** Cal Grant deadline and application priority deadline
- **April 1, 2011:** Established priority funding deadline for limited funded financial aid programs
- **May 1, 2011:** Established priority deadline to submit required documents to the Financial Aid Office
- **Sept 2, 2011:** Extended competitive Cal Grant deadline for community college students

To receive Title IV Financial Aid as noted above, 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, 2012, 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) at www.fafsa.ed.gov. The FAFSA is an all inclusive application form that allows students to apply for all programs.

Note: Prior to completing the FAFSA, apply for your Personal Identification Number (PIN) at www.pin.ed.gov The PIN allows you to electronically sign your FAFSA. If you are a dependent student, your parent may also apply for a PIN.

Verification Policy

Federal verification requirements apply to the following programs:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study Program (FWS)
- Federal Perkins Loan Program
- Federal Direct 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 verification deadline dates, visit the Financial Aid Office website.

For the Federal Direct 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) approved 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) approved unit minimum enrollment is required at the Home campus. Please note that if you are in an extension appeal due to Satisfactory Academic Progress, you must be enrolled in approved units, meaning classes listed in your Student Educational Plan (SEP) you submitted with your appeal to the Financial Aid Office. If you are enrolled in classes not listed in your SEP, the units will not be included in the calculation of approved units. For further information, please contact the Financial Aid Office.

ITV Classes

Students taking ITV courses must be enrolled in at least one (1) approved unit at the Home campus (the college 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) approved units at the Home campus; 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 campus 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: 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.

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) approved unit minimum enrollment requirement at the college where students are receiving financial aid. Since this is a limited funded program, priority will be awarded to students who are enrolled at least six (6) approved units at Pierce College. 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 BOGF 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 apply 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 2010 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, 2011. A second deadline for community college applicants is September 2, 2011, 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 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 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) approved units. Check with the Financial Aid Office or visit the website at 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. Since this is a limited funded program, priority will be awarded to students who are enrolled at least six (6) approved units at Pierce College.

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 Direct Loan

The Federal Direct Loan Program is a loan program made to students who show financial need while attending college at least half-time. For 2011-2012, the interest rate is 3.4% 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) approved units at the home campus to be considered for this program; units from other campuses cannot be combined. Since this is a limited funded program, priority will be awarded to students who are enrolled at least six (6) approved units at Pierce College.

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

Summer Financial Aid

Students must submit their 2011-2012 Free Application for Federal Student Aid (FAFSA) to apply for financial aid including the Fee Waiver during Summer. Please contact the Financial Aid Office for more information.

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 Fall semester, provided that all established deadlines have been met.

All financial aid students will be issued a debit card, called myLACCDcard. The myLACCDcard is the key for unlocking student's disbursement preference. Students 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; _ time is considered 9-11.5 units per semester; _ 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 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).

COA minus EFC = 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.

2011-2012 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.

*Please note that this Cost of Attendance is estimated. The actual Cost of Attendance will be determined and provided to you in your Award Offer Letter.

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. If you are paying for Child Care expenses during the academic year, you must notify the Financial Aid Office in writing to request for an adjustment to your Cost of Attendance.

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 receiving financial aid, 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 eligible educational goal and major, and update changes with the Admissions and Records Office. Students who do not have a valid educational goal will be notified at the time of review of financial aid application and if students do not provide a valid educational goal with Admissions and Records will not be processed their financial aid.
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 required 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 and intentionally committing fraud 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
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study (FWS)
- Federal Perkins Loan

- Federal Direct Loan
- 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 or before the end of the semester, whichever is earlier.
- The Appeal Request Form should be completed in ink or typed and consist of a written statement. The appeal must include:
- Why the student failed to meet the SAP standards, and
- What has changed that will allow the student to make SAP at the next evaluation period.

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, to the Federal Government and the Office of Inspector General.
- 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.

If you we a repayment, students will be notified in writing by the Financial Aid Office. The student will have 45 calendar days from the date of notification to repay; otherwise, a hold will be placed on the academic and financial aid records which will prevent the student from receiving college services and will jeopardize future financial aid.

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.

Special Circumstances

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.

Financial Aid Related Websites

1. Pierce College Financial Aid website – www.piercecollege.edu/offices/financial_aid
2. FAFSA On the Web – www.fafsa.ed.gov
3. Sign up for the Personal Identification Number (PIN) to electronically sign your FAFSA – www.pin.ed.gov
4. Information about the Cal Grant Program – www.calgrants.org
5. California Student Aid Commission – www.csac.ca.gov
6. Direct Loan Servicing Center – www.dl.ed.gov
7. National Student Loan Database System – www.nslds.ed.gov

Telephone Numbers

1. Pierce College Financial Aid, Scholarships, and Veterans Office (818) 719-6428
2. California Student Aid Commission (888) 224-7268
3. Central Loan Administration Unit (Perkins Loan) (800) 822-5222
4. Department of Veterans Affairs (800) 827-1000
5. Direct Loan Servicing Center (800) 848-0979
6. 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 San Diego 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/offices/transfer_center

University of California Transfer Information:

www.uctransfer.universityofcalifornia.edu

California State University Transfer Information:

CSU Mentor: www.csumentor.edu

California Private and Independent Transfer Information:

AICCU: www.aiccumentor.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

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

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 60-61.

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.

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 18 Honors units including four (4) formal Honors classes within these 60 units, and maintain an overall grade point average of 3.25 in UC-transferable units, are eligible for TAP certification.

Satisfactory completion of the above gives students 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.

Distance Education (Distributive Learning)

Pierce College offers many traditional courses using web-enhanced instruction. A Web Enhanced course is any class where some of the course content or activities are performed online. Students who do not have their own computer may use the computers in the Library to complete these tasks.

A Hybrid or Blended format course is a course where one or more classroom meetings are replaced with online activities. Some activities may be held at specific times, while others may be done at any time which is convenient to the student so long as they meet the obligations of the course. Access to a computer with reliable Internet access will be required to complete this course. See the College Schedule of Classes for specific details.

A Fully Online course is a course where all classroom meetings are replaced with online activities. The course will have no classroom meetings. Some online activities may be held at specific times, while others may be done at any time which is convenient to the student so long as they meet the obligations of the course. Access to a computer with reliable Internet access will be required to complete this course. See the College Schedule of Classes for specific details.

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.

PACE (Program of Accelerated College Education)

Two programs, PACE and PierceOnLine, are each uniquely structured to offer courses in these alternative options.

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 four educational paths, Business, Educator, General Studies or Child Development
- Call Today! (818) 710-2890

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

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 Clean Energy Auditing, with BPI Certification 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), Board of Certified Energy Practitioners (NABCEP), and border Patrol and Port Security..
- **Train-to-Hire** classes for people who are looking for work.
- **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 Education 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.

ENCORE noncredit classes generally meet for 2 hours a week for 15 weeks. 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

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 (Whole Family Foster Home) rate pre-service training for foster parents or relative caregivers to gain certification in those categories.

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 Foster Youth Success Initiative (FYSI), 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 feature a summer program in Marine Biology in Mexico. 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 Tuseday through Thursday 8:00 a.m. until 5:30 p.m.

The following special services are offered:

- Interpreter services for the deaf
- Note-taking 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, 2nd floor, Room 48235. 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.

High School Outreach and Recruitment

The High School Outreach and Recruitment Department (OAR) assists students and the Pierce College community in general, in achieving their higher education goals, by providing information and access to the academic and student services programs available at Pierce. Through outreach efforts at our local feeder high schools and our surrounding communities, the OAR department facilitates the transition from high school to college by proving information regarding vocational, certificate, degree and transfer program options.

The OAR department assists students with:

- Admission Application
- Assessment Exams at local high schools
- Financial Aid applications
- Concurrent enrollment for High schools students

Additionally, the OAR department works with the Student Success Committee to support its programs and initiatives including the Summer Bridge Program and learning communities.

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
Student Services Building 48109
Pierce College
6201 Winnetka
Woodland Hills, CA 91371 USA
website: www.piercecollege.edu
email: 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 Progams under "FAQ's - Frequently Asked Questions."

Current Students — International Student Services (ISS) Contact Information: Location-Student Services Building, 2nd Floor (48271) Phone number-(818)719-6417

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, 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 8406 & 8407): Computer stations are available for student use when classes or workshops are not scheduled. 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 (VLGE 8401 & 8402) 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

Writing Lab

For students who could use one-on-one writing help from a professional English instructor in a place quiet enough to think, the Pierce College Writing Lab is available as a free service. Periodic group workshops are also offered on a variety of technical and composition topics. Service is open to any currently enrolled Pierce College student, native English speakers and ESL students. Our two English instructors have the knowledge and experience to explain principles of grammar, sentence structure, organization and punctuation and to spot problems standing between students and clear, effective writing. Computers are available for grammar tutorials as well as for word processing and internet access.

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

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) 710-3316. Also, visit the Veterans website at 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

Bookstore

Pierce College's Bookstore 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 Bookstore is to provide for the sale of book and supply requirements connected with the academic programs of the college. Text book information is available online at www.piercebookstore.com.

The Bookstore 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

Northwest 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 1adult 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

Temporary food services will be available on the mall during normal business hours.

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.

Pierce College does NOT require vaccinations to enroll; however, some programs may require certain immunizations. Please call the Health Center at (818) 710-4270 for specific vaccines available or check our website at www.piercecollege.edu/offices/health_center for additional information.

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 seeekers 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.

Pierce College is committed to the safety of all the Students, Faculty, and Staff. The campus is equipped with "Blue Emergency Phones" that connect directly to the on-campus Sheriff's station. Campus payphones may also be used to connect directly to the on-campus Sheriff's station by dialing *86.

Emergency Resources

The campus has developed comprehensive emergency procedures on evacuations, general safety, communications, and response to a major disaster. An emergency procedure booklet can be found in each classroom and it provides information on the following subjects: Emergency Contacts, Utility Failures, Personal & Medical Emergency, Fire, Crime in Progress, Earthquake, Explosions, Bomb Threat, Evacuation [with zone map and zone assignments], and Blue Phone Map. The Pierce College Campus Emergency Procedure Statement and emergency booklet is also available on the college website under Campus Safety & Sheriff.

Pierce has installed several methods to communicate to Students, Faculty, and Staff in the event of an emergency. Pierce College utilizes Blackboard Connect to send messages, voice paging via the campus telephone system, and the wireless communications boxes installed in campus classrooms.

All emergency communications and the overall emergency plan for Pierce are updated on a consistent basis and tested on an annual basis.

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.

Lost And Found

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.

Student Right to Know: Crime Statistics

Campus crime statistics are published on the Pierce website at http://info.piercecollege.edu/offices/sheriff1 in accordance with the "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act." A paper copy of this information is also available from the Sheriff's Office at Pierce College upon request.

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 a 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)

Skateboards, roller skates and inline skates are not permitted on campus.

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 caravaning, 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 areavailable year-round online at www.theroundupnews.com.

The campus magazine, The BULL, is published semi-annually as resources permit. Issues can be viewed online at www.thebullmagazine.net.

The campus internet radio station, KPCRadio.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. 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 S-9)

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 40 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; Anthropology Club; Boots and Saddles Club; Christian Bible Study; Cinema Club; Dance Club; French Club; Gay Straight Alliance (GSA); Geology Club; International Students Club; Parents Club; Phi Theta Kappa; Philosophy Club; Pierce Hillel; Pre-Vet Club; Sampuso Filipino-American Club; Sign Language Club; Sociology Club and Student Veteran Organization.

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)

1. **Unit Requirement:**
   A minimum of 60 semester units in degree applicable courses.

2. **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.

   Policy on general education fulfillment for students with prior degree: Local Los Angeles Community College District associate degree general education requirements (Plans A and B) are fully satisfied by students who have an Associate, Baccalaureate or higher degree from a United States regionally accredited institution. (Pierce Curriculum Committee 05/14/2010)

3. **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.

4. **Scholarship Requirement:**
   A minimum "C" (2.0) cumulative grade point average in all courses used toward the degree.

5. **Residency Requirement:**
   A minimum of 12 of the units used toward the degree must be completed in residence at Pierce College.

6. **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, or any term thereafter, 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:

1. 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

2. **A passing score on the District (Intermediate Algebra) Mathematics Competency Examination.**

   OR

3. A score of 3 or higher on one of the following AP Exams:
   - Calculus AB
   - Calculus BC
   - Statistics

4. 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:

1) Completion of English 101 (or its equivalent at another college) with a grade of "C" or better.

   OR

2) A score of 3 or higher on one of the following AP Exams:
   - English Language and Composition
   - English Composition and Literature

   OR

3. 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 64-65.

Part 3 - ELECTIVES

Pick Associate degree applicable courses as needed to reach 60 units.

GRADUATION AND COMPLETION RATES:

The California Community College's State Chancellor's Office provides completion and transfer rates for every community college in California, including Pierce College. For more information on the graduation or completion rates for certificate or degree-seeking, full-time, first-time undergraduate students, please access the link provided: http://srtk.cccco.edu/index.asp.

TRANSFER STUDENTS:

At the time of catalog publication, no majors for the AA-T or AS-T have been approved. Majors are under development. For more information, please see a counselor located in the Student Services Building.

Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the Educational Programs section of the catalog. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
4. Certified completion of the Plan C: California State University General Education-Breadth pattern (CSU GE Breadth) (see page 60 for more information); OR the Plan D: Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 61 for more information).

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 56 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, 17
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
GIS 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, 28, 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 32, 33
GIS 32, 33
MATH 115, 125, 146, 215, 227, 228A, 228B, 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, 151
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, 473

Part 1 PLAN B Career and Technical GE (General Education) Plan

All students must meet the following common requirements (see page 56 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, 17
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, 28, 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 32, 33
GIS 32, 33
MATH 115, 125, 146, 215, 227, 228A, 228B, 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, 151
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, 473

Part 1 PLAN C

Pierce College
CSU General Education Certified Plan 2011-2012

Every effort has been made to ensure the information below is accurate and timely. However, this information in unofficial and should be checked against the official information found on the ASSIST website at www.assist.org. For additional information and requirements for transferring to a CSU campus visit the CSUMentor website at 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 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, 15, 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, 107, 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, 27A, 27B; 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, 28, 29, 30, 33, 35, 40, 41, 42; Spanish 1, 2, 3, 4, 5, 6, 9, 11, 12, 15, 21, 22, 25, 26, 27, 35, 36, 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, 10, 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, 14, 21, 22, 31; GIS 31

D-6 History: Economics 10; History 3, 4, 5, 6, 11, 12, 13, 20, 27, 29, 39, 41, 42, 43, 44, 52, 56, 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, 69, 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 2, 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) 2011-2012

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. For additional information and requirements for transferring to a UC or CSU campus visit the CSUMentor website at www.csumentor.edu and the UC transfer website at 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 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, 107, 109, 111, 137, 138, 139, 501, 502; Cinema 3, 104, 107; Dance Studies 802, 803, 804; Music 111, 112, 121, 122; Photography 27, 27A, 27B; 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, 28, 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, 14, 21, 22; History 3, 4, 5, 6, 11, 12, 13, 20, 29, 39, 41, 42, 43, 44, 52, 56, 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, 69, 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, 17***; 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, 15, ***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. 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 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
AGRICULTURE AND NATURAL RESOURCES	**Dr. Leland Shapiro**	**710-4254 CFS 1043**
Animal Science / Pre-Veterinary Sciences	General Agriculture Horse and Equine Science	
Horticulture & Landscaping Veterinary Science & Technology	Natural Resources Management	
ANTHROPOLOGICAL & GEOGRAPHICAL SCIENCES	**Diane Levine**	**710-2876 FO 2903**
Anthropology Geography Linguistics	Archaeology Geographic Information Systems Meteorology	
ART/ARCHITECTURE	**Greg Gilbertson**	**719-6475 ART 3303C**
Architecture Ceramics Graphic Design Web Design	Architectural History Drawing Painting Digital Imaging	Art History Fine Art Sculpture Multimedia
ATHLETICS	**Bob Lofrano**	**710-2823 SOUTH GYM**
Physical Education (Intercollegiate Athletics)		
BUSINESS ADMINISTRATION	**David Braun**	**719-6479 BUS 3213D**
Accounting Finance Marketing	Business International Business Real Estate	Business Law Management Supervision
CENTER FOR ACADEMIC SUCCESS	**Kathy Boddicker**	**710-2938 VLGE 8401**
Learning Skills	Tutoring	Computer Labs
CHEMISTRY	**Isidore Goodman**	**719-6464 CFS 91041**
CHILD DEVELOPMENT	**Joleen Voss-Rodriguez**	**719-6402 BEH 1306**
COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES	**Lyn Clark**	**710-4244 BUS 3210C**
Administrative Professional Business Communications Computer Applications Computerized Accounting Desktop Publishing	General Administrative Internet Legal Office Procedures Office Procedures Web Site Construction	
COMPUTER SCIENCE INFORMATION TECHNOLOGY	**Lynne O'Hanlon**	**710-2933 COSC 1503**
Computer and Network Technology Programming for Computer Science	Programming for Business	
COOPERATIVE EDUCATION	**Ron Smetzer**	**710-4291 VLGE 8200**
COUNSELING	**Rudy Dompe**	**719-6440 STUDENT SERVICES BLDG.**
Personal Development		
ENGLISH	**Donna Accardo**	**710-2879 FO 2501**
English	English as a Second Language	
HISTORY/HUMANITIES	**Eugene Larson**	**710-4305 FO 3101**
HONORS PROGRAM	**Elizabeth Strother**	**710-2224 VLGE 8340**

Department & Disciplines	Chairperson(s)	Phone/Office
INDUSTRIAL TECHNOLOGY	**Tom Fortune**	**719-6490 AT 3803**
Automotive Service Technology Engineering, Mechanical Robotics	Drafting, Mechanical Machine Shop-CNC	Electronics Welding
LIBRARY SCIENCE	**Florence Robin**	**719-6409 LIBRARY**
LIFE SCIENCES	**Lyn Koller**	**710-4138 CFS 91042**
Anatomy Microbiology Physiology	Biology (Including Marine Biology)	
MATHEMATICS	**Bruce Yoshiwara**	**719-6468 MATH 1409E**
MEDIA ARTS	**Jill Connelly**	**710-4235 VLGE 8100**
Broadcasting Photography	Cinema Public Relations	Journalism Multimedia
MODERN LANGUAGES	**Fernando Oleas**	**719-6452 VLGE 8340**
American Sign Language Italian	French Japanese	Spanish
MUSIC	**Stephen Piazza**	**719-6476 MUS 3416A**
NURSING	**Joan Schneider**	**719-6477 CFS 91029**
Registered Nursing (ADN)		
P.A.C.E.	**Dr. Arthur Gillis**	**719-6485 VLGE 8340**
PHILOSOPHY/ SOCIOLOGY	**Dr. Anna Bruzzese**	**710-4280 FO 2901**
Philosophy	Sociology	
PHYSICAL EDUCATION Health Education Physical Education	**Diane Kelly** Recreation	**710-4119 VLGE 8316**
PHYSICS & PLANETARY SCIENCES	**John Zayac**	**710-2218 CFS 91088**
Astronomy Geology Physical Science	Environmental Science Oceanography Physics	
POLITICAL SCIENCE / ECONOMICS / CRIMINAL JUSTICE	**Kathy Oborn**	**710-2587 LIBRARY ROOM 1**
Criminal Justice Chicano Studies	Economics Political Science	Law
PSYCHOLOGY	**Raymond Lim**	**710-4318 BEH 1306C**
Addiction Studies Education	Psychology Statistics	
SPECIAL EDUCATION	**Norm Crozer**	**719-6430 STUDENT SERVICES BLDG.**
SPEECH COMMUNICATION	**Jennifer Rosenberg**	**710-4297 FO 2705**
THEATER AND DANCE		**719-6488 PAB 3539**
Dance	Theater	

Educational Programs
2011-2012

Pierce College

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
Addiction Studies	AA	C
Agriculture		
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	
American Sign Language (Interpreting)	AA	
Anthropolgy		
Anthropology		SC
Archaeology		SC
Architecture		
Architecture Technology	AA	C
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		C*
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
Computer Science		
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
Criminal Justice	AA	
Electronics	AS	
Digital Option		C
Communications Option		C
Analog Option		C
***Environmental Science and Technology**	AA	
Controls for Sustainable Power Systems		SC
Energy Auditing and Management		SC
Environmental Field Technician		SC
Environmental Laboratory Technician		SC
Green Building Facilities Assistant		SC
Sustainable Horticulture		SC
Water Treatment Technician		SC
French	AA	
General Education Breadth Requirement		
CSU GE Breadth Certification Plan		C
IGETC		C
General Studies with an area of emphasis	AA	
Arts and Humanities		
Science, Technology, Engineering and Mathematics		
Social and Behavorial Sciences		
Women's Studies		
Geographic Information Systems (GIS)		SC
Geography		SC
Industrial Technology		
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
Italian	AA	
Journalism	AA	
Latin American Studies	AA	SC
Mexican Studies		SC
Linguistics		SC
Mathematics	AA	
Meteorology		SC
Music	AA	
Nursing	AA	
Photojournalism	AA	SC
Political Science	AA	
Pre-Engineering	AS	
Spanish	AA	SC
Hispanic Studies		SC
Spanish Translation		SC
Speech Communication		
Communication Studies		SC
Theater Arts	AA	
Costume Option	AA	
Technical Theater Option	AA	C
Women's Studies		SC

**Pending State Approval*

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 56 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 44 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 44 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

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)

MAJOR - TOTAL UNITS **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

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 44 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:

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

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 44 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:

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

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 44 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 44 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), 640 (2 units), 645 (5 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) 506 (2 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), 603A (2 units), 603B (2 units), 603C (2 units), 603D (2 units), 603E (2 units), 615 (1 unit), 616 (2 units), 617 (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 44 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:

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

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 44 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:

Plan A: NOT AVAILABLE WITH THIS MAJOR
Plan B: Pierce Career and Technical general education plan18 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 44 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 44 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 Western University's College of Veterinary Medicine. In addition, our students have been accepted into a total of twenty one other colleges across the nation. Our 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 44 of this catalog for more information on transfer requirements and resources.

Department Subject Advisor: Dr. Lee Shapiro

MAJOR - REQUIRED COURSES

		UNITS
[1]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
[2]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)	
[3]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

[1]Offered Spring semester of even numbered years only

[2]Offered Fall semester only

[3]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 44 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)	
	Or	3
CO SCI 501	Personal Computer Application Software (3 units)	
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
MAJOR - TOTAL UNITS		**63**

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: 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 44 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
[1]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
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

[1] 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-onexperience 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 44 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
CERTIFICATE - TOTAL UNITS		**34**

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 44 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) Or	3
ART 307	Oil Painting I (3 units)	
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
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

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 44 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
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

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 44 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 44 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 44 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:

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

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 44 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:

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

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 44 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
[1]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

[1]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
CERTIFICATE - TOTAL UNITS		**16**

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[1]

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) Or	3
[1]BUS 10	Fundamentals of Tax Return Preparation (3 units)	
BUS 1	Introduction to Business	3
CERTIFICATE - TOTAL UNITS		**16**

[1]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
CERTIFICATE - TOTAL UNITS		**17**

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 44 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		
Select a minimum of 15 semester units from the following		15
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: 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:

- 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) Or	3
MARKET 21	Principles of Marketing (3 units)	
MGMT 2	Organization and Management Theory (3 units) Or	3
MGMT 13	Small Business Management I (3 units)	

CERTIFICATE - TOTAL UNITS **17**

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
Plus 6 additional units from:		**6**
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	Principles of Marketing (3 units)	
CERTIFICATE - TOTAL UNITS		**15**

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
CERTIFICATE - TOTAL UNITS		**20**

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
CERTIFICATE - TOTAL UNITS		**12**

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 supervisorial 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 44 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:

Select a minimum of 12 units from the following courses		12
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

CERTIFICATE - REQUIRED COURSES		UNITS
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
Select a minimum of one course (3 semester units) from the following:		3
MGMT 31	Human Relations for Employees (3 units)	
MGMT 33	Personnel Management (3 units)	
PUB REL 1	Public Relations (3 units)	
SUPV 1	Elements of Supervision (3 units)	
CERTIFICATE - TOTAL UNITS		**17**

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.

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
MGMT 13	Small Business Management I	3
CERTIFICATE - TOTAL UNITS		**17**

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
CERTIFICATE - TOTAL UNITS		**34**

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 44 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)	
CERTIFICATE - TOTAL UNITS		**15**

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 44 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**

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 or through the Child Development Training Consortium 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 44 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 10	Child Health (3 units)	
CH DEV 11	Home, School, & Community Relations	3
CH DEV 22	Practicum in Child Development I	4
CH DEV 34	Observation and Assessment of Children (3 units)	
CH DEV 42	The Child in a Multicultural Society (3 units)	
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)

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 general education plan18 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 34	Observing and Recording Children's Behavior	3
CH DEV 42	The Child in a Multi-Cultural Society	3
*ENGLISH 28	Intermediate Reading & Composition	3
Select a minimum of one course (3 semester units) from the following:		3
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 **31**

**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 34	Observing and Recording Children's Behavior	3
Select a minimum of one course (3 semester units) from the following:		3
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 **25**

**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
Select a minimum of one course (3 semester units) from the following:		3
CH DEV 3	Creative Experiences for Children I (3 units)	
CH DEV 4	Creative Experiences for Children II (3 units)	
CERTIFICATE - TOTAL UNITS		**12**

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) Or	3
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) Or	3
CH DEV 39	Administration of Early Childhood Programs II (3 units)	
Select a minimum of one course (3 semester units) from the following:		3
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)	
CERTIFICATE - TOTAL UNITS		**15**

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) Or	3
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) Or	3
CH DEV 31	Infant Toddler Studies II (3 units)	
Select a minimum of one course (3 semester units) from the following:		3
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)	
CERTIFICATE - TOTAL UNITS		**15**

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) Or	3
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) Or	3
CH DEV 47	School Age Programs II (3 units)	
Select a minimum of one course (3 semester units) from the following:		3
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)	
CERTIFICATE - TOTAL UNITS		**15**

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
Select a minimum of one course (3 semester units) from the following:		3
ENGLISH 240	Literature and the Motion Pictures (3 units)	
PHILOS 42	Philosophy of CINEMA (3 units)	
PHOTO 10	Beginning Photography (3 units)	
CERTIFICATE - TOTAL UNITS		**18**

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

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.

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 44 of this catalog for more information on transfer requirements and resources.

ENTRY-LEVEL COURSES

		UNITS
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010)	3

MAJOR - REQUIRED COURSES

ACCTG 1	Introductory Accounting I	5
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3
[3]CAOT 67	Microsoft Outlook for the Office	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2010)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES

CAOT 32	Business Communications	3
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
Select a minimum of 6 semester units from the following:		6
[2]CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS5)	3
CAOT 96	Adobe Creative Suite CS5 for the Office and the Web	3
[3]CAOT 108	Computer Design for the Office (MS Powerpoint 2010) Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design (MS Powerpoint 2010)	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS5)	3
CAOT 113	Introduction to Adobe Photoshop for the Office (CS5)	3
[3]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

[1]See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

[2]Offered in the Fall semester only.

[3]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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010)	3

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3
[3]CAOT 67	Microsoft Outlook for the Office (2010)	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2010)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES		
CAOT 32	Business Communications	3
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
Select a minimum of two courses (5-6 semester units) from the following:		**5-6**
[2]CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS5)	3
CAOT 96	Adobe Creative Suite CS5 for the Office and the Web	3
[3]CAOT 108	Presentation Design for the Office (Powerpoint 2010) Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design (Powerpoint 2010)	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS5)	3
CAOT 113	Introduction to Adobe Photoshop for the Office (CS5)	3
[3]CAOT 125	Microsoft Office Project 2010	2
CAOT 132	Introduction to Student ePortfolios	2

CERTIFICATE - TOTAL UNITS **49-50**

[1]See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

[2]Offered in the Fall semester only.

[3]Offered in the Spring semester only.

LEGAL OFFICE PROCEDURES

■ Associate of Arts Degree

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.

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 44 of this catalog for more information on transfer requirements and resources.

ENTRY-LEVEL COURSES		UNITS
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010)	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 2010)	3
[3]CAOT 66	Voice-Recognition Software for Computer Input	1
[3]CAOT 67	Microsoft Outlook for the Office	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES		
[2]CAOT 23F	Legal Procedures IF	2
[3]CAOT 23G	Legal Procedures IG	3
CAOT 32	Business Communications	3
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications (MS Word 2010)	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

[1]See course description for course prerequisites and corequisites. Students who havenot acquired the necessary skills should enroll in CAOT 1.

[2]Offered in the Fall semester only.

[3]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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010)	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 2010)	3
[3]CAOT 66	Voice-Recognition Software for Computer Input	1
[3]CAOT 67	Microsoft Outlook for the Office 2010	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES		
[2]CAOT 23F	Legal Procedures IF	2
[3]CAOT 23G	Legal Procedures IG	3
CAOT 32	Business Communications	3
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
CERTIFICATE - TOTAL UNITS		**46**

[1] See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

[2] Offered in the Fall semester only.

[3] 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

The Administrative Professional program prepares students for supervisorial and managerial positions in business offices. The 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.

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 44 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
[1]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 2010)	3
[3]CAOT 67	Microsoft Outlook for the Office (2010)	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2010)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]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
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications	3
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
[3]CAOT 108	Presentation design for the Office (Powerpoint 2010) Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design (Powerpoint 2010)	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

[1]See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

[2]Offered in the Fall semester only.

[3]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 supervisorial 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
[1]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 2010)	3
[3]CAOT 67	Microsoft Outlook for the Office (2010)	1
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2010)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]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
[2]CAOT 71	Voice-Recognition Software With Document Applications	3
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
[3]CAOT 108	Presentation Design for the Office (MS PowerPoint 2010) Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design	3

CERTIFICATE - TOTAL UNITS **52-53**

[1]See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

[2]Offered in the Fall semester only.

[3]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 Or	5
CAOT 77	Microsoft Accounting for the Electronic Office	3
CAOT 78	Microcomputer Accounting Applications for the Electronic Office (QuickBooks 2010)	3
CAOT 82	Microcomputer Software Survey in the Office (MS Office 2010)	3
CAOT 85	Microcomputer Office Applications: Spreadsheet Or	3
CAOT 74	Excel Concepts for Business Applications	2
[2]CAOT 92	Computer Windows Applications (Windows 7)	2

CERTIFICATE - TOTAL UNITS **13-16**

** For an Associate in Arts degree or a two-year certificate in Accounting, see Business Administration: Accounting.*

[2] 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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010) Or	3
CAOT 100	Windows-Based Computer Applications (MS Office 2010)	3

CERTIFICATE - REQUIRED COURSES		
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3
[3]CAOT 66	Voice-Recognition Software for Computer Input	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSE		
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
CERTIFICATE - TOTAL UNITS		**26**

[1]See Pierce College Catalog course description or CAOT Web site 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.

[2]Offered in the Fall semester only.

[3]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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey for the Office (MS Office 2010) Or	3
CAOT 100	Windows-Based Computer Applications (MS Office 2010)	3

CERTIFICATE - REQUIRED COURSES		
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3
[3]CAOT 66	Voice-Recognition Software for Computer Input	1
CAOT 85	Microcomputer Office Applications: Spreadsheet (MS Excel 2010)	3
[2]CAOT 92	Computer Windows Applications (Windows 7)	2
[3]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES		
[2]CAOT 86	Microcomputer Office Applications: Database (MS Access 2010)	3
Select 12 semester units from the following:		**12**
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
[2]CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS5)	3
CAOT 96	Adobe Creative Suite CS5 Survey for the Office and Web	3
[3]CAOT 108	Presentation Design for the Office (MS Powerpoint 2010) Or	2
CAOT 110	Microcomputer Office Applications: Presentation Design (MS Powerpoint 2010)	3
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS5)	3
CAOT 113	Introduction to Adobe Photoshop CS5 for the Office	3
[2]CAOT 114	Adobe Acrobat CS5 for the Office and the Web	2
[1]CAOT 120	Adobe Illustrator CS5 for the Office and the Web	3
[2]CAOT 125	Microsoft Office Project 2010	2
CAOT 132	Introduction to Student ePortfolios	2
CERTIFICATE - TOTAL UNITS		**38-39**

[1]See Pierce College Catalog course description or CAOT Web site 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.

[2]Offered Fall semester only.

[3]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 2010)	3
	Or	
CAOT 100	Windows-Based Computer Applications (MS Office 2010)	3

CERTIFICATE - REQUIRED COURSES		
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3
[1]CAOT 92	Computer Windows Applications (Windows 7)	2
[2]CAOT 97	Introduction to the Internet for CAOT	3

CAPSTONE COURSES		
[2]CAOT 79	Word Processing Applications (MS Word 2010)	3
CAOT 109	Web Multimedia for the Office (Adobe CS5 Dreamweaver and Flash)	3
CAOT 113	Introduction to Adobe Photoshop CS5 for the Office	3
CERTIFICATE - TOTAL UNITS		**20**

[1]Offered Fall semester only.

[2]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 2010)	3
	Or	
CAOT 96	Adobe Creative Suite CS5 Survey for the Office and the Web	3

CAPSTONE COURSES		
[1]CAOT 88	Microcomputer Office Applications: Desktop Publishing (Adobe InDesign CS5)	3
CAOT 113	Introduction to Adobe Photoshop CS5 for the Office	3
[2]CAOT 114	Adobe Acrobat CS5 for the Office and the Web	2
[2]CAOT 120	Adobe Illustrator CS5 for the Office and the Web	3
CERTIFICATE - TOTAL UNITS		**17**

[1]Offered Fall semester only.

[2]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 2010)	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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2
CAOT 82	Microcomputer Software Survey in the Office (MS Office 2010)	3

CERTIFICATE - REQUIRED COURSES		
CAOT 39	Word Processing: Keyboarding and Operations (MS Word 2010)	3

CAPSTONE COURSES		
[3]CAOT 79	Word Processing Applications (MS Word 2010)	3
CERTIFICATE - TOTAL UNITS		**17**

[1]See Course Description
[2]Offered in the fall semester only
[3]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
[1]CAOT 2	Computer Keyboarding II	3
CAOT 31	Business English	3
[2]CAOT 34	Business Terminology	2

CAPSTONE COURSES		
CAOT 32	Business Communications	3
	Or	
CAOT 128	Communication Skills for the Business Professional	3
[2]CAOT 71	Voice-Recognition Software With Document Applications	3

CERTIFICATE - TOTAL UNITS **14**

[1]See Course Description
[2]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 2010), basic spreadsheet applications (Microsoft Excel 2010), 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
[1]CAOT 55	Career Skills for the Workplace	3
CAOT 100	Windows-Based Computer Applications (MS Office 2010)	3
	Or	
CAOT 82	Microcomputer Software Survey in the Office (MS Office 2010)	3
CAOT 130	Communication Skills in the Workplace	3
	Or	
CAOT 31	Business English	3

CERTIFICATE - TOTAL UNITS **12**

[1]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
[1]CAOT 108	Presentation Design for the Office (MS Powerpoint 2010)	2
	Or	
CAOT 110	Microcomputer Office Applications: Presentation Design (MS Powerpoint 2010)	3
CAOT 113	Introduction to Adobe Photoshop CS5 for the Office	3

CAPSTONE COURSES		
CAOT 109	Web Multimedia for the Office (Adobe Dreamweaver and Flash CS5)	3
[1]CAOT 114	Adobe Acrobat CS5 for the Office and the Web	2
[2]CAOT 120	Adobe Illustrator CS5 for the Office and the Web	3

CERTIFICATE - TOTAL UNITS **16-17**

[1]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 44 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 44 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
[1]CO SCI 508	Visual BASIC	3
[1]CO SCI 533	Databases Using Access and SQL	3
[1]CO SCI 541	Advanced Visual Basic and Database Programming	3
[1]CO SCI 552	Programming in Java	3
	Or	
[1]CO SCI 572	Introduction to Personal Computer Hardware and Operating Systems	3
CO SCI 560	Business Systems Design Using Oracle Developer	3
CERTIFICATE - TOTAL UNITS		**23**

[1]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
CERTIFICATE - TOTAL UNITS		**9**

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
[1]CO SCI 508	Visual BASIC	3
[1]CO SCI 541	Advanced Visual Basic and Database Programming	3
[1]CO SCI 560	Business Systems Design Using Oracle Developer	3
CERTIFICATE - TOTAL UNITS		**9**

[1]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 44 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
Technical Elective: select a minimum of one course from the following list:		**3-5**

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).

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, 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
[1]CO SCI 516	Beginning Computer Architecture and Organization	3
[1]CO SCI 536	Introduction to Data Structures	3
[1]CO SCI 539	Programming in C	3
[1]CO SCI 540	Object Oriented Programming in C++	3
[1]CO SCI 552	Programming in Java	3
CO SCI 575	Programming Fundamentals for Computer Science	3
CERTIFICATE - TOTAL UNITS		**18**

[1]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 44 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
[1]CO SCI 514	Network Operations and Systems	3
CO SCI 533	Databases with Access and SQL	3
[1]CO SCI 534	Operating Systems	3
[1]CO SCI 535	Network Configuration and Control Systems	3
[1]CO SCI 537	Routing Systems, Devices and Protocols	3
CO SCI 550	Website Development and Programming Using Dreamweaver and JavaScript	3
CO SCI 538	Implementing Wide Area and Wireless Networking	3
CO SCI 572	Introduction to Personal Computer Hardware and Operating Systems	3
CO SCI 575	Programming Fundamentals for Computer Science	3
[1]CO SCI 578	Routing Systems Design and Programming	3
[1]CO SCI 581	Personal Computer Upgrades and Repair	3
[1]CO SCI 587	Introduction to Computer Networks	3

[1]See course description for prerequisites.

Technical Electives:
Select a minimum of 3 units from any of the courses listed below: 9

1) PROGRAMMING: CO SCI 508 (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), 555(3 units), 556 (3 units)
3) ELECTRONICS: ELECTRN 4A (3 units), 4B (1 unit), 6A (3 units), 6B (1 unit), 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
[1]CO SCI 581	Personal Computer Upgrade and Repair	3
[1]CO SCI 587	Introduction to Computer Networks	3

CERTIFICATE - TOTAL UNITS **12**

1See 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
[1]CO SCI 514	Network Operations and Systems	3
[1]CO SCI 534	Operating Systems	3
[1]CO SCI 535	Network Confirguration and Control Systems	3
[1]CO SCI 587	Introduction to Computer Networks	3

CERTIFICATE - TOTAL UNITS **12**

[1]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
[1]CO SCI 537	Routing Systems, Devices and Protocols	3
CO SCI 538	Implementing Wide Area and Wireless Networking	3
[1]CO SCI 578	Routing Systems Design and Programming	3
[1]CO SCI 587	Introduction to Computer Networks	3
CERTIFICATE - TOTAL UNITS		**12**

[1]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
[1]CO SCI 534	Operating Systems	3
CO SCI 547	Introduction to Digital Imaging Using Photoshop	3
[1]CO SCI 553	Web Page Development	3
[1]CO SCI 554	Server-Side Programming for the World Wide Web	3
CERTIFICATE - TOTAL UNITS		**12**

1See 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 44 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: NOT AVAILABLE WITH THIS MAJOR	
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

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 44 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
[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.piececollege.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

ELECTRN 44	Communications Electronics	3
ELECTRN 45	Communications Electronics Laboratory	1
ELECTRN 60	Microwave Fundamentals	3
ELECTRN 61	Microwave Fundamentals Laboratory	1

ANALOG OPTION

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.

Environmental Science and Technology

ENVIRONMENTAL SCIENCE AND TECHNOLOGY

■ Associate of Arts Degree

Associate Degree requirements must be completed with a cumulative grade point average of 2.0 (C) or better.

This degree is pending State Approval.

PROGRAM INFORMATION

This program will provide the background in the basic science needed to understand the operation of our environmental life support systems and our impact upon them. This understanding will serve as the foundation to evaluate causes and possible solutions to these problems with emphasis on the sustainability of our social, political and economic expectations.

MAJOR - REQUIRED COURSES UNITS

BIOLOGY 6	General Biology I	5
BIOLOGY 7	General Biology II	5
CHEM 101	General Chemistry I	5
CHEM 102	General Chemistry II	5
CO SCI 501	Introduction to Computers and Their Uses	3
	Or	
CAOT 100	Windows Based Computer Applications	3
ENV SCI 1	The Human Environment	3
ENV SCI 2	The Human Environment: Biological Processes	3
ENV SCI 31	Energy and Power	3
GEOL 1	Physical Geology	3
& GEOL 6	Physical Geology Laboratory	2
	Or	
GEOL 4	Physical Geology & Laboratory	5
MATH 227	Statistics	4
MATH 260	Pre-calculus	5

MAJOR - TOTAL UNITS: 46

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 44 of this catalog for more information on transfer requirements and resources.

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: Not available with this major
Plan B: Career and Technical GE Plan
Plan C: CSU GE Breadth Certification Plan 39 units
Plan D: IGETC 34-39 units

CONTROLS FOR SUSTAINABLE POWER SYSTEMS

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
ELECTRN 4A	Fundamentals of Electronics IA Lecture	3
ELECTRN 4B	Fundamentals of Electronics IB Lab	1
ELECTRN 6A	Fundamentals of Electronics IIA Lecture	3
ELECTRN 6B	Fundamentals of Electronics IIB Lab	1
IND TEK 173	Electrical Codes and Ordinances	3
IND TEK 36	Solar PV, Wind and Power Systems	4
TOTAL UNITS		**15**

ENERGY AUDITING AND MANAGEMENT

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
IND TEK 33	Energy Auditing and Management	3
CAOT 100	Windows Based Computer Applications	3
MATH 145	Technical Mathematics	3
ENGISH 28	Intermediate Reading and Composition	3
IND TEK 34	Green Building Technology	3
TOTAL UNITS		**15**

ENVIRONMENTAL FIELD TECHNICIAN

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
GEOL 1	Physical Geology	3
GEOL 6	Physical Geology Laboratory	2
ENV SCI 35	Basic Environmental Field Techniques	1
CAOT 100	Windows-Based Computer Applications	3
BIOLOGY 10	Natural History I	4
ENV SCI 32	Survey of Environmental Regulations	3
TOTAL UNITS		**16**

ENVIRONMENTAL LABORATORY TECHNICIAN

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
CHEM 101	General Chemistry I	5
	Or	
CHEM 60	Introduction to General Chemistry	5
CHEM 34	EPA Laboratory Methods	4
ENV SCI 33	Fundamentals of Water Treatment	3
TOTAL UNITS		**12**

GREEN BUILDING FACILITIES ASSISTANT

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
MATH 145	Technical Mathematics I	3
IND TEK 31	Basic Building Maintenance Skills	3
IND TEK 30	Workplace Safety	1
PSYCH 13	Social Psychology	3
CAOT 100	Windows Based Computer Applications	3
TOTAL UNITS		**13**

SUSTAINABLE HORTICULTURE

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
PLNT SCI 828	Sustainable Waster Conservation and Management	3
PLNT SCI 829	Sustainable Plant Selection	3
PLNT SCI 830	Sustainable Pest Control	3
PLNT SCI 827	Sustainable Gardening for Landscapes	3
TOTAL UNITS		**12**

WATER TREATMENT TECHNICIAN

■ Department Skills Certificate

Department skills certificates will not appear on the students' official transcript.

CERTIFICATE - REQUIRED COURSES		UNITS
CHEM 51	Fundamentals of Chemistry I	5
ENV SCI 33	Fundamentals of Water Treatment	3
CHEM 34	EPA Laboratory Methods	4
TOTAL UNITS		**12**

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 44 of this catalog for more information on transfer requirements and resources.

MAJOR - REQUIRED COURSES		UNITS
FRENCH 8	Conversational French (2 units)	2-3
	Or	
FRENCH 81	Practical French for Business (3 units)	
Select a minimum of three courses (15 semester units) from the following:		**15**
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: NOT AVAILABLE WITH THIS MAJOR	
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 44 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 (3units), 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 (3 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); **A S L**: 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), 28 (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 (), 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); **ENG GEN** 131 (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), 228A, 228B, 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:** 4 (4),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), 174 (3 units), 305 (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), 26 (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), 151 (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: NOT AVAILABLE WITH THIS MAJOR	
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.

CERTIFICATE - REQUIRED COURSES		UNITS
GEOG 31	Introduction to Geographic Information Systems (3 units) Or	3
GIS 31	Introduction to Geographic Information Systems (3 units)	
GEOG 32	GIS Applications: Arc View (3 units) Or	3
GIS 32	GIS Applications: Arc View (3 units)	
GEOG 36	GIS Cartography and Base Map Development (3 units) Or	3
GIS 36	GIS Cartography and Base Map Development (3 units)	
GEOG 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

GEOG 33 Intermediate GIS Applications: Arc View 93 units); GIS 33 Intermediate GIS Applications: Arc View (3 units)
GEOG 37 Introduction to Global Positioning System (GPS) (1 unit); GIS 37 Introduction to Global Positioning System (GPS) (1 unit)
GEOG 39 GIS for Science, Business, and Government (3 units); GIS 39 GIS for Science, Business, and Government (3 units)
GEOG 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

GEOG 1	Physical Geography	3
GEOG 2	Cultural Elements of Geography	3
	Or	
GEOG 7	World Regional Geography	3
GEOG 15	Physical Geography Laboratory	2

Select a minimum of 8 semester units from the following:

GEOG 2*	Cultural Elements of Geography	3
GEOG 7*	World Regional Geography	3
GEOG 3	Introduction to Weather and Climate	3
	Or	
METEOR 3	Introduction to Weather and Climate	3
GEOG 14	Geography of California	3
GEOG 20	Field Studies in California Geography	1-6
GEOG 21	Introduction to the Geography of the United States and Canada	3
GEOG 22	Introduction to the Geography of Latin America	3
GEOG 31	Introduction to Geographic Information Systems	3
GEOG 32	GIS Applications: ArcView	3
GEOG 33	Intermediate GIS Applications: ArcView	3
GEOG 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 44 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

Select a minimum of 3 semester units from the following: 3

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) Or	1-3
AST 52	Advanced Brakes Steering and Suspension systems (3 units)	
AST 34	Automotive Service Technology Projects Laboratory Electrical Circuits (2 units) Or	2-3
AST 54	Advanced Electrical Systems (3 units)	
AST 36	Automotive Service Technology Laboratory Standard Transmissions, Clutches, Drive Lines and Differentials/ Air Conditioning	1
Select a minimum of 3 semester units from the following:		**3**
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 Changing 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
CERTIFICATE - TOTAL UNITS		**13**

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 automoble.

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
CERTIFICATE - TOTAL UNITS		**15**

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 draftsperson 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, draftspersons 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 44 of this catalog for more information on transfer requirements and resources.

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		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		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 44 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:

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

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
Select a minimum of one course (3 semester units) from the following:		**3**
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
Select a minimum of one course (3 semester units) from the following:		**3**
IND TEK 244	CNC Programming and Machine Operation - Lathe (3 units)	
IND TEK 248	CNC Programming and Machine Operation - Mill (3 units)	
CERTIFICATE - TOTAL UNITS		**15**

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
Select a minimum of two courses (6 semester units) from:		**6**
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)	
CERTIFICATE - TOTAL UNITS		**15**

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
CERTIFICATE - TOTAL UNITS		**15**

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
CERTIFICATE - TOTAL UNITS		**12**

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 44 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: NOT AVAILABLE WITH THIS MAJOR	
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 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 44 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 24units, 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 44 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)	
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 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: NOT AVAILABLE WITH THIS MAJOR	
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
Select a minimum of one course from the following:		2-3
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	Intermediate Spanish II or Higher	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	3
	Or	
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 Degree Common Requirements. 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 44 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 44 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
Performance Organization: Select a minimum of one course from the following:		
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: NOT AVAILABLE WITH THIS MAJOR	
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 course; 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
MAJOR - TOTAL UNITS		**37**

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).

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 44 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 44 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 44 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 44 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

Select a minimum of on e course (3 units) from the following:	
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 **19-20**

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
Select a minimum of one course (3 semester units) from the following:		**3**
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
Select a minimum of three courses (9 semester units) from the following:		**9**
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)	
MAJOR - TOTAL UNITS		**12**

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 44 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
[2]THEATER 342	Technical Stage Production (2 units)	2-3
	Or	
THEATER 411	Costuming for the Theater (3 units)	

MAJOR - TOTAL UNITS **15-16**

[2]Prerequisite for THEATER 232 - Play Production

[3]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 44 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: NOT AVAILABLE WITH THIS MAJOR	
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 44 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: NOT AVAILABLE WITH THIS MAJOR
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) Or	2-3
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

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

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)

– continues next page

Major Codes

Certificates of Achievement, – continued

Major Code	Title
130540	Preschool Teacher
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

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

Educational Goals:

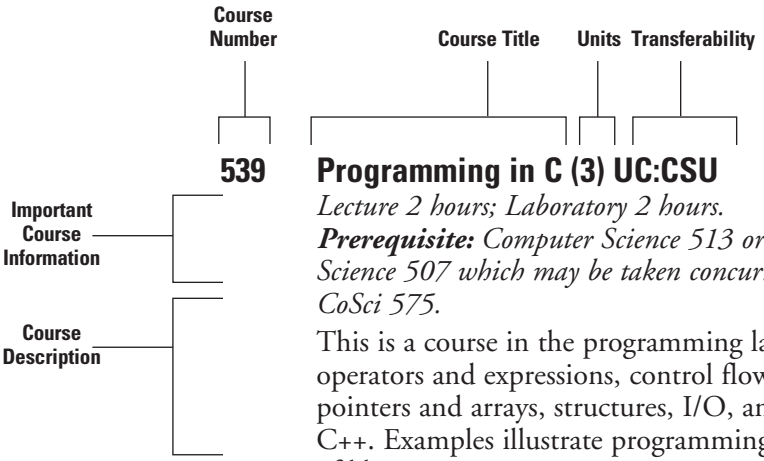
1. **Prepare for a new career (acquire new job skills)**
2. **Advance in current job/career (update job skills)**
3. **Discover/develop career interests, plans and goals**
4. **Obtain a two-year vocational degree without transfer**
5. **Obtain a two-year Associate's degree without transfer**
6. **Obtain 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
2011-2012

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.

RPT Number of times a course may be repeated for credit.

Prerequisite:

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. You must complete prerequisites before enrolling in a class.

Corequisite:

A condition of enrollment consisting of a course that a student is required to take simultaneously in order to enroll in another course.

Advisory:

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.

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.

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.

9 Field Work For Addiction Personnel (3)
Lecture 1 hour; Laboratory 5 hours.
Prerequisites*: Addiction Studies 1 or 2 with a grade of "C" or better..*
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; workaholism 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 with a grade of "C" or better*
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 delecti, 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.

174 Offender Profiling in Criminal Investigations (3) CSU
Lecture 3 hours.
This course will introduce students to the typology of crime, patterns and motives of crimes, and crime scene patterns in order to analyze and identify the personality and behavioral characteristics of serial offenders. Students will examine and analyze the history of criminal profiling, inductive and deductive profiling; the development of profiling techniques used by the FBI's Behavioral Analysis Unit (BSU); crime scene/offender characteristics; profile characteristics of organized vs. disorganized murders; explore myths and controversial issues surrounding criminal profiling.

305 Criminal Intelligence and Data Analysis (3) CSU
Lecture 3 hours.
Students learn the application of criminal intelligence and data analysis through critical thinking, language and logic, inductive and deductive reasoning resulting in the construction of a hypothesis. Analytical methodologies such as analysis and criticism, problem-solving, mapping and charting, commodity flow analysis, matrices and link chart production are employed to distinguish matters of fact from issues of judgment or opinions in determining criminal intelligence and behavior.

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, 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

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.

16 Creative Signing (2) CSU
Lecture 2 hours.
Prerequisite*: American Sign Language 2 with a grade of "C" or better.*
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 story-telling 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 with a grade of "C" or better 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

Agriculture - General	**Animal Science 100-199**
Veterinary Technology (RVT)	**Animal Science 400-499**
Animal Science	**Animal Science 500-599**
Horse Science	**Animal Science 600-699**

120 Ethical Issues of Using Animals (3) CSU
Lecture 3 hours.
***Advisory:** Animal Science 501*
In this course students consider 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.
Veterinary science students will learn all aspects of animal care. Areas of study will include sanitation, housing, nutrition, restraint, and environmental enrichment for livestock, lab animals and companion animals.

181A Field Work (1) - RPT 4
Laboratory 3 hours.
Students participate in supervised job experience related to their 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 integumnetary 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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with grades of "C" or better.*
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 an opportunity to obtain specialized experience in a veterinary clinic through an internship program. During this internship program, students will be given varied practical experience in all aspects of veterinary assistance and will be able to coordinate this experience with their classroom instruction.

501 Principles of Animal Science (3) UC:CSU
Lecture 3 hours.
Students will learn 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, goats, swine, horses, poultry, llamas, rabbits and ostriches. Topics include breeds, feeding, reproduction, animal welfare and other management activities. Course is designed for the pre-veterinary, registered veterinary technician, equine science and general animal science student.

505 Animal Nutrition (3) CSU
Lecture 3 hours.
Advisory: *Animal Science 501*
Students will study the constituents of feed (carbohydrates, proteins, fats, minerals, vitamins and water), their utilization by the animal body, the digestive system, the process of digestion and assimilation of the various feed constituents, identification of feedstuffs, feeding standards, computation of simple rations for livestock, and economy in feeding and purchasing feeds by nutritive values.

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.
Advisory: *Animal Science 512*
Students learn the structural aspects and the normal functions of the principal systems of the various farm and companion animals. Comparative anatomy and physiology is included. Provides a basic study of the facts and principles of animal life.

512 Anatomy and Physiology of Animals Laboratory (1) CSU
Laboratory 3 hours.
Corequisite*: Animal Science 511.*
Students will gain 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.
Corequisite*: Animal Science 615*
Advisory: *Completion of Animal Science 501 and Animal Science 511*
Students learn the techniques in the collection, evaluation, processing, storage, and shipment of semen. Course includes the study of insemination procedures and practices and fertility problems, basic reproductive anatomy and physiology. Heat detection, disease control and other management skills needed in artificial insemination are discussed.

516 Artificial Insemination Laboratory (1)
Corequisite*: Animal Science 515*
Advisory: *Completion of Animal Science 501, 511 and 512.*
Laboratory 3 hours.
Students learn the techniques of the rectovaginal cervical fixation method of artificial insemination of cattle. Heat detection and other management skills needed in artificial insemination.

520 Beef Production (2)
Lecture 3 hours.
Corequisite*: Animal Science 521*
Advisory: *Completion of Animal Science 501*
Surveys market beef production in the United States, with emphasis on California. Includes beef cattle terms, grades and classes of market cattle and carcasses, breed characteristics, grading and selection of stock and feeder cattle. Analyzes markets and functions, importance of by-products, necessary margin, and factors affecting economy and efficiency of gain. Discusses modern animal welfare concerns and methods as well as veterinary procedures, diseases which special emphasis on the role of the veterinarian and RVT in beef cattle production.

530 Poultry Production (2) CSU
Lecture 2 hours.
Corequisite*: Animal Science 521*
Students learn the economic and managerial aspects of the commercial poultry operation. The particulars of breeding, care and housing of growing and laying stock, culling and record keeping are covered. Students visit commercial poultry plants in the local area.

531 Poultry Production Laboratory (2)
Corequisite*: Animal Science 530*
Advisory: *Completion of Animal Science 501*
Laboratory 4 hours.
In this laboratory class, students learn the manipulation skills commonly practiced in poultry production. The practical aspects of poultry production are emphasized.

540 Livestock Management Techniques (2) CSU
Advisory: *Completion of Animal Science 501*
Students learn about the practical applications of livestock management. The livestock industry encompasses on the job farm management, decisions, operation, and procedures of the college livestock. Livestock options include one or more of the following: beef, sheep, swine, and poultry animals.

596 Agricultural Enterprise Projects (10)
Laboratory 30 hours.
Prerequisite*: Animal Science 540 with a grade of "C" or better.*
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 with grades of "C" or better.*
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 hours; 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 he 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 with a grade of "C" or better 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 with grades of "C" or better. 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 with a grade of "C" or better. 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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

105 PREHISTORIC PEOPLES (3) UC:CSU
Lecture 3 hours.
This course 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. Students survey 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 with a grade of "C" or better, or concurrent enrollment.*
Offers laboratory exploration of selected topics in biological anthropology including genetics, human variation, the living primates, and human paleontology.

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.

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.
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 with grades of "C" or better.*
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 with grades of "C" or better.*
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 with grades of "C" or better.*
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 with grades of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.
Furthers 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.
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
Continuation of Art 304.

306 Acrylic Painting III (3) UC:CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**: Art 305 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

53 Introduction to Alternative Fuels (3)
Lecture 2 hours; Laboratory2 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.

55 Hybrid Service and Safety (3)
Lecture 2 hours; Laboratory2 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 with a grade of "C" or better.*
***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 with a grade of "C" or better.*
***Note**: Biology 6 is not a prerequisite for Biology 7.*
***Note**: This class meets off campus several times during the semester.*

Students 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 with a grade of "C" or better.*

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 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) with a grade of "C" or better*
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.

22 Radio/Television Activities(1) CSU RPT -3
Laboratory 3 hours.
Special training and studio/field experience in production, programming, research and management in broadcast media. Practical assignments with Pierce College broadcasting projects.

50 Radio Documentary Production (6) CSU
Lecture 3 hours. Laboratory 6 hours.
This course explores long-form radio documentary concept development, pre-production, production and post-production. Students will learn how to research and pitch a story, elements of storytelling and story structure, character development, interviewing, microphone and editing techniques, how to write and perform narration, as well as how to use natural sound, music and sound effects for radio documentaries. In addition, copyright law and other legal issues will be considered in this hands-on course.

81 Field Work I - Broadcasting (1) CSU
Laboratory 2 hours.
Allows student to pursue Field Work in Media Arts on a contract basis under the direction of a supervising instructor. Student has hands on experience working on a specific approved topic in order to give practical experience in what they have learned in one of the listed prerequisite courses.

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, suc h 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.

385 Directed Study- Broadcasting (3) CSU
Lecture 3 hours.
Allows student to pursue Directed Study in Broadcasting on a contract basis under the direction of the supervising instructor.

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.

34 EPA Mthods for Environmental Analysis (4)
Lecture 3 hours. Laboratory 2 hours.
This course is designed to teach sample collection and preparation of geological, water and atmospheric samples. Students will analyze environmental samples for specific pollutants utilizing specialized instrumental techniques and will follow proper data handling and analysis protocols. Regulatory requirements, such as the Environmental Protection Agency (EPA) are introduced as the basis for sampling and analysis techniques

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) △UC:CSU

△*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 goodmaii@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 bezenoid 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.

Students examine 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.
***Prerequisite**: 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 with a grade of "C" or better; 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.

Students learn the cognitive/language, social/emotional and perceptual/motor developmental domains and milestones of infants from birth to 36 months. As well as, an overview of major theories including attachment, brain development, the value of play, early intervention and relationship-based care in the context of family systems: culture, home language, and traditions. Students will be introduced to the laws and regulations of safe healthy environments and the rights of all infants and toddlers including children at-risk for disabilities. Class instruction includes objective observations of infants and toddlers in diverse settings.

31 Infant and Toddler Studies II (3) CSU
Lecture 3 hours

This course implements the principles of inclusive, respectful care-giving for infants and toddlers within a variety of program designs, routines and schedules. Topics cover typical and atypical development, principles of early intervention, design, implementation and assessment of developmentally appropriate curriculum and environment; health, safety and licensing issues. Students will also examine observation assessments, family communications, community resources, and current research within the context of home language, culture and traditions.

33 Introduction to the Reggio Emilia Approach (3) CSU RPT 2
Lecture 3 hours.

The Reggio Emilia Preschool and Infant/Toddler programs are recognized as outstanding early childhood programs. This course will focus on the history and basic philosophy of the Reggio Emilia Approach to early childhood education. We will consider organization of the environment, the teacher's role, the role of the atelerista, and the relationships between the schools and the community. Special focus on the emergent curriculum and processes for documentation

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 with a grade of "C" or better.*
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 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.

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.
Advisory: *Basic computer knowledge and ability to keyboard.*
Emphasizes the spelling and definition of words that sound alike but are spelled differently and have different meanings. Develops an understanding of common business and technology 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 2010 as students create, format, and edit business documents.

55 Career Skills for the Workplace (3)
Lecture 3 hours.
Advisory: *Basic English skills, which include reading and speaking.*
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 Computer Applications and Office Technologies Laboratory (1) - RPT 3
Laboratory 2 hours.
Corequisite: *Simultaneous enrollment in another CAOT course.*
Develops competency in the subject areas taught in the Computer Applications and Office Technologies Department. Designed as an aid to students who need additional time and practice to increase their knowledge and skills in any computer applications and office technologies course.

66 Voice-Recognition Software for Computer Input (1) - RPT 2
Laboratory 2 hours.
Note: *Uses Dragon NaturallySpeaking Preferred 11 or Microsoft Speech Recognition.*
Uses voice-recognition software (Dragon NaturallySpeaking 11 or Microsoft 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 the use of Microsoft Outlook 2010 in the business setting. Includes sending and receiving e-mail messages as well as 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.

71 Voice-Recognition Software With Document Applications (3) CSU - RPT 2
Lecture 2 hours; Laboratory 3 hours.
***Prerequisite**: CAOT 31 and 34 with a grade of "C" or better, or equivalent. Offered in the Fall semester only.*
***Note:** Uses Dragon NaturallySpeaking Preferred 11 or Microsoft Speech Recognition.*

Uses voice-recognition software—Dragon NaturallySpeaking or Microsoft 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.

77 Microcomputer Accounting for the Electronic Office (3)
Lecture 3 hours.

Develops competency in the fundamentals and mechanics of accounting 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 2 hours; Laboratory 3 hours.
***Prerequisite**: CAOT 77 or Accounting 1 with a grade of "C" or better.*
***Note:** Uses QuickBooks Pro 2010.*

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 2010 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 2010. 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 2010) 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 2010. 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 2010. 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.

87 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 2010 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.

88 Microcomputer Office Applications: Desktop Publishing (3) CSU - RPT 2
Lecture 2 hours, Laboratory 3 hours.
***Prerequisite**: CAOT 39 and CAOT 2 with a grade of "C" or better, or equivalent.*
***Note:** Uses Adobe InDesign CS5 software.*

Provides instruction and hands-on training in desktop publishing using Adobe InDesign CS5 software with Windows-based desktop computers, laser printers, scanners, and other software. Includes preparing brochures, advertisements, flyers, business forms, reports, newsletters, and presentations. Presents instruction in formatting text, using advanced graphics, adding color to publications, working with long publications, publishing electronically, and creating additional challenging projects.

92 Computer Windows Applications (2) CSU - RPT 2
Lecture 1 hour; Laboratory 2 hours.
***Note:** Uses Windows software.*

Provides an in-depth study of a Windows operating system, Windows 7. Covers the Windows 7 environment, the Windows 7 desktop, folder and file management, personal information management and communication, developing a personal work environment, and customizing the computer using the control panel.

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 CS5*

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.
***Advisory:** Basic keyboarding skills and computer knowledge.*

Covers the modern Internet tools used in business today. Students will obtain experience in using these tools and gain a firm understanding of their use. Some of the tools covered include social networking, virtual meetings, messaging, research, file sharing, remote access, and others as they emerge. This course is designed for business majors and individuals who wish to establish, maintain, or work from a virtual office.

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 7 environment for the computer novice. Includes hardware basics, operating systems, basic Windows operations, applications software, document creation with word processing (Microsoft Word 2010), spreadsheet applications (Microsoft Excel 2010), and basic Internet applications.

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. Basic knowledge of Microsoft Word.*

Provides an overview of presentation design principles. Uses PowerPoint software to create presentations incorporating PowerPoint 2010 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 with a grade of "C" or better 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 CS5 (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 2010 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 CS5.*

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 projects. Covers the vocabulary specific to Adobe Photoshop.

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.*

Uses Adobe Acrobat CS5 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 CS5 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 2010 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.

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.
***Prerequisite**: 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.
***Prerequisite**: Computer Science 572 and 587 with a grade of "C" or better, 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.
***Prerequisite**: 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.

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++) with a grade of "C" or better. 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 with a grade of "C" or better.*
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 LAN & VLAN Switching (3) CSU - RPT 1
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**: Computer Science 578 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.
***Prerequisite**: Computer Science 575; or Computer Science 506 and Computer Science 507; or Computer Science 508 and Computer Science 507 with grades of "C" or better.*
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 with grades of "C" or better.*
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. CICS 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-intructions 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 Introduction to Web Site Development Using Dreamweaver and CSS (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.
***Prerequisite**: 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 Web Site Development Using XHTML and JavaScript (3) CSU - RPT 1
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**: 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.
***Prerequisite**: 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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 and Routing Protocols (3) CSU
Lecture 2 hours; Laboratory 2 hours.
Prerequisite*: Computer Science 587 with a grade of "C" or better.*
This course covers a wide area of internetworking fundamentals. Topics include router fundamentals, router setup and configuration, network management, access control lists, routing and routed protocols, and network troubleshooting.

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 with a grade of "C" or better, 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)

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
Addiction Studies
Administration of Justice
Agriculture
American Sign Language
Anthropology
Architecture
Art
Automotive Service Technology
Biology
Business
Chemistry
Child Development
Computer Applications and Office Technology
Computer Science
Economics
Education
Electronics
Engineering, General
English
Geography
Health
Industrial Technology General
Journalism
Music
Nursing
Philosophy
Photography
Physical Education
Physics
Political Science
Psychology
Sociology
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.
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.

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 with grades of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

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.

***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.

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.

473 Middle Eastern Dance (1) CSU - RPT 3
Laboratory 2 hours.
This course is designed as an introduction to, and development of, basic and intermediate techniques of Middle Eastern Dance skills with an emphasis on movement principles, vocabulary, techniques and artistic style and differences in rhythms of each of the major Middle Eastern cultural styles. Included is the development of an understanding and appreciation of Middle Eastern Dance as an art form, with an examination of its history, evolution and place in contemporary society, and to support training in other dance classes when offering students an opportunity to experience learning movements relative to other 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 in Middle Eastern dance.

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 - Engineering Design and Technology**

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.
Students study the causes of growth in the American economy and how the economy today continues to be influenced by events from the past, such as the American Revolution, Civil War, World War 1, and the Great Depression. Further speculation 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 ~ 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.
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.

48A Integrated Circuits (3) CSU
Lecture 3 hours.
Recommended Preparation: *Electronics 26 and 63.*

Theory and applications of linear and linear/digital integrated circuits with emphasis on operational amplifiers. DC parameters, input/output impedance, input offset/bias current, CMRR, open and closed loop gain. Frequency response, voltage regulators, audio frequency amplifiers, oscillators, filters and mixers. Differential amplifiers and phase lock loops. Applications and CAD circuit analysis.

48B Integrated Circuits Laboratory (1) CSU
Laboratory 3 hours.
Recommended Preparation: *Electronics 26 and 63.*

Laboratory applications of linear and linear/digital integrated circuits with emphasis on operational amplifiers. DC parameters, input/output impedance, input offset/bias current, CMRR, open and closed loop gain. Frequency response, voltage regulators, audio frequency amplifiers, oscillators, filters and mixers. Differential amplifiers and phase lock loops. Applications and CAD circuit analysis.

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.

72A Digital Circuits IA (3) CSU
Lecture 3 hours.
***Advisory**: Electronics 6A and 6B.*
Recommended: Concurrent enrollment in Electronics 8A.
Digital number systems, Boolean algebra, Karnaugh maps. Combinational systems including gates, adders, encoders, decoders, code converters, displays and drivers, multiplexers. Sequential circuits including flip flops, monostable multivibrators, counters, registers, and timers. Synchronous sequential design, transition tables and timing diagrams. Memory systems. Computer aided circuit analysis.

72B Digital Circuits Laboratory IB (1) CSU
Laboratory 3 hours.
Recommended: Concurrent enrollment in Electronics 72A.
Provides practice in breadboarding and troubleshooting digital circuits using integrated circuits. The circuits that are constructed and tested include logic gates, flip-flops, memories, counters, registers, synchronous sequential designs, and digital displays. Emphasis is placed on using manufacturers data sheets.

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

131 Statics (3) UC:CSU
Lecture 2 hours. Laboratory 3 hours.
A first course in engineering mechanics. Considers two and three dimensional analysis of force systems on particles and rigid bodies in equilibrium. Topics also include static analysis of trusses, beams, and cables; determination of center of gravity, centroids, friction, and moments of inertia of area and mass.

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.

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.*
Students gain 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.

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.

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.
Students are introduced to the life and works of William Shakespeare, with emphasis on Shakespeare's milieu. Emphasizes detailed study of several history plays, and earlier comedies.

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.*
In this course, students study a selection of classic and contemporary literature suitable for children of many age levels, preschool through high school (and beyond), new readers and English language learners. Emphasis will be placed on storytelling, acquaintance with authors, and the development in children of desirable attitudes toward literature. Recommended for prospective nursery, kindergarten, elementary, and secondary teachers, parents of developing readers, literacy providers, literature consultants, librarians, and anyone who wants a foundation in what's great about English language literature or who wants to know how to select wonderful books for readers of all ages

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.

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 compliex 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.

32 Survey of Environmental Regulations (3)
Lecture 3 hours.
Presents a survey of the principal environmental legislation that must be considered in the design and performance of environmental projects. Includes discussion of the natural history and practical application of the common environmental regulations. at the federal, state and local levels. Regulations to be discussed are: NEPA, CWA, FESA, NBTA, Fed. Wet. Reg., Coastal Act, CEQA, Fish and Game Code, CESA, Cal. Wat. Qual. Reg., General Plan Req., and Project Mitigation Monitoring.

33 Fundamentals of Water Treatment (3)
Lecture 3 hours.
A survey of modern water treatment methods for drinking water, industrial water, and facilities water systems. Includes discussions methods for removal of particles, dissolved chemicals and disinfection. Methods of water monitoring and conservation and interpretation of water quality reports will also be examined.

34 EPA Methods for Environmental Analysis (3)
Lecture 2 hours. Laboratory 3 hours.
This course is designed to teach sample collection and preparation of geological, water and atmospheric samples. Students will analyze environmental samples for specific pollutants utilizing specialized instrumental techniques and will follow proper data handling and analysis protocols. Regulatory requirements, such as the Environmental Protection Agency (EPA) are introduced as the basis for sampling and analysis techniques.

35 Basic Environmental Field Techniques (1)
Lecture .75 hours. Laboratory .5 hours.
Presents basic requirements and methods used in environmental field work including preparation for field work, background project research, sampling protocols and methods, and field data logging. The course will be divided betyween classroom and field instruction. Personal field effects (e.g. boots, clothing, hat, canteen etc.), field notebook and writing implements will be required

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.*

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.

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.
Students are introduced to the fundamentals of GIS, including the 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.
***Prerequisite**: Geography 31 or GIS 31, and Geography/GIS 32 (ArcView) with grades of "C" or better 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) with a grade of "C" or better 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.

40 GIS Internship (1) CSU
Lecture 1 hour.
(Same as Geography 40. Credit not given for both courses.)
***Prerequisite**: Geography 38 or GIS 38 with a grade of "C" or better 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.
Students will study 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.
Students will study 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 bio-physical 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.
Students will learn about 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 of 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 with a grade of "C" or better.*
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.

17 PHYSICAL GEOGRAPHY AND LABORATORY (5) UC:CSU
Lecture 4 hours. Laboratory 2 hours.
Lecture: Students study 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. Lab: This lab course supplements the material of Geography 1. Laboratory exercises are used to increase understanding of geographical concepts/ Tools used for laboratory 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.

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 with a grade of "C" or better 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 with grades of "C" or better 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.

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 with a grade of "C" or better.*
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 geologic 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 with a grade of "C" or better 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 with a grade of "C" or better.*
***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.
A survey of the physical and historical geology of California. Consideration is given to the twelve geomorphic provinces into which the State is divided, and to the characteristic geological record, with particular reference to the latter 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.

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 Easter 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) UC: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.

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.

Industrial Technology

Industrial Technology courses are listed individually under sub-headings, (e.g., **Industrial Technology - Machine Shop/CNC)**
Automotive Service Technology - Listed separately
Electronics - Listed separately
Engineering - Listed separately
Engineering Design and Technology (includes CAD)
Machine Shop/CNC (includes CAM)
Pre-Engineering
Welding

Industrial Technology classes are affiliated with the Society of Manufacturing Engineers and American Welding Society.

30 Workplace Safety (1)
Lecture 1 hour.
An analysis of the safety problems in the workplace. Unsafe situations will be identified, The steps that must be taken to prevent accidents in the workplace are presented and explained. Successful completion of this course will prepare the student to test for the 10 hour OSHA safety certificate for the general worker. The topics covered are those required by OSHA for this certificate.

31 Basic Building Maintenance Skills (3)
Lecture 3 hours.
This class will prepare maintenance personnel to pursue the various tasks requied for building maintenance safely and effectively. It presents the skills that will be used in building maintenance including: use and care of tools used in the different trades, repairs required to maintain a building, characteristics of building materials, methods used in conducting repairs and safety and response to emergencies.

33 Energy Auditing and Management (3)
Lecture 3 hours.
Covers the methods of auditing and managing energy use in buildings leading to California State Auditor Certification

34 Green Building Technology (3)
Lecture 3 hours.
This course introduces Green Building Methods and Operations and Maintenance technologies. It includes a discussion of sustainable sites, water efficiency, energy and atmosphere efficiency and control, Purchasing, waste management, indoor air quality and field trips to certified "Green" buildings.

36 Solar PhotoVoltaic and Wind Power Systems (4)
Lecture 3 hours. Laboratory 3 hours.
An introduction to the basics of solar photovoltaic and wind power systems. Examines how these technolgies generate electricity, what must be considered in locating these systems, differeing component designs, transmission and control of generated electricity, conncection ot the grid, storage of electical energy and their application to motors.

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 (Engineering Design and Technology)

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.

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 vies, 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.

911-941
Cooperative Work Experience Education - Industrial Technology (1-4) CSU
See Cooperative Work Experience Education.

Industrial Technology (Pre-Engineering)

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.

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)
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)
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
Stresses the usage of Japanese language skills that have been acquired through prior coerces 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.

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**

21 Composition for the Dysgraphic (3) - RPT 3
Lecture 3 hours.
Not designed for students wishing to become Learning Disabilities Specialists. This course will focus on the mechanics of clear prose with the intention of the student becoming more adept at articulating concepts on paper. The number of students will be limited to twenty per semester. It is expected that a significant amount of time outside of class will be spent by the student in developing their composition skills

22 Introduction to Learning Disabilities (1) (NDA) RPT 2
Lecture 1 hour.
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.
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

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.

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.

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.

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.

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 (Student Services Building). 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.

CAS Math Laboratory
Open to any regularly enrolled student in Pierce College. Mathematics tutoring is located in The Center for Academic Success.

105 Arithmetic for College Students (3) (NDA)
Lecture 3 hours.

Math 105 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.

Math 110 discusses abstract ideas necessary for understanding algebra and reviews selected topics in arithmetic relevant to algebra. Math 110 introduces fundamental notions of algebra including signed numbers, simple equations, and modeling. Math 110 includes hands-on laboratories and group work instruction in study skills

112 Pre-Algebra (3) (NDA)
Lecture 3 hours.

Math 112 discusses abstract ideas necessary for understanding algebra and reviews selected topics in arithmetic relevant to algebra. Math 112 introduces fundamental notions of algebra including signed numbers, simple equations, and modeling.

113 Elementary Algebra A (3)
Lecture 3 hours.
Prerequisite: *Math 112 with a grade of "C" or better.*

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 with a grade of "C" or better.*

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.*

Math 115 includes operations with algebraic expressions, solution of linear equations and inequalities, systems of linear equations, quadratic equations, graphs of lines and simple parabolas. No credit is 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.*

Math 115 includes operations with algebraic expressions, solution of linear equations and inequalities, systems of linear equations, quadratic equations, graphs of lines and simple parabolas. No credit is given for students who have completed Mathematics 116.

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.*

Math 125 includes linear equations and inequalities, systems of linear equations and Gaussian elimination, quadratic equations, polynomials and rational expressions, exponents and radicals. Math 125 includes functions and their graphs, including linear, quadratic and exponential functions; logarithms, polynomials and algebraic fractions. Math 125 includes modeling and problem solving, sequences, conic sections, and complex numbers.

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.*

Math 215 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. Math 215 is intended 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*

Math 227 discusses averages, variability, graphical techniques, probability, hypothesis testing, sampling, estimation, correlation, prediction, and linear regression. The emphasis of Math 227 is on the collection and analysis of data and how inferences about a population are made from a sample.

228A Statistics Pathway Part I (5)
Lecture 5 hours.
***Prerequisite**:Math 110 or Math 112 with a grade of C or better or Beginning Algebra Math Placement Test.*

Students study averages, variability, graphical techniques, probability, sampling, estimation, and linear regression. Emphasis is on the collection and analysis of data. Algebraic skills and techniques are integrated into the presentation of statistical methods; these include numeracy (calculation with rational numbers, signed numbers, and percents, estimating and rounding, converting units), proportional reasoning, writing and evaluating algebraic expressions, solving equations and inequalities, modeling situations with functions (evaluating and interpreting function values, representing functions graphically and algebraically, recognizing families of functions), with particular attention to linear and exponential functions.

228B Statistics Pathway Part II (5) CSU
***Prerequisite:** Math 228A with a grade of C or higher*

Students study 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. Algebraic skills and techniques are integrated into the presentation of statistical methods; these include numeracy (calculation with rational numbers, signed numbers, and percents, estimating and rounding, converting units), proportional reasoning, writing and evaluating algebraic expressions, solving equations and inequalities, modeling situations with functions (evaluating and interpreting function values, representing functions graphically and algebraically, recognizing families of functions), with particular attention to linear and exponential functions.

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.*

Math 238 presents 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. Math 238 topics of finite mathematics include 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.*

Math 240 centers on a study of the sine, cosine, and tangent functions, including a study of their graphs, inverses of the functions, solution of triangles, models for periodic phenomena, identities, conditional equations, and polar coordinates. Math 240 includes an introduction to the cotangent, secant, and cosecant functions.

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.*

Math 245 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.*

Math 260 develops properties of the elementary functions, including exponential, logarithmic and trigonometric functions. Graphing is stressed. Math 260 includes sequences, series, and elements of analytic geometry such as conic sections.

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.*
Math 261 begins a sequence of three courses in calculus. The topics include 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.*
Math 262 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 Math 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
Math 270 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*
Math 275 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.

4 Introductory Meteorology Laboratory (2) CSU
UC Pending Approval
Lecture 1 hour. Laboratory 1 hour.
***Prerequisite:** Meteorology 3 or Geography 3 with a grade of "C" or better.*
This course supplements the material of Geography 3 or Meteorology 3. Students participate in laboratory exercises to increase their understanding of weather and climatological processes on the Earth, to develop skills using meteorological instruments and observations, to appraise Earth-Sun relationships and energy balances as they impact temperature, to identify the major atmosphere-hydrosphere interactions related to humidity, clouds and precipitation, to identify and analyze the factors that contribute to pressure patterns, winds and storms and to demonstrate an understanding of the factors which control climate development. Tools used for laboratory inquiry may include various weather charts and maps, satellite images, selected weather instruments and computer programs.

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 with a grade of "C" or better.*
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

108 Basic Digital Video Production for New Media (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 Basic Digital Video Production for New Media (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 with a grade of "C" or better.*

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.

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 with a grade of "C" or better.*
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 Digital Video, Animation, Gaming, and New Media (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 Digital Video, Animation, Gaming, and New Media (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.

806 Innovation In Motion Pictures And New Media (3) CSU
Lecture 3 hours.
Students explore and define innovations in motion pictures and television, focusing on convergence of new media, internet storytelling and gaming, and emerging technologies in entertainment.

807 Interactive Media Design (3) CSU RPT-2
Lecture 2 hours. Laboratory 2 hours.
This course introduces students to basic concepts of interactive design for digital media with a journalistic emphasis. Students will design interactive multimedia packages, graphics, animation, mobile applications, digital e-book reader interactives, widgets, and more. An introduction to basic design principles, concepts of engagement and interactivity, and presentation of journalistic content on a variety of platforms will be discussed. An emphasis will be placed on accuracy, as well as clear and dynamic presentation.

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.
This course provides basic materials, aesthetics, and structure of music through a broad historical survey of musical styles and masterpieces from the Middle Ages up to and including the 21st century, with emphasis on perceptive listening.

112 Music Appreciation II (3) UC:CSU
Lecture 3 hours.
Prerequisite*: Music 111 with a grade of "C" or better.*
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.
This course enriches the students' musical experiences through the presentation of live performances in a variety of concerts and recitals throughout Los Angeles. The events offered include concerts by the various departmental musical organizations, student soloists faculty recitals, and guest artists.

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 with a grade of "C" or better.*
Continuation of Music 181.

183 Applied Music III (.5) UC:CSU
Laboratory 1 hour.
***Prerequisite**: Music 182 with a grade of "C" or better.*
Continuation of Music 182.

184 Applied Music IV (.5) UC:CSU
Laboratory 1 hour.
***Prerequisite**: Music 183 with a grade of "C" or better.*
Continuation of Music 183.

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.*
The student studies diatonic harmony including primary and secondary triads, the dominant seventh chord and their inversions. Also includes harmonizing figured and unfigured bass, simple melodies and the writing of original phrases. Students taking this class should also enroll in Music 211.

202 Harmony II (3) UC:CSU
Lecture 3 hours.
***Prerequisite**: Music 201 and 211 with a grade of "C" or better.*
***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 with a grade of "C" or better.*
***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 1 hour. Laboratory 2 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.*
This course is correlated with the study of harmony in Music 201. An advanced beginning course in ear training, the course includes sight singing; rhythmic, melodic and harmonic dictation; basic keyboard harmony, and a review of fundamentals of music theory.

212 Musicianship II (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
***Prerequisite**: Music 211 with a grade of "C" or better.*
This course is correlated with the study of harmony in Music 202. An intermediate course in ear training; sight singing; rhythmic, melodic and harmonic dictation; basic keyboard harmony. Review of fundamentals of music theory.

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.

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 with grades of "C" or better.*
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.

321 Elementary Piano I (2) UC:CSU
Lecture 1 hour. Laboratory 2 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 1 hour. Laboratory 2 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.*

323 Elementary Piano III (2) UC:CSU
Lecture 1 hour. Laboratory 2 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 1 hour. Laboratory 2 hours.
***Prerequisite**: Music 323 with a grade of "C" or better.*
Continuation of Music 323.

341 Intermediate Piano (2) UC:CSU - RPT 3
Lecture 1 hour. Laboratory 2 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 with a grade of "C" or better.*
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 1 hour. Laboratory 2 hours.
In this course, basic techniques of vocal production are introduced. The student is directed toward proper stance and breathing techniques, increased vocal freedom, and improvement of articulation and tone. The course introduces standard solo literature and offers performing experience.

412 Elementary Voice II (2) UC:CSU
Lecture 1 hour. Laboratory 2 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 1 hour. Laboratory 2 hours.
This course offers continued voice building, looking toward the possibility of increasing range, richness and expressiveness. A song repertoire of moderate difficulty, including art songs in English, Italian, and German or French, is memorized and performed in class.

414 Elementary Voice IV (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
Continuation of Music 413.

441 Song Repertoire (2) UC:CSU - RPT 3
Lecture 1 hour; Laboratory 2 hours.
***Prerequisite**: Music 414 with a grade of "C" or better.*
Further experience with and refinement of technique, repertory and performance. Along with songs in English, Italian and German, those in French or Spanish will be introduced. The development of the student's ability to analyze and interpret the song repertoire is stressed.

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.

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.

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 1 hour. Laboratory 2 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 1 hour. Laboratory 2 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 1 hour. Laboratory 2 hours.
Continuation of Music 651.

653 Classical Guitar III (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
Continuation of Music 652.

654 Classical Guitar IV (2) UC:CSU
Lecture 1 hour. Laboratory 2 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.*
This course is designed for students interested in popular and jazz guitar techniques. Topics include Chords, Scales, Blues and Swing patterns. Soloing styles and accompaniment technique will be learned as well as ensemble playing in jazz bands and combos.

662 Commercial Guitar II (2) CSU
Lecture 1 hour; Laboratory 2 hours.
***Prerequisite**: Music 661 with a grade of "C" or better 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 with a grade of "C" or better 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 with a grade of "C" or better 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.

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.

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 with a grade of "C" or better 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 courses 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 Fexibility 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

1 Introduction to College (1) RPT - 1

Lecture 1 hour.

Students learn the necessary skills to succeed in college. Emphasis is placed on college policies and procedures, campus services and resources, study skills and time management. Additional topics include: certificate, associate degree requirements, and transfer admission requirements.

4 Career Planning (1) CSU

Lecture 1 hour.

This course will 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.

Students will learn 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.

Students are introduced 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 internshipoff- 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 1-3units 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 1-3units 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.

Students learn how to understand, evaluate, and distinguish arguments and explanations by applying accepted standards of good reasoning. Students will learn techniques to recognize deductively valid arguments and avoid 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.

Students study western philosophy from the Renaissance to the 20th century. The course explores the rise of modern science, continental rationalism and British empiricism, and Kant.

19 Contemporary Problems in Bioethics (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.

Students are introduced 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.

20 Ethics (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.

Students consider human conduct, study the rules and institutions of moral order, and philosophically examine a range of today's moral issues, such as the just distribution of the social good, abortion, euthanasia, the environment, war, and world hunger.

28 Environmental Ethics (3) UC:CSU
Lecture 3 hours.

Relationship between human beings and the environment;human obligations to the environment. Study of "traditional" normative theories of ethics, morality, and rights, as applied to issues involving the environment and animals. Critical examination of environmental ethical theories. Consideration of the value and moral status of the environment (animals, plants, ecosystems)

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 VLGE 8300 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 VLGE 8300 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.*
Students learn photojournalism methods, news, feature and sports photography. Introduction to documentary photography.

21 News Photography (4) CSU - RPT 3
Lecture 2 hours; Laboratory 6 hours.
Same as Journalism 221. Credit not given for both courses.
***Prerequisites**: Photography 20 with a grade of "C" or better.*
Students gain practical experience in taking photojournalistic pictures including news, sports and feature photos. Students take pictures for the campus newspaper, magazine and website. Students learn editing, Photoshop and design skills. Some students will serve as editors for the campus newspaper. Emphasis is placed on real world experience, photo stories, digital technology and portfolio development.

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.

27A History & Aesthetics Of Photography A (3) UC:CSU
Lecture 3 hours.
Students study the major developments of the photographic medium, and relate these developments to society and to events in the other visual arts examining the meaning of photography as a work of art.

27B History & Aesthetics Of Photography B (3) UC:CSU
Lecture 3 hours.
Provides a chronological description of the major developments of the photographic medium, focusing on documentary. Relates these developments to society and to events in the other visual arts.

35 Travel Photography (3) CSU - RPT 3
Lecture 2 hours. Laboratory 2 hours.
Students will develop a travel project idea from inception to publication for print and online. Emphasis on capturing moments which portray the visual essence of a culture and a sense of place through the practice of photographic documentation of people in their environments.

36 Documentary Photography (3) CSU
Lecture 2 hours. Laboratory 2 hours.
***Prerequisite:** Photography 10 with a C or better.*
***Advisory:** Completion of Photography 20*
Students will research, propose, create, edit, write and present a documentary photography project. Emphasis on storytelling, developing a personal vision and in-depth coverage of social issues.

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.

101 Beginning Digital Photography (3) CSU
UC Pending Approval.
Lecture 2 hours. Laboratory 1 hour.
This is an introductory course for students without prior photographic training. Provides theory and practice of contemporary use of the DSLR (Digital Single Lens Reflex) camera; Includes expanded comprehension of exposure control with various light sources; skills of digital photographic printing are emphasized; an emphasis is also given to creative thinking and idea preparation and execution. Course will cover digital photography including imaging editing software, printing methods and the internet. A DSLR camera with manual control of f-stops and shutter speeds is required.

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 Specialities, 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.

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:

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**
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:

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**
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.

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) **^A UC:CSU
Lecture 3 hours; Laboratory 3 hours.
***Prerequisite:** Mathematics 115 and Mathematics 120 with a grade of "C" or better.*
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.

12 Physics Fundamentals (3) **^A 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.

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.

66 Physics for Life Science Majors I (5) *UC:CSU
Lecture 3 hours; Laboratory 6 hours.
***Prerequisite**: Mathematics 240 with a grade of "C" or better.*
***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.
***Prerequisite**s: Mathematics 261 and Physics 66 with a grade of "C" or better.*
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 with a grade of "C" or better.*
***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.
***Prerequisite**s: Mathematics 262 and Physics 101 with a grade of "C" or better.*
***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.
***Prerequisite**s: Mathematics 263 and Physics 102 with a grade of "C" or better.*
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.*
*[Δ]**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.

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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

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.

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.

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;

806 Landscape Planning and Design (4) ¬UC:CSU
Lecture 2 hours; Laboratory 4 hours.
*¬**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) UC:CSU - RPT 3
Lecture 2 hours; Laboratory 4 hours.
***Prerequisite**: Plant Science 806 with a grade of "C" or better.*
***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 with a grade of "C" or better.*
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.).

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.

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.

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.

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.

827 Sustainable Gardening for Landscapes (3) CSU RPT - 1
Lecture 2 hours. Laboratory 2 hours.
Students will study ways in which urban landscapes in Southern California can become more sustainable. Topics include water conservation, storm water runoff, landscapes for fire prone areas, material reuse, recycling and repurchase, and other principles of sustainablility. Students will learn the application of new technology to increase sustainability.

828 Sustainable Water Management & Conservation (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Students will study principles and practices of water management for urban sustainable landscapes including water audit methods and certification, irrigation scheduling, water budgets, water use monitoring and laws and regulations pertaining to sustainable urban landscape irrigation and runoff

829 Sustainable Plant Selection (3) CSU RPT - 1
Lecture 2 hours. Laboratory 2 hours.
A course in drought tolerant xeriscape plant identification, collection and preservation. The list of plants to be studied include trees, shrubs, vines, groundcovers, succulents, grasses, perennials and annuals.The student will be able to identify plants by botanical and common name and demonstrate their characteristics (height, spread, soil adaptation, flower, landscape use and ecology). Information will be used by the student to produce an individual reference guide for future use. This class is especially useful for students entering the fields of nursery operations landscape design, landscape contractiong and landscape maintenance.

830 Sustainable Pest Control (3) CSU
Lecture 2 hours. Laboratory 2 hours.
An examination of the various methods of pest control with emphasis on common pest problems for garden and house plants and vertebrate pests. Includes a survey of common pests, plants they infect and the symptoms of infestation. Diagnostic procedures are presented and the non-chemical and integrated pest management methods are presented. Student will do projects that require development of a complete sustainable integrated pest management program.

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.

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) ¬UC:CSU
Lecture 3 hours.
¬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.

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.
Survey of the Government of the United States with respect to historical background, constitutional framework and development, civil liberties and civil rights, the political process, including elections, political parties and interest groups, and the principle institutions and processes for the development and implementation of American Public policies. the study of California state and local government is a special component of this class.

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.
Students study the relationships among modern nation-states, emphasizing the nation-state system, international diplomacy, international law, and international organizations. The course examines the causes, consequences, and methods of resolving international conflicts as well as the impact of internal economic, political, and military factors on foreign policy.

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 women's perspective political theories and public policies which shape the various possibilities and strategies for women's political participation in the United States and elsewhere. Examines the political institutions, processes, and problems of the national, state, and local government from a women's perspective.

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.

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) CSU
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.

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.

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 1or 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 studentâ?™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 with a grade of "C" or better.*

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.

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.

Students are introduced to social psychology, focusing on the contributions of sociology to this field. the course examines the relationship between the individual and the social environment. Issues analyzed include socialization, self, identity, symbolic communication, altruism, aggression, deviant behavior, group processes.

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.

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 cylce 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.

31 Sociology of Gender (3) UC:CSU
Lecture 3 hours.

This course examines the social significance of gender in contemporary U.S. society. It analyzes the social construction of gender ideology and how women and men's experiences are affected by social institutions such as work, education, the family, and the criminal justice system. Men and women's differential experiences are analyzed within the context of race, class, and sexual orientation. The course demonstrates how the experiences of men and women are created through social institutions and can, therefore, be transformed through social and institutional change.

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.

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.

This course is designed to introduce students to the analysis of 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 is analyzed.

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 pass/no pass 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 21th 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 with a grade of "C" or better.*
***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.

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.

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.

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.

151 Small Group Communication (3) UC:CSU
Lecture 3 hours.
Provides an analysis of the purposes, principles, and types of group processes. Development of individual skills in leadership, problem solving, is achieved by responsible group participation.

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.

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

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: playwriting, 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 with a grade of "C" or better.*
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 with a grade of "C" or better (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 with a grade of "C" or better (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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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 with a grade of "C" or better.*
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.

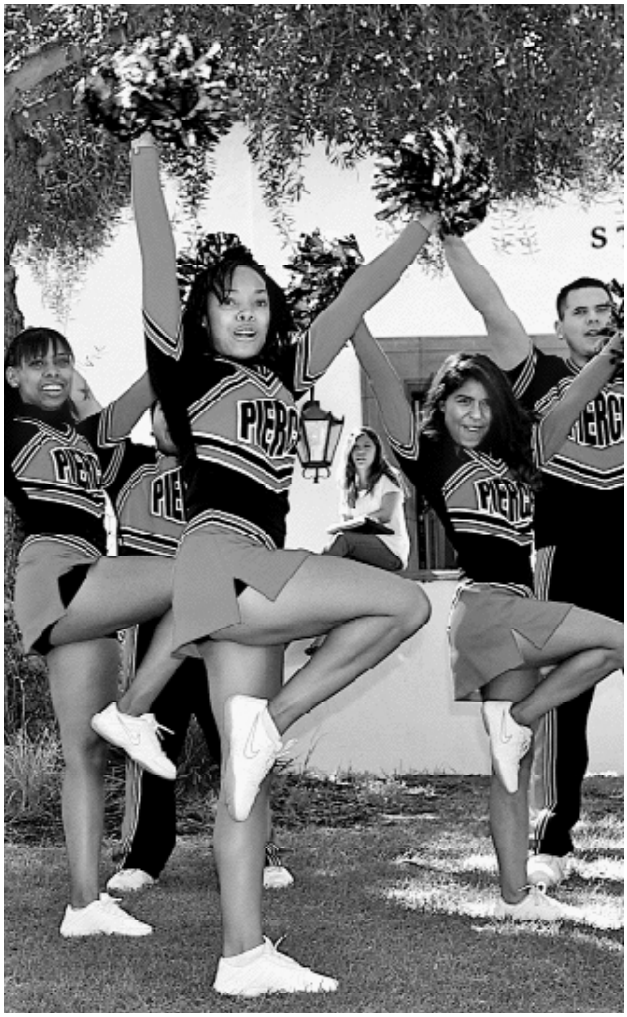
UC Credit Limits: Theater 279 and Music 776 combined; maximum credit, one course. Theater 280 and Music 777 combined; maximum credit,
one course.

Welding

See course listings under **Industrial Technology - Welding**

Faculty
2011-2012

Pierce College



Faculty

Abbamontian, Ramela (2007)
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Braxton, Phyllis D. (2001)
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Brown, Pamela J. (2002)
Associate Professor of Economics
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Cohen, Jeffrey L. (1977)
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Duxler, William M. (1973)
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B.A., M.A., Ph.D., University of California, Riverside

Eisenlauer, Joseph (1996)
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B.A., Stanford University
M.A., Cal State, Hayward
Ph.D., University of California, Los Angeles

Farris, Patricia A. (1992)
Professor of Biology
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Fernandez, Jose Luis (2008)
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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
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Fink, Norma (1982)
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Director, Special Services

Curby, J. C. (Suzette); 1971-2001;
Professor of Physical Education

Daruty, Kathy; 1979-2010;
Professor of Business Administration

de Champlon, John S.; 1965-1984;
Professor of Foreign Languages

DeLaney, Gertrude Anne; 1980-1997;
Professor of Computer Science and Information Technology

De Leon, Ralph; 1961-1986;
Professor of Physical Education

Delgado, Carole Ann; 1977-2008;
Associate Dean, Academic Affairs

Delling, Leonard V.; 1974-1994;
Professor of Electronics

De Martin, Albert; 1963-1997;
Professor of Electronics

Deonik, Walter A.; 1957-1988;
Associate Professor of Engineering

de Rubertis, William A.; 1970-2010;
Professor of Political Science

DesMarteau, Philip D.; 1976-92;
Professor of Animal Science

Dixon, James; 1949-1982;
Professor of Horticulture;
Coordinator of Administrative Services

Doctor, Charlotte B.; 1989-2007;
Professor of English;
Dean, Academic Affairs

Drooyan, Irving; 1956-1983;
Professor of Mathematics

Drummond, Patricia A.; 1991-1995;
Professor of Counseling

Ehrhardt, Luise; 1989-2009;
Associate Professor of Library Science

Eisenbart, Gordon J.; 1975-2005;
Professor of History

Elman, Sidney H.; 1961-1995;
Professor of Political Science

Enger, Robert R.; 1988-1996;
Assistant Professor of Business

Enkema, Patricia; 1967-1987;
Professor of Biology

Epstein, Allen; 1999-2009;
Professor of Mathematics

Eskelin, Gerald Ray; 1973-2001;
Assistant Professor of Music

Farhood, John N.; 1986-1991;
Dean of Academic Affairs

Farrar, Ronald D.; 1968-1989;
Professor of Foreign Languages;
Department Chairperson, Foreign Languages

Feldman, Bernard; 1967-1983;
Professor of Mathematics

Fiorello, Geraldine Y.; 1961-1990;
Professor of Physical Education

Fish, Barbara; 1977-2006
Professor of Counseling

Fisk, Richard; 1985-1995;
Professor of Music

FitzGerald, Richard E.; 1970-1995;
Professor of English

Flores-Esteves, Manuel; 1989-2008
Professor of Counseling

Foster, Harold; 1963-1984;
Professor of Psychology

Fox, Stuart; 1986-2006;
Professor of Life Science

Friedrich, Linda B.; 1987-1995;
Professor of Nursing

Fujimoto, Jack; 1996-1996;
President of the College

Furman, Mildred; 1971-1986;
Professor of Health Education

Gani, Scarlett; 1985-2003;
Professor of Modern Languages

Garber, Robert; 2006-2009;
President of the College

Gechtman, Murray; 1956-1989;
Lecturer in Mathematics;
Department Chairperson, Mathematics

Gelber, Martin B.; 1965-2003;
Professor of Architecture

Gerstl, Shelly; 1981-2008;
Dean, Admissions and Records

Gibson-Lott, Anne; 1987-2010
Professor of Library Science

Girgis, Amal Y.; 1976-2007;
Professor of Chemistry

Goerss, Harold; 1971-2006;
Professor of Economics

Goldbloom, Erwin M.; 1965-1995;
Professor of Physical Education

Goldblum, Sheldon M.; 1970-1995;
Professor of History

Gonzalez, Margarita L.; 1984-2005;
Professor of Counseling

Gottlieb, Seymour; 1970-2003;
Professor of Mathematics

Greer, Fontaine; 1989-2002;
Professor of English

Guffey, Mary Ellen; 1975-1994;
Professor of Office Administration

Habib, Nicholas; 1976-2008;
Department Chairperson, Philosophy/Sociology
Professor of Philosophy

Haile, Lynne H.; 1968-1998;
Professor of Physical Education

Hall, Fay K.; 1986-1989;
Professor of Nursing

Hankammer, Larry; 1968-1995;
Professor of Physical Education

Hardesty, James N.; 1965-1995;
Professor of Mathematics

Harwick, Betty C. B.; 1966-1995;
Professor of Sociology

Haskell, Barry S.; 1958-1999;
Professor of Geology

Heckel, Russel H.; 1969-1995;
Professor of History

Hoffmann, Edmund C.; 1970-1999;
Professor of Computer Science and Information Technology

Hopper, Barbara K.; 1968-1982;
Professor of Biology

Horne, Janet B.; 1979-2005;
Professor of Computer Applications and Office Technologies

Horst, Donald P.; 1970-1988;
Professor of Theater

Horstein, Charlotte G.; 1986-1997;
Professor of Nursing

Horvath, Rozsa J.; 1981-2010;
Professor of Theater Arts

Houghten, Sadako H.; 1966-1986;
Professor of Biology

Houston, Ann H.; 1969-1999;
Professor of Biology
Department Chairperson, Life Science

Huber, William A.; 1965-1989;
Professor of Chemistry;
Department Co-Chairperson, Chemistry

Hubbell, John L.; 1965-1984;
Professor of Foreign Languages

Hume, Carlyle M.; 1975-2000;
Department Chairperson, Music
Professor of Music

Hutner, Lavina; 1998-2006;
Associate Professor of Counseling

Hylton, Wallace; 1985-1989;
Professor of Art

Ikkanda, J. Martin; 1971-2007;
Professor of Biology

James, Anna Gale; 1966-1999;
Articulation Officer
Professor of Psychology

Johnson, J. Thomas; 1972-2001;
Professor of Philosophy

Johnson, Ray; 1964-1973;
Dean of Instruction

Jones, Edwards; 1986-2008;
Professor of Political Science

Jones, Harry; 1963-1994;
Professor of Electronics

Kamuk, John; 1985-1989;
Lecturer of Industrial Education

Khasigian, Amos; 1965-1983;
Professor of Economics

Kinchloe, Ralph; 1970-2001;
Professor of Biology

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

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

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

Norton, William; 1989-2010
Professor of Physical Education
Department Chairperson,
Physical Education

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

O'Neil, Robert; 1989-2011;
Professor of Journalism

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

Putnam, Gene; 1989-2011;
Professor of Theater Arts
Department Chairperson,
Theater Arts

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

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

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

South, Richard; 1976-2010
Professor of Horticulture

Stanley, Kenneth; 1966-2002;
Professor of Physical Education

Stein, Philip L.; 1965-2009
Professor of Anthropology
Department Chairperson,
Anthropological and Georgraphical
Sciences

Sterk, Jack.; 2007-2011;
Professor of Speech

Sutherland, Miriam M.; 1976-1989;
Professor of Nursing

Thomas, Louise B.; 1975-2001;
Professor of Nursing

Thompsen, 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

Toyoshima, Joe; 1964-1989;
Lecturer in History

Trinchero, Bart L.; 1968-2000;
Professor of Industrial Technology

Turney, Kay E.; 1965-1995;
Professor of Physical Education
Department Chairperson,
Physical Education/Women

Van Auker, 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

Williams, Shiela; 1990-2010
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

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.

Advisory - 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.

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 reentring 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 for 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.

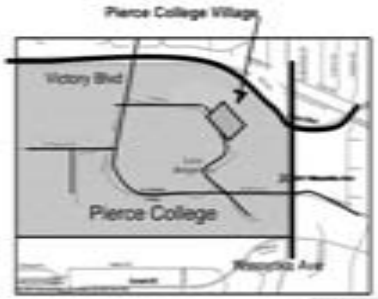
Units Completed - Total number of units in the courses for which a student received a grade of A, B, C, D, or CR.

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.

Index

Pierce College Village Map



Room activities are subject to change. Please use the most recent updated map.

This map is dated **November 2010**

Map is good through **June 2011**

EWDD = Economic and Workforce Development Department
JPC = Job Placement Center
EDD = Employment Development Department
CARE = Cooperative Agencies Resources Education

FACULTY & STAFF PARKING

8343 8344 8345 8346 8342 8341 8340 8330 8320 8321 8400 8407 8408 8409 8401 8406 8410 8402 8405 8411

8109 8104 8110 8103 8111 8102 8112 8101 8113 8100

8204 8209 8203 8210 8202 8211 8201 8212 8213 Academic Affairs 8200

8310 8300 8000 Administrative Services

Village Road

Writing Center

North GYM

POOL

South GYM

SHERIFF'S STATION

PATH OF TRAVEL | PATH OF TRAVEL | Ave of the Champions | PATH OF TRAVEL | PATH OF TRAVEL

Village Room Numbers and Activity

Room	Activity
8000	Administrative Services
8000	Research and Planning
8100	Faculty Offices
8103-8104, 8109	Electronics Classrooms
8110	Electronics Faculty
8101-8102	Classrooms
8111-8112	Classrooms
8113	Faculty Offices
South Gym	Writing Center
Restrooms	

10-21-10

Room	Activity
8200	JPC, Co-Op, Housing, EDD
8201-8202	Classrooms
8203	Faculty Offices
8204-8209	Classrooms
8210	Classroom
8211	Media Arts - Roundup
8212	Media Arts Dept / Internet Radio
8213-8215	Academic Affairs

Room allocations as printed on this map are subject to change.

Room	Activity
8300	Digital Photo Lab
8310	Encore, and EWDD
8320-8321	Environmental Science / Geology
8330	Child Development Classroom, Office
8340	Bridge to Success, PACE, Honors, Foster
8341	Foundation, Market / PR, Acad -Outreach
8342	Classroom (History)
8343	Classroom (Psychology)
8344	Classroom (Geography)
8345	Classroom (Addiction Studies)
8346	Faculty / Staff Offices

Room	Activity
8400A	Classroom (History)
8400B	SI Tutoring Lab
8401	Center for Academic Success Tutor
8402	Center for Academic Success Tutor
8405	Classroom (History)
8406	Center for Academic Success Lab
8407	Center for Academic Success Lab
8408A	Classroom (History)
8408B	Classroom
8409A	Classroom (Political Science)
8409B	Classroom
8410A	Classroom (Political Science)
8410B	Classroom
8411	Classroom (Admin Justice)

PIERCE COLLEGE CAMPUS

6201 Winnetka Avenue, Woodland Hills (818) 347-0551