PIERCE COLLEGE 2012-2014

General Catalog

Visit us on the web

www.piercecollege.edu

Calendar

2012-2014

Fall 2012

REGISTRATION DATES

On-line applications accepted for
Fall 2012 semester..... October 1, 2011- August 23, 2012
In person applications .....August 27
Continuing students online registration ..... May 10
New student online registration ..... June 4

GENERAL CALENDAR DATES

Day and Evening Classes Begin .....August 27
Saturday Classes Begin ..... September 1
Last Day of Instruction .....December 9
Final Examinations ..... December 10 - 16

HOLIDAYS - NO CLASSES

Labor Day, college closed..... September 2
Veteran's Day, college closed ..... November 12
Thanksgiving, college closed .....November 22 - 23
Winter Break, college closed ..... December 24 - January 2

Spring 2013

REGISTRATION DATES

On-line applications accepted for
Spring 2013 semester ....October 1 2012 – January 3, 2013
In person applications ..... February 4
Continuing students online registration ..... November 17
New student online registration .....December 22

GENERAL CALENDAR DATES

Day and Evening Classes Begin ..... February 4
Saturday Classes Begin ..... February 9
Last Day of Instruction .....May 26
Final Examinations ..... May 28- June 3

HOLIDAYS - NO CLASSES

Martin Luther King Jr. Day, college closed.....January 21
Presidents Birthdays, college closed..... February 15 - 18
Spring Break ..... March 29 - April 5
Cesar Chavez Day, college closed.....April 1
Memorial Day, college closed.....May 27

Fall 2013

REGISTRATION DATES

On-line applications accepted for
Fall 2013 semester.....October 1, 2012 - August 22, 2013
In person applications .....August 29
Continuing students online registration ..... May 13
New student online registration ..... June 3

GENERAL CALENDAR DATES

Day and Evening Classes Begin .....August 29
Saturday Classes Begin .....August 31
Last Day of Instruction .....December 15
Final Examinations ..... December 16 - 22

HOLIDAYS - NO CLASSES

Labor Day, college closed..... September 3
Veteran's Day, college closed ..... November 11
Thanksgiving, college closed .....November 28 - 29
Winter Break, college closed ..... December 24 - January 2

Spring 2014

REGISTRATION DATES

On-line applications accepted for
Spring 2013 semester . October 1, 2013 - February 2, 2014
In person applications ..... February 10
Continuing students online registration ..... November 22
New student online registration .....December 12

GENERAL CALENDAR DATES

Day and Evening Classes Begin ..... February 10
Saturday Classes Begin ..... February 21
Last Day of Instruction .....June 9
Final Examinations ..... June 10- June 17

HOLIDAYS - NO CLASSES

Martin Luther King Jr. Day, college closed.....January 20
Presidents Birthdays, college closed..... February 14 - 17
Spring Break ..... April 7 - April 13
Cesar Chavez Day, college closed.....March 31
Memorial Day, college closed.....May 26

Pierce College

One of Nine Los Angeles Community Colleges

General Catalog 2012-2014

Volume 64

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:
Michaela Borlaza, 21, calls Pierce her "gateway to a University of California" now that she has transferred to UC Irvine as a Psychology and Social Behaviors major. She was the founder and first president of Sampuso, Pierce's Filipino/American Club.

Photograph by
Yvonne K. Kleiman

Publication Coordinator
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Los Angeles Community College District

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Los Angeles, California 90017
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A Message From The President

Welcome to Pierce College and our 2012-2014 issue of the General Catalog.

As you embark on your studies, I hope you are reaping the benefits of the dramatic new improvements to the campus, and taking advantage of the richness Pierce College affords you.

We strive to provide our students with the tools they need to succeed. This Catalog will give you a more in-depth description of the courses presented in our Schedule of Classes. It represents an agreement between the college and you. It spells out the college's programs, policies, services and resources to help you as you strive to achieve your educational goals.

We are forward-thinking when it comes to our students' futures. When resources are limited, it's important to stay focused and keep your goals foremost in mind. To assist you with this task, in 2010 SB 1440 was passed. The goal of SB 1440 is to streamline the transfer process for California community college students planning to attend a California State University (CSU) system campus. Thus far, Pierce College has submitted for approval to the State Chancellor's Office two degree pathways. The first of these pathways is based on a statewide model curriculum program in Mathematics. Our second SSB 1440 degree is in Sociology which has been approved by our Region 7 CSU campuses, California State University Northridge, California State University Los Angeles, and California State University Dominguez Hills. In addition to these two degree pathways, Pierce College faculty in Physics, Child Development, Business, and History are reviewing the options in each of their disciplines for adopting a transfer pathway degree.

As we commit to improving the transfer process, we hope you will benefit and that we are able to assist you along the path to your educational goals.

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 (LACCD) 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 Gene Little, LACCD Director of Diversity Programs, at (213) 891-2317. Additional information may be obtained by emailing diversityprograms@laccd.edu.

Americans with Disabilities Act (ADA) And California State Law

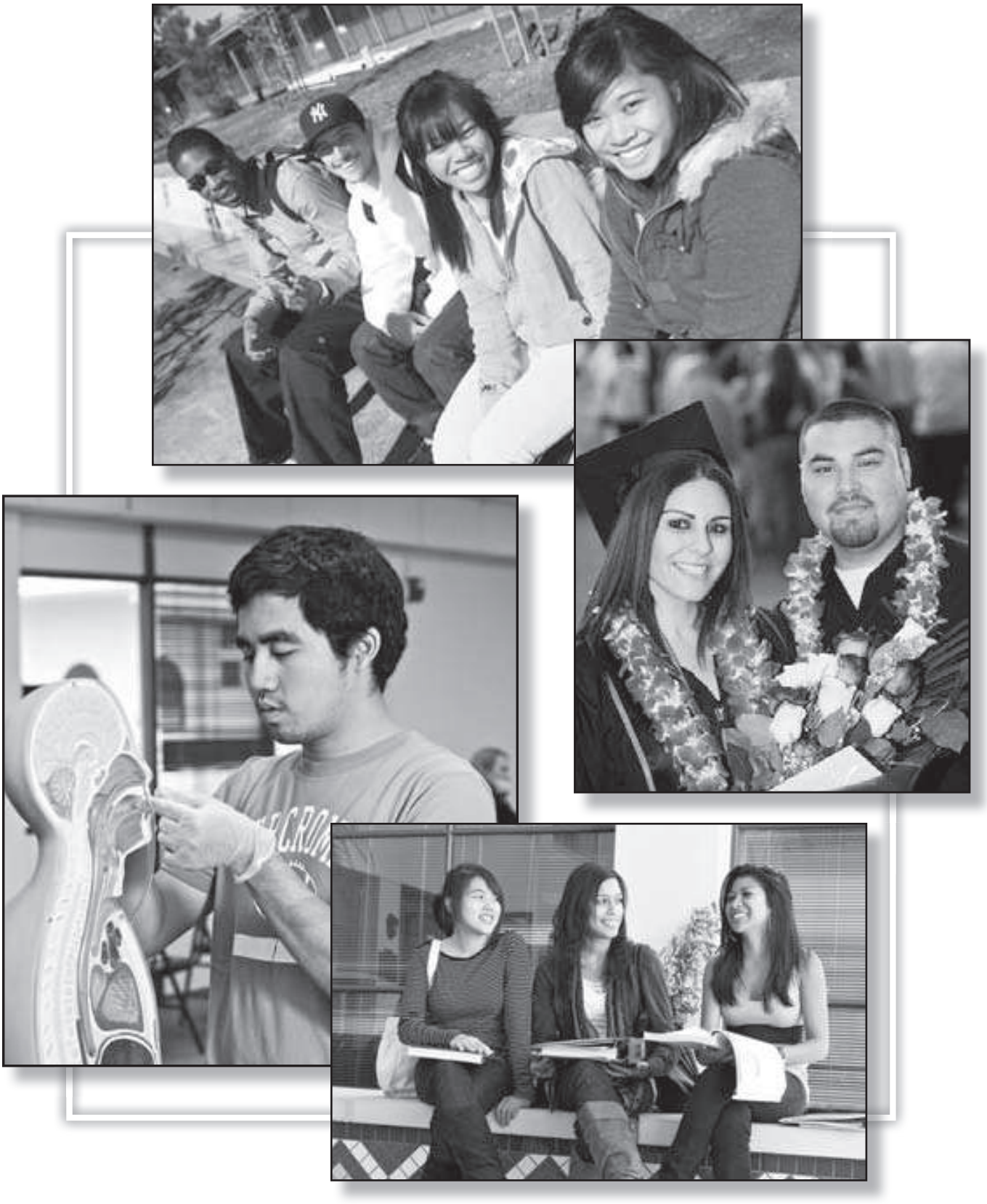
In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 , the Fair Employment & Housing Act (FEHA), Government Code Section 11135, and other applicable codes, the Los Angeles Community College District and Pierce College do not discriminate against individuals on 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 of policies or procedures should communicate with the responsible department or event contact as soon as possible, but no later than three 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 Diversity Programs at LACCD 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 Gene Little, LACCD Director of Diversity Programs at (213) 891-2317 or email diversityprograms@laccd.edu.



Welcome to Pierce College

College Information

History of the College

Pierce College has been a landmark in the Western San Fernando Valley for nearly 70 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 programs 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.

In addition to 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, Student Services Building, College Services Building, and Performing Arts Building.

Regular Program

For the academic year 2012-2013 the fall semester will run from August 27 to December 16, 2012. The spring semester will follow from February 4 to June 3, 2013.

For the academic year 2013-2014 the fall semester will run from August 29 to December 18, 2013. The spring semester will follow from February 6 to June 4, 2014.

The regular program consists of two semesters, 16 weeks in length. Classes are generally 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.

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

Mission Statement and Values

Pierce College is a student-centered learning institution that offers opportunities for access and success in a diverse college community. The college dedicates its resources to assist students in identifying and achieving 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 proficiency, and develop basic skills. We serve our community by providing opportunities for lifelong learning, economic and workforce development, and a variety of enrichment activities.

Pierce College values:

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

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 Directions

Pierce College is guided by its Educational Master Plan, which was developed in 2011. As the overarching planning document of the college, the Educational Master Plan was developed by a thorough review of college program reviews and annual plans, as well as the internal and external influences on the college. Ultimately, the educational master plan has provided six strategic priorities for the college. These include:

- Fostering retention and success among our Latino students
- Recruiting and meeting the needs of traditional-age (18 – 24 years) students, including transfer
- Supporting emerging academic programs that meet industry needs
- Addressing the basic skills needs of all students
- Prioritizing student support services to help students identify and meet their academic goals
- Maximizing the effective use of technology by students and faculty
- Generating revenue to support the goals of the college
- Using data and dialogue to make decisions

General Education Philosophy

Pierce College recognizes that education encompasses more than the completion of a program of study. Education is a life-long process that is both interactive and personal. Our General Education Program is designed to encourage students to develop foundational skills and to garner knowledge so they may become lifelong learners and effective participants in our society.

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 LACCD Director of Diversity Programs, Gene Little,at (213) 891-2317.

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, cancer related 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 in the workplace or in the educational setting.

Retaliation

Retaliation means adverse personal, employment or academic decisions made against anyone who makes a complaint, refers a matter for investigation or complaint, participates in an investigation, represents or serves as an advocate for a complainant or alleged offender.

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, or complainant.

General Provisions

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 Office of Diversity Programs. 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 Office of Diversity Programs.

Investigation

A Compliance Officer shall promptly investigate all potential violations of this policy of which he or she becomes aware. A Complaince Officer 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 alleged offender has the right to be represented.

Informal Procedure

A Compliance Officer shall undertake efforts to informally resolve and investigate the charges. This process is limited to 30 days. If a resolution is reached, a Compliance Officer shall draft a Settlement Agreement to be signed by the complainant and the alleged offender. A Compliance Officer 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. Employment based Complaints shall be filed within 180 days. Non employment based complaints 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.

Compliance Officer's Report

Within 60 days after becoming aware of a potential violation of this policy, a Compliance Officer 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 complainant shall have the opportunity to make an oral statement, within 15 days from the receipt of the Compliance Officer's report.

Within 90 days from the start of the investigation a Written Decision shall be mailed to the complainant 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 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 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. Complaints may also be filed with the State Chancellor's Office.

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.

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.

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 Concurrent Enrollment 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
- website—www.piercecollege.edu
  click on "Students" scroll down and click on "International Students"

Application Dates:

Outside the USA

Fall Semester Apply:	January through May
Spring Semester Apply:	May through October

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.

Within the USA

Fall Semester Apply:	January through July before the start of term
Spring Semester Apply:	May through December before the start of term

See Pierce College Website for more details.

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, LSI Level 6, MLI High Intermediate Track 2, ELS :eve; 109.
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 on the 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) & (AB669)

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 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 Counseling Office. (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.

Matriculation Service Learning Outcome

The following Service Area Outcome has been developed to inform students about the goals of the program:

- The Matriculation Program seeks to assess students' satisfaction, knowledge and awareness of Matriculation services such as the assessment process, online orientation and advising, counseling, and other matriculation services.

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 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 Counseling Office.

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.

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 Concurrent Enrollment for Students in Grades K-12 form to the Admissions Office.

2. Financial Aid

Apply for financial aid online at www.fafsa.gov every year. The Free Application for Federal Student Aid (FAFSA) is available on January 1st of each year. We recommend that the FAFSA be completed and submitted before March 2nd each year to be considered in our priority application deadline. If students apply after March 2nd, we still encourage students to apply, however funding for other financial aid programs are limited.

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 online 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 online.

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 semester.

1. Registration Materials

Continuing students will receive an email with their priority online registration appointments for registration during the month before finals. Your priority registration appointment is also available on the Pierce website student information system.

2. Financial Aid

Apply for financial aid online at www.fafsa.gov every year. The Free Application for Federal Student Aid (FAFSA) is available on January 1st of each year. We recommend that the FAFSA be completed and submitted before March 2nd each year to be considered in our priority application deadline. If students apply after March 2nd, we still encourage students to apply, however funding for other financial aid programs are limited.

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.

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 website.

It is the student's responsibility to officially drop from class by the Pierce website. Students must drop by the end of the second week of semester-length classes to avoid fees. Any drops or exclusions that occur after the no penalty drop date (under last day to drop without a "W") and up to 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. Withdrawals 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, Advisory, 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.)

ADVISORY: 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

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

1. The prerequisite or corequisite has not been established in accordance with the District's process for establishing prerequisites and corequisites;
2. The prerequisite or corequisite is in violation of this section;
3. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
4. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;

5. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available.

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 19 units during a regular semester. The normal class load for students in the Fall or Spring semester is from 12 to 19 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 20 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 Summer, 2012 the fee prescribed by these sections is forty-six dollars ($46) per unit per semester with no maximum per semester. If you take ten units, the cost will be $460. If you take fifteen units, the cost will be $690 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

To learn about enrollment fee assistance, go to the Financial Aid section of the catalog or visit the website at www.piercecollege.edu/offices/financial_aid.

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 cancelled or rescheduled by the administration. All fee refunds are processed in person.

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 2012-2013 tuition fee for non-resident students is $190 per semester unit for students who are non-residents from another state; $212 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.

Fee And Refund Schedule - Fall And Spring Semesters (Effective Fall Semester, 2012)

TYPE OF FEE	AMOUNT	REFUND DEADLINE
Enrollment Fee Subject to change by the California Legislature	$46 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 $46 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:	$212 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 $747 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 (different for each class)
- 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.

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 Sheriff's 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.

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 Sessions

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.

Some classes may require additional fees for printing documents in the Open Access Labs. These labs may include The Learning Center, English Writing Lab, Computer Science Lab, Multimedia, Journalism and Photography Labs. Please pay all fees at either the Business Office or Copy Tech.

Scholastic Policies

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 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 no penalty drop date. The date is listed in the schools term calendar, under last day to drop without a "W".

Withdrawal between the no penalty drop date (last day to drop without a "W") and 75% of the time the class is scheduled to meet, will result in a grade of "W". A student who remains in class beyond 75% of the time the class is scheduled shall be given a grade other than a "W", except in cases of extenuating circumstances.

After 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 from the Admissions website under "forms". Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. Withdrawal after 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 the no penalty drop date (last day to drop without a "W"). No notation ("W" or other) shall be made on the records of a student who withdraws before the no penalty drop date. 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 online 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.

Repetitions and Withdrawals

New rules about the number of times you can attempt a course

Effective Summer 2012, course withdrawal ("W") and/or a substandard grade ("D," "F," or "NP") count as an attempt at a course. Only three attempts at any one course will be allowed, with some exceptions. Listed below are the new rules that all students need to know about.

- Students who drop or are excluded after the last day to drop without a grade of "W" will have a "W" appear on their transcript. The "W" will count as an attempt for that course.
- A course in a student's transcript which currently shows a recorded "W" counts as an attempt for that course.
- Students will not be allowed to register for any course within the LACCD if there are three recorded attempts for that course in any combination of W, D, F, or NP grades.
- Add permits for a course within the LACCD will not be processed if there are three recorded attempts for that course in any combination of W, D, F, or NP grades.
- For courses specifically designated as "repeatable," students may repeat up to three times. (See Title 5 California Code of Regulations sections 55040, 55041, 58161).
- When the student's number of enrollments in a course exceeds the allowable amount, the student may petition for an additional enrollment in cases of extenuating circumstances.

What students should do:

- Be sure you are academically ready for classes you enroll in.
- If you must drop a course, drop before the specified deadline for dropping a class without a grade of "W."
- See a counselor before making decisions that could affect your educational plan.

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 are 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 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 online, 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.

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.

Credit by Examination (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, 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
Physics	12
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 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:

1.1. Thirty (30) semester units of credit will be given to graduates of Diploma Schools of Nursing under the following conditions:

1.1.1. The student presents a valid, current California certificate as a licensed registered nurse to the designated administrative officer;

1.1.2. The student has completed at least 12 units of credit at the College to which application is made.

1.2. 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.

1.3. 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.

1.4. Additional courses in Nursing may be taken for credit only upon approval of the Nursing Department.

1.5. 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, 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:

3.1. Credit will be given for training from institutions which meet the standards of training of the California Peace Officers Standards and Training Commission.

3.2. A single block of credit will be given and identified as academy credit.

3.3. 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.

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 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

Administration of Justice -1, 2, 3, 4, 5, 8, 67, 75, 174, 319, 383

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, 301, 501, 519, 604, 700, 708

Astronomy - 1, 2, 3

Automotive Service Technology - 1, 20, 25

Biology - 3, 10, 121, 122

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 - 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

Geology - 12

GIS - all courses

History - all courses

Humanities - 6

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 - 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

Business - 10

CAOT - 64, 133

French - 8, 185, 285, 385

Geology - 22A, B, C, D, E and F

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: 2012-2014

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

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
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.

College-Level Examination Program (CLEP)

CLEP exams test mastery of college-level material acquired in a variety of ways — through general academic instructions, significant independent study or extracurricular work. CLEP exam-takers include adults just entering or returning to school, military service members and traditional college students. For more information go to: http://clep.collegeboard.org/

International Baccalaureate (IB)

The International Baccalaureate®(IB) assesses student work as a direct evidence of achievement against the stated goals of the IB Diploma Program courses. Students must have completed a high school IB Diploma Program to be eligible to take the IB exams. For more information go to http://www.ibo.org/diploma/

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

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

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

LACCD Credit for College-Level Examination Program (CLEP) Exams

CLEP Exam	ACE Recommended Score	Total Semester Units Awarded Toward Associate Degree [1]	Semester Units Applied Toward Associate Degree GE Requirements	Associate Degree GE Section Fulfilled Board Rule: Chapter VI: 6201.14	Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12	Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14
Business Exams						
Financial Accounting	50	3	NA			
Information Systems and Computer Applications	50	3	3	Section D2: Communication and Analytical Thinking		
Introductory Business Law	50	3	NA			
Principles of Management	50	3	NA			
Principles of Marketing	50	3	NA			
Composition and Literature						
American Literature	50	6	3	Section C: Humanities		
Analyzing and Interpreting Literature	50	6	3	Section C: Humanities		
College Composition Replaces English Composition w/essay effective 07/01/10	50	6	3	Section D: Language & Rationality: Area 1. English Composition		
College Composition Modular Replaces English Composition and Freshman College Composition exams effective 07/01/10	50	6	3	Section D: Language & Rationality: Area 1. English Composition		
English Literature	50	6	3	Section C: Humanities		
Humanities	50	6	3	Section C: Humanities		
Foreign Languages						
French Language, Level 1	50	6	3	Section C: Humanities		
French Language, Level 2	59	12	3	Section C: Humanities		
German Language, Level 1	50	6	3	Section C: Humanities		
German Language, Level 2	60[2]	12	3	Section C: Humanities		
Spanish Language, Level 1	50	6	3	Section C: Humanities		
Spanish Language, Level 2	63	12	3	Section C: Humanities		
Level 1 – equivalent to the first two semesters (or 6 semester hours) of college-level foreign language course work						
Level 2 – equivalent to the first four semesters (or 12 semester hours) of college-level foreign language course work						
History and Social Sciences						
American Government	50	3	3	Section B1: American Institutions		American Institutions Satisfied
History of the United States I: Early Colonization to 1877	50	3	3	Section B1: American Institutions		American Institutions Satisfied
History of the United States II: 1865 to present	50	3	3	Section B1: American Institutions		American Institutions Satisfied
Human Growth and Development	50	3	3	Section B2: Social and		

LACCD Credit for College-Level Examination Program (CLEP) Exams

CLEP Exam	ACE Recommended Score	Total Semester Units Awarded Toward Associate Degree [1]	Semester Units Applied Toward Associate Degree GE Requirements	Associate Degree GE Section Fulfilled Board Rule: Chapter VI: 6201.14	Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12	Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14
				Behavioral Sciences		
Introduction to Educational Psychology	50	3	3	Section B2: Social and Behavioral Sciences		
Introductory Psychology	50	3	3	Section B2: Social and Behavioral Sciences		
Introductory Sociology	50	3	3	Section B2: Social and Behavioral Sciences		
Principles of Macroeconomics	50	3	3	Section B2: Social and Behavioral Sciences		
Principles of Microeconomics	50	3	3	Section B2: Social and Behavioral Sciences		
Social Sciences and History	50	3	3	Section B2: Social and Behavioral Sciences		
Western Civilization I: Ancient Near East to 1648	50	3	3	Section B2: Social and Behavioral Sciences		
Western Civilization II: 1648 to Present	50	3	3	Section B2: Social and Behavioral Sciences		
Science and Mathematics						
Biology	50	6	3	Section A: Natural Sciences		
Calculus	50	3	3	Section D2: Communication and Analytical Thinking	Mathematics Competency Satisfied	
Chemistry	50	6	3	Section A: Natural Sciences		
College Algebra	50	3	3	Section D2: Communication and Analytical Thinking	Mathematics Competency Satisfied	
College Mathematics	50	6	3	Section D2: Communication and Analytical Thinking	Mathematics Competency Satisfied	
Precalculus	50	3	3	Section D2: Communication and Analytical Thinking	Mathematics Competency Satisfied	
Natural Sciences	50	6	3	Section A: Natural Sciences		

[1] The scores and credit hours that appear in this table are the credit-granting scores and semester hours recommended by the American Council on Education (ACE). The scores listed above are equivalent to a grade of C in the corresponding course.

[2] This score is recommended for exams administered after June 30, 2008. Sources: http://www.collegeboard.com/student/testing/clep/about.htm

LACCD Credit for International Baccalaureate (IB) Exams

IB Subject Area	Minimum Passing Score AA/AS CSU GE IGETC	Total Semester Units Awarded Toward Associate Degree	Semester Units Applied Toward Associate Degree GE Requirements	Associate Degree GE Area Fulfilled Board Rule: Chapter VI: 6201.14	Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12	Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14	IGETC Applicability Source: IGETC Standards v 1.3	CSU GE Breadth Applicability Source: CSU Coded Memo AA-2010-09
IB Biology HL	5 (ALL)	6	3	Section A: Natural Science			5B (without lab) 3 semester/4 quarter units	B2 3 semester units
IB Chemistry HL	5 (ALL)	6	3	Section A: Natural Science			5A (without lab) 3 semester/4 quarter units	B1 3 semester units
IB Economics HL	5 (ALL)	6	3	Section B2: Social and Behavioral Sciences			4B 3 semester/4 quarter units	D2 3 semester units
IB Geography HL	5 (ALL)	6	3	Section B2: Social and Behavioral Sciences			4E 3 semester/4 quarter units	D5 3 semester units
IB History (any region) HL	5 (ALL)	6	3	Section B2: Social and Behavioral Sciences			3B or 4F 3 semester/4 quarter units	C2 or D6 3 semester units
IB Language A1 (English) HL	4 (AA/AS)	6	3	Section D Language & Rationality: Area 1. English Composition	Reading and Written Expression Competency Satisfied		Refer below to IB Language A1 (any language) HL for IGETC Area applicability	Refer below to IB Language A1 (any language) HL for CSU GE Area applicability
IB Language A2 (English) HL	4 (AA/AS)	6	3	Section D Language & Rationality: Area 1. English Composition	Reading and Written Expression Competency Satisfied		Refer below to IB Language A2 (any language) HL for IGETC Area applicability	Refer below to IB Language A2 (any language) HL for CSU GE Area applicability
IB Language A1 (any language, except English) HL	4 (AA/AS) 5 (IGETC)	6	3	Section C: Humanities			3B and 6A 3 semester/4 quarter units	N/A
IB Language A2 (any language, except English) HL	4 (AA/AS) 5 (IGETC)	6	3	Section C: Humanities			3B and 6A 3 semester/4 quarter units	N/A
IB Language A1 (any language) HL	4 (AA/AS) 4 (CSU GE)	6	3	Section C: Humanities			3B 3 semester/4 quarter	C2 3 semester units

LACCD Credit for International Baccalaureate (IB) Exams

IB Subject Area	Minimum Passing Score AA/AS CSU GE IGETC	Total Semester Units Awarded Toward Associate Degree	Semester Units Applied Toward Associate Degree GE Requirements	Associate Degree GE Area Fulfilled Board Rule: Chapter VI: 6201.14	Graduation Competency Requirement Fulfilled Board Rule: Chapter VI: 6201.12	Title 5 American Institutions Requirement Fulfilled Board Rule: Chapter VI: 6201.14	IGETC Applicability Source: IGETC Standards v 1.3	CSU GE Breadth Applicability Source: CSU Coded Memo AA-2010-09
	5 (IGETC)						units	
B Language A2 any language) HL	4 (AA/AS) 4 (CSU GE) 5 (IGETC)	6	3	Section C: Humanities			3B 3 semester/4 quarter units	C2 3 semester units
B Language B[1] any language) HL	4 (AA/AS) 4 (CSU GE) 5 (IGETC)	6	3	Section C: Humanities			6A Meets proficiency req.	N/A
B Mathematics HL	4 (AA/AS) 4 (CSU GE) 5 (IGETC)	6	3	Section D: Language & Rationality: Area 2. Communication and Analytical Thinking	Mathematics Competency Satisfied		2A 3 semester/4 quarter units	B4 3 semester units
B Physics HL	5 (ALL)	6	3	Section A: Natural Science			5A (without lab) 3 semester/4 quarter units	B1 3 semester units
B Psychology HL	5 (ALL)	3	3	Section B2: Social and Behavioral Sciences			4I 3 semester/4 quarter units	D9 3 semester units
B Theater HL	4 (AA/AS) 4 (CSU GE) 5 (IGETC)	6	3	Section C: Humanities			3A 3 semester/4 quarter units	C1 3 semester units

[1]The IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.

Sources:

http://www.universityofcalifornia.edu/admissions/counselors/ib-credits/index.html
http://www.calstate.edu/AcadAff/codedMemos/AA-2010-09.pdf
http://icas-ca.org/standards-policies-and-procedures-manual
http://www.ibo.org/

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 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:

- 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).
- 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.
- 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

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 District Office of Diversity Programs at (213) 891-2317.

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.

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.

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 opportnunities. 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 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

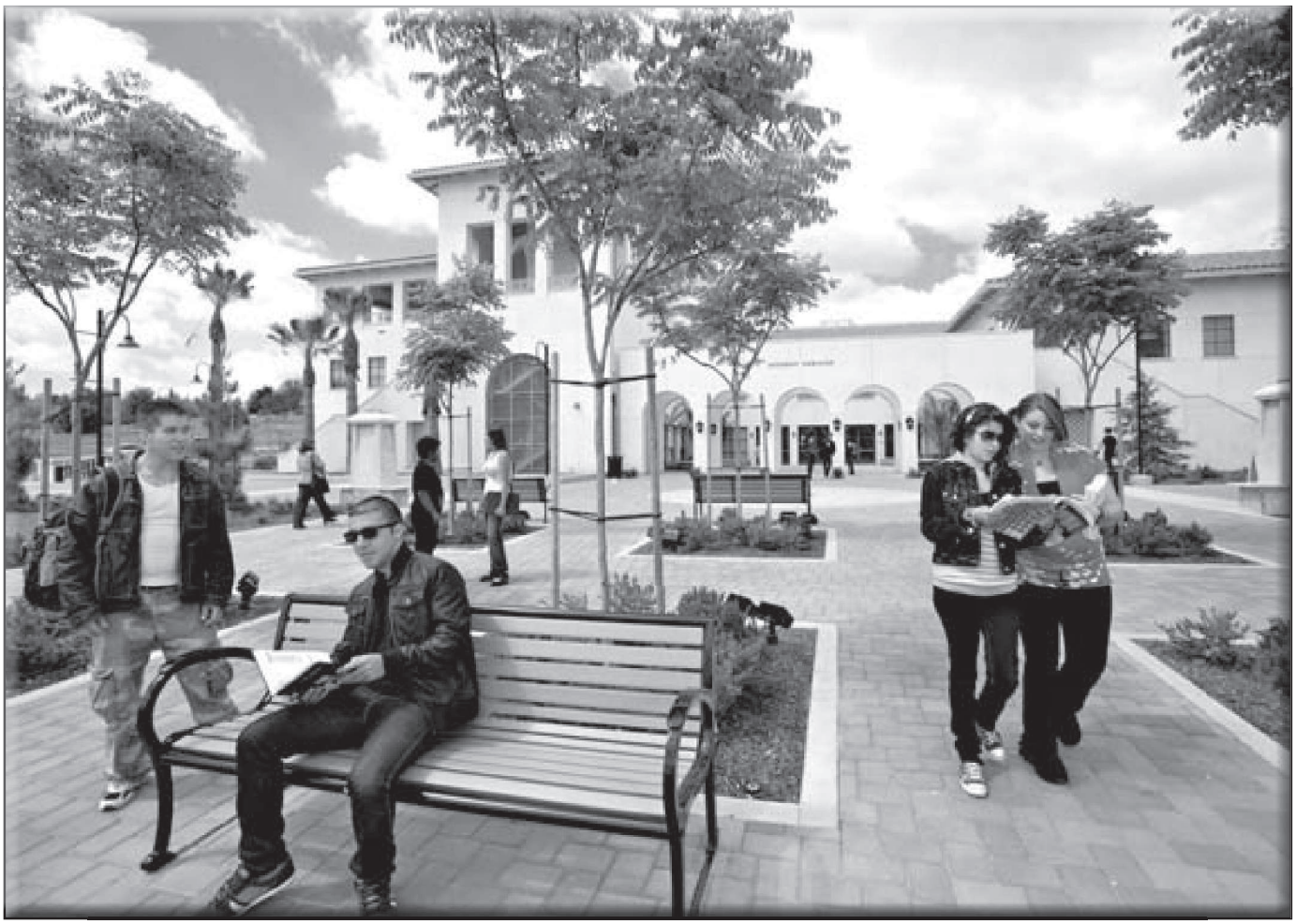
All parties involved in a potential grievance are encouraged to seek an informal remedy. In the majority of the cases, a meeting with the person with whom the student has a grievance or with that person's immediate supervisor or chair can resolve the issue(s). The student may also seek the assistance 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 Student Services Office. 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 at (818) 719-6418.



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.

The Service Area Outcomes of the Financial Aid Office at Pierce College are as follows:

1. Students apply for financial aid by March 2nd Cal Grant deadline.
2. Students complete their financial aid file by the May 1st priority deadline.
3. Students are aware of the financial aid process.
4. Students apply for the Fee Waiver program.

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.
- Received a high school diploma or its equivalent, or passed a high school proficiency examination.

When to Apply

- **January 1, 2012:** FAFSA application available online at www.fafsa.ed.gov
- **March 2, 2012:** Cal Grant deadline and application priority deadline
- **May 1, 2012:** Established priority deadline to submit required documents to the Financial Aid Office
- **Sept 2, 2012:** Extended Competitive Cal Grant deadline for community college students

To be considered for Title IV Financial Aid, 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, 2013, whichever is earlier. Check the financial aid website at www.piercecollege.edu/offices/financial_aid for deadlines.

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.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
- Iraq and Afghanistan Service Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study (FWS)
- Federal Perkins Loan
- Federal Direct Loan
- Cal Grant B and C
- California Chafee Grant
- Child Development Teacher Grant
- California National Guard Education Assistance Award Program (CNG EAAP)

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:

- IRS Tax Transcript
- 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 Benefit

Plan ahead – you may be able to take advantage of federal tax benefits for education. Most tax benefits have income limits; to learn more about each program, see IRS Publication 970, Tax Benefits for Education, available at www.irs.gov or by calling 1-800-829-3676. Also, be sure to consult a professional tax advisor.

American Opportunity Credit and Lifetime Learning Tax Credits allow you or your parents to subtract a portion of your college costs from the taxes you owe each year when you file your tax return.

Tuition and fees tax deduction and student loan interest deduction allows you to subtract a portion of your tuition and fees from your taxable income and to deduct up to $2,500 of the interest you pay on your student loan each year (or on any student loans you take out for your spouse's or child's education).

In addition, funds from your IRA, 529 college savings plan or Coverdell Education Savings Account may be withdrawn without a tax penalty to pay for qualified education expenses. There's also a tax break if you use certain U.S. savings bonds to pay for college.

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

Types of Financial Aid Available

Federal Financial Aid Grants

Federal PELL Grant Program

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

NEW: In December 2011, President Obama signed into the law the Consolidated Appropriations Act, 2012 (Public Law 112-74). This law has significantly impacted the PELL Grant Program. Effective July 1, 2012, students are now limited to 12 semester (or 600%) of PELL Grant eligibility during their lifetime. This change affects all students regardless of when or where they are received their first PELL Grant. Students who received PELL Grant during the 2011-2012 academic year and have already used 600% of their PELL Grant eligibility will no longer be eligible to receive a PELL Grant for the 2012-2013 academic year. Students may view their percentage of PELL Grant eligibility by logging into www.nslds.ed.gov The "Lifetime Eligibility Used" percentage will be displayed in the "Grants" section of the webpage.

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.

Iraq and Afghanistan Service Grant

A student whose parent or guardian was a member of the U.S. Armed Forces and died as a result of service performed in Iraq or Afghanistan after September 11, 2001 may be eligible to receive the Iraq and Afghanistan Service Grant. Student eligibility requirements are:

- Must be ineligible for a Federal PELL Grant due only to having less financial need than is required to receive PELL funds, and
- Be under 24 years old, or
- Enrolled in college at least part-time at the time of the parent's or guardian's death.

The grant award is equal to the amount of a maximum PELL Grant for the award year – not to exceed the cost of attendance for that award year.

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 applies to you:

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

B. You meet the income standards as established by the Board of Governors. Check with the Financial Aid Office if you qualify.

C. You are qualified based on financial need as defined by the state. To qualify under this criteria, you will need to complete the FAFSA to determine if you have need based on state requirements. If you qualify after you have paid your enrollment fees, you should go to the college Business Office to request for a refund.

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, 2012. A second deadline for community college applicants is September 2, 2012, 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.

California National Guard Education Assistance Award Program (CNG EAAP)

This state-funded program designed to provide an educational incentive to improve skills, competencies, and abilities for up to 1,000 services members who remain active in the National Guard, the State Military Reserve, or the Naval Militia. This program authorizes the California Student Aid Commission to make payments to eligible program participants. Participants can receive up to the amount of the Cal Grant A award for attending the University of California or California State University, up to the Cal Grant B award for attending a community college, up to the University Cal Grant A amount for attending a non-public institution, or up to the Cal Grant A award plus $500 for books and supplies for graduate students. To learn more about the program, visit the California Student Aid Commission website at www.csac.ca.gov.

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. Effective July 1, 2012, the interest rate is 6.8% for subsidized loans and 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, complete a Loan Entrance Counseling and other financial literacy requirements to apply for a loan.

NEW: As a result of recent legislative changes, you should be aware of a number of new requirements for the federal student aid programs. Most of these changes are effective with the 2012-13 school year (July 1, 2012 through June 30, 2013).

- *Direct Subsidized loans will not be eligible for an interest subsidy during the six-month grace period.*

  Subsidized loans are loans for which the borrower is not responsible for the interest while the student is enrolled in college on at least a half-time basis, when the loan is in the six-month grace period after the student is no longer enrolled at least half time, or if the loan is in a deferment status. This provision eliminates the interest subsidy provided during the six-month grace period for subsidized loans for which the first is made on or after July 1, 2012, and before July 1, 2014. If you receive a subsidized loan during this timeframe, you will be responsible for the interest that accrues while your loan is in the grace period. You do not have to make payments during the grace period (unless you choose to) but the interest will be added (capitalized) to the principal amount of your loan when the grace period ends. This provision does not eliminate the interest subsidy while the borrower is in school or during eligible periods of deferment.

- *All subsidized loans made to undergraduate students will have a fixed interest rate of 6.8%.*

  Subsidized loans for which the first disbursement is on or after July 1, 2012, will have a 6.8% fixed interest rate.

- *Graduate and professional students are no longer eligible to receive subsidized loans.*

  Effective for loans made for payment periods that begin on or after July 1, 2012, graduate and professional students are no longer eligible to receive subsidized loans.

- ***The U.S. Department of Education can no longer offer borrowers repayment incentives.***

  Effective for loans first disbursed on or after July 1, 2012, the Department of Education is prohibited from offering any repayment incentives to Direct Loan borrowers, except interest rate reductions to borrowers who agree to have payments automatically electronically debited from their bank account).

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 to be considered for this program. 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. FWS awards range upward from $1,500 to $4,000 per academic year, depending on need, packaging policy, and availability of funds.

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

To apply for financial aid for summer 2013, students must submit their 2012-2013 Free Application for Federal Student Aid (FAFSA) before June 30, 2013. Please contact the Financial Aid Office for more information and deadlines.

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.

Students will be notified via email, if email was provided on the FAFSA, when Aid Offer Letters are available for review in the Student Information System. 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.

New financial aid applicants to the LACCD 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.

The award amount reflected on the Award Notification is for full-time enrollment. Disbursements will be adjusted if enrollment is less than full-time at the time of disbursement. Supplemental disbursements occur throughout the academic year. Disbursements will be adjusted if enrollment increases or decreases. After the second disbursement run date of the each semester, no further award adjustments can be made. **Any outstanding institutional debt will be deducted from the financial aid disbursement.** Disbursements will be adjusted if enrollment increases or decreases. Student must be an active student (enrolled in at least one approved unit) at Pierce College to be eligible for financial aid disbursement. Payment for late-starting classes will not be issued until the class begins. Students are encouraged to log-on the Student Information System (SIS) at www.laccd.edu/student_information to view their disbursement information. Please note that the disbursement schedules are based on full-time enrollment. The actual disbursement amount will depend on the enrollment status at the time of the disbursement run. 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). If the class you are enrolled in is not listed on your SEP, the units will not be included in the calculation of approved units.

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

Federal PELL Grant is scheduled for payment twice a semester. FSEOG 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.

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 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.

Federal Refund Requirements – 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.

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.**

If you owe 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.

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.

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.

	Living with Parents 9 Mos.	Living Away from Home 9 Mos.
Fees	$ 1,220	$ 1,220
Books & Supplies	$ 1,665	$ 1,665
Room & Board	$ 4,401	$ 10,962
Transportation	$ 1,170	$ 1,314
Personal Expenses	$ 3,105	$ 2,844
Total	$11,561*	$18,005*

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

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.

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
- Iraq and Afghanistan Service Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study (FWS)
- Federal Perkins Loan
- Federal Direct Loan
- Cal Grant B and C
- California Chafee Grant
- Child Development Teacher Grant
- California National Guard Education Assistance Award Program (CNG EAAP)

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

Satisfactory Academic Progress standards are reasonable if they are the same as or stricter than the institution's standards for a student enrolled in the same educational program who is not receiving assistance under Title IV Federal Financial Aid Programs.

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. The District Student Information System will collect, maintain, and utilize the number of outside units entered into the system for calculating student eligibility.

Repeated coursework

- Repeated coursework within the LACCD will be counted towards attempted units as defined in this chapter.
- For repeated coursework for which a student has petitioned the college to utilize the most recent grade received, only the most recent grade received will be used for cumulative GPA calculation for SAP status determination.

Transfer coursework from institutions outside of the LACCD will be used and evaluated for SAP standing. College Admissions & Records Offices (A&R) will record incoming units as indicated on transcripts.

General Requirements

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

- An educational program that leads to an associate degree, or
- An educational program which is at least a two-year academic transfer program that is acceptable for full credit toward a bachelor's degree, or
- An educational program which is at least a one-academic-year training program that leads to a certificate, degree, or other recognized educational credential and that prepares a student for gainful employment in a recognized occupation.

To meet satisfactory academic progress standards student must:

- Maintenance of a 2.0 or higher cumulative grade point average (GPA).
- Completion of a minimum 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.
- Fewer than ninety (90) attempted units for students who indicated AA/AS Degree and/or transfer as their educational goal.
- ESL and 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 outside of the LACCD 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.

Application of Standards

- Satisfactory Academic Progress for financial aid students will be determined at the end of each payment period/semester (summer, fall/winter, or spring semester).
- Students who are disqualified from financial aid will be notified by email or mail and receive information regarding the petition process.
- Students disqualified at **any** college in the LACCD are disqualified at **all** colleges within the LACCD.

Disqualification

Students will be disqualified if they have one or more of the following:

- Cumulative GPA is less than 2.0 following a semester for which the student received a Warning Letter.
- Cumulative non-grades are greater than 33% following a semester for which the student received a Warning Letter.
- Total units attempted (excluding ESL and Basic Skills/Remedial classes) are equal to or greater than ninety (90).
- An Associate or higher degree has been earned outside the LACCD. Degree information received and posted to the District Student Information System during a semester will be evaluated for the following semester for potential disqualification.

Warning Letter

Students will receive a Warning Letter (by mail or email) if they were initially in good standing (based on SAP standards) but at the end of their most current semester they show one of the following academic deficiencies:

- Cumulative GPA is less than 2.0.
- Cumulative non-grades are greater than 33%.

Advisory Letter

Students will receive an Advisory Letter at the end of the first semester where their number of units attempted reaches forty-five (45).

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.
- 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.
- Short Length Certificate Programs.
- Some certificate objectives in the LACCD 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. Summer is considered a separate semester for evaluation purposes. Winter term, as it is combined with fall semester or payment purposes, will be included with fall semester for SAP evaluation purposes.

Petition Procedure for Reinstatement or Extension of Financial Aid Eligibility

1. To petition for reinstatement or extension of financial aid eligibility, a student must file the appropriate petition form to the Financial Aid Office (FAO). A student may obtain the appropriate Petition for Reinstatement form or Petition for Extension form from the FAO at the student's specific college. Petition forms must be submitted to the FAO with any supporting documentation the student wishes to have considered.
2. Students submitting Petition for Extension forms must also submit a current Student Educational Plan (SEP) prepared by an academic counselor. The SEP should outline the minimum required courses necessary to complete the student's educational program.
3. Petition forms must be submitted before the end of the semester/term for which the student requests consideration of reinstatement or extension of financial aid eligibility.
4. Students are not eligible for any federal or state aid or parent retroactively for petitions received and approved after the payment period ends.
5. Petitions forms should be completed in ink or typed and consist of a written statement from the student as to why he/she is appealing the disqualification. Additional information may be requested and supplied by the student which supports their rationale for requesting reinstatement or extension of financial aid eligibility.
6. Upon receipt of the request, the Financial Aid Administrator (FAA) or designee shall consider the petition.
   - The result of the petition will be provided to the student in writing within 30 calendar days.
   - Students with an approved Petition for Reinstatement will be placed on probation for one semester. If the student is not meeting the terms of the probationary semester, they will be disqualified from continued financial aid eligibility.
   - Students with an approved Petition for Extension will receive approval for only the minimum number of courses required to complete their educational program, as determined by the student's academic counselor and approved by the Financial Aid Administrator. Enrollment status for financial aid calculation purposes will be determined by enrollment in approved classes only.
   - If a student's petition is denied, the student may submit an appeal within a given semester/term before the end of the specified semester/term.
   - A District Appeal Review may be processed only after all college appeal procedures have been exhausted. A District Office review may be initiated by a student who reasonably believes that college, state, and/or federal guidelines were applied incorrectly and, therefore, adversely affected their financial aid status, rights and privileges.

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

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 and Scholarships Office
   (818) 719-6428
3. Pierce College Veterans Office
   (818) 710-3316
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 system-wide 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.

Transfer Center Service Area Outcomes

The following Service Area Outcomes have been developed to inform students about the goals of the program:

- Students will learn the best methods and strategies for applying and getting admitted to local transfer institutions.
- Students will gain confidence and satisfaction by participating in transfer services (e.g. transfer workshops, individualized counseling and advising, application advising, and transfer events.
- Students will have personal contact with university representatives.
- Students will have increased opportunities to access transfer services in their college classes and at the high schools.
- Students will complete Transfer Admission Guarantees (TAG) agreements to increase their chances for being admitted to participating UC colleges.
- Students will understand the importance of taking courses that traditionally block transfer pathways such as developmental math and English

See the CSU GE Certified Plan and IGETC on pages 68-69.

Special Instructional 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)

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 call (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.

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 eligible students enrolled at the college who currently receive CalWORKs (public assistance) for themselves and at least one child under the age of eighteen and who have or are in the process of developing a GAIN welfare-to-work plan which includes education as an approved activity, or are County-referred for post-employment or post-time limits services. Students receiving SSI, General Relief, Cal-Fresh (food stamps) only or Medi-Cal only, or who have no children are not eligible for the program.

The program offers a variety of supportive services designed to help students meet their welfare-to-work and educational goals in order to achieve academic success, career advancement and economic self-sufficiency, including:

- Case management
- Service coordination with other campus programs
- Information and advocacy for GAIN, CalWORKs and child care concerns
- Self-advocacy skills development
- Books, supplies, fees, tools and uniforms, in partnership with the Los Angeles County GAIN program
- On-campus child care (space permitting) in the Child Development Center for eligible children
- Work-study opportunities
- Academic counseling
- Student Education Plans
- Completion and certification of required GAIN and Child Care Resource Center forms and documents
- Informative workshops
- Referrals to community agencies for legal, personal counseling, domestic violence and social services

The program is funded by the California Community Colleges Chancellor's Office with additional funding from the Los Angeles County Department of Public Social Services.

The GAIN/CalWORKs office is located in the Student Services Building, second floor, room 48235. For more information and appointments call 818-719-6400. Our email address is: pierce_gaincalworks@piercecollege.edu.

CalWORKs Service Area Outcomes

- Students will develop effective self-advocacy skills by:
  - Seeking available Financial Aid assistance
  - Submitting a book and supply request payment form
  - Contacting the CalWORKs Program for supportive services assistance
- Students will use available resources in pursuit of their welfare-to-work goals by meeting with a counselor to develop a long-range education plan

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 Avenue
Woodland Hills, CA 91371 USA
website: www.piercecollege.edu
email: intlstu@piercecollege.edu

Application Deadlines — 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.

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.

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. 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.

Office Hours:

Monday through Thursday	8:00 am – 4:00 pm
Friday	8:00 am – 2:00 pm

The Veterans Services Office offers the following services:

- Help student veteran start and continue educational benefits,
- Help student veteran with college admission and application process,
- Assist with financial aid application process,
- Offer advice on completing and filing VA forms,
- Provide information on student services available at Pierce College,
- Provide educational counseling,
- Offer Orientation workshops to learn how to navigate college life, and
- Offer information on veterans services provided by VA Centers and support groups.

New Veteran Student Checklist:

1. Apply to Pierce College at www.piercecollege.edu
2. Apply for VA Educational Benefits at www.gibill.va.gov
3. Apply for financial aid at www.fafsa.gov
4. Request official transcripts from previous colleges and universities. Mail transcripts to:

   Pierce College
   Attn: Admissions & Records Office
   6201 Winnetka Avenue
   Woodland Hills, CA 91371
5. Visit the Pierce College's Veterans Services Office to pick up a packet. This packet will contain required documentation you to need to complete.
6. Schedule an appointment with a Veterans Counselor in the Counseling Office to formulate an educational plan and evaluate prior college credit(s).
7. To continue receiving benefits, visit the Veterans Services Center every semester to request VA Enrollment Certification.

Veterans Educational Benefits

- Chapter 33 (Post 9/11 GI Bill) – this is the most comprehensive educational benefit package since the original Montgomery GI Bill. The Post 9/11 GI Bill is for individuals with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post 9/11 GI Bill. This program will pay for enrollment fees (non-resident tuition is not eligible) and other mandatory fees, a monthly housing allowance, and an annual books and supplies stipend for eligible individuals.
- Chapter 1606 – this program provide benefits for members of the Selected Reserve and National Guard who enlisted, re-enlisted, or extended their enlistment for a period of six years after July 1, 1985.
- Chapter 1607 – this program provides benefits for members of the Selected Reserve who have established eligibility for 1606 of the MGIB and have been called to active duty since September 11, 2001.
- Chapter 31 (Vocational Rehabilitation) – this is an educational assistance program that is available to disabled veterans who are in need of vocational rehabilitation.
- Chapter 35 (Dependents or Spouses) – this is an educational program is designed to provide benefits for dependents or spouses of veterans.

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's 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.

Counseling Service Area Outcomes

The following Service Area Outcomes have been developed to inform students about the goals of the program:

- Students will have greater access to counseling services
- Students will learn important information and will experience a supportive and positive environment during counseling sessions
- Students will learn important information and basic academic and personal survival skills by attending Counseling Department workshops
- Students will be able to evaluate and establish their educational and career goals by attending at least one counseling appointment session per semester

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 provids 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.

Career Center Service Area Outcomes

The following Service Area Outcomes have been developed to inform students about the goals of the program:

- Students will have access to career counseling appointments and drop in sessions
- Students will be satisfied with career services including individualized counseling, workshops, and web-based services
- Students will be satisfied with career workshops

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 1 adult to 6.5 children in each classroom. Our program is NAECP accredited (National Association of Early Childhood Programs).

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

Food Services

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 for 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. During Summer and Winter sessions hours are 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 Friday.

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 (818) 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.

Health Services Service Area Outcomes

The following Service Area Outcomes have been developed to inform students about the goals of the program:

1. More students will utilize the Student Health Center.
2. Students will utilize free psychological services, if needed.
3. Students will exhibit knowledge of behaviors that support good health, identify obstacles and challenges to achieving optimal health and devise strategies to pursue a healthy lifestyle.
4. Students will experience a private, secure facility for health services.

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.

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.

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 in Parking Lots 5 and 6. 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, motor scooters 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 bra when parking.
10. If you feel you have received a parking citation in error, see College Sheriff between the hours of 8:00 a.m. to 9:00 p.m., Monday–Friday.

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

Bicycle Safety Rules

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

Cross Country Track and Adjacent Areas Closed from Dusk to Dawn

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

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

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 a variety of sports. The sports offered for men are baseball, basketball, football, swimming, tennis and volleyball. The sports offered for women are soccer, softball, swimming, volleyball, water polo, and basketball.

Eligibility

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

Student Publications

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

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

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 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.

Associated Student Organization Service Area Outcomes

The following Service Area Outcomes have been developed to inform students about the goals of the program:

- Leadership: Students have a chance to learn leadership skills.
- Advocacy: Students learn about the policy making process and how to communicate with political leaders.
- Committee Projects: Students learn how to work with others to complete projects.

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 S-9:

— 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.

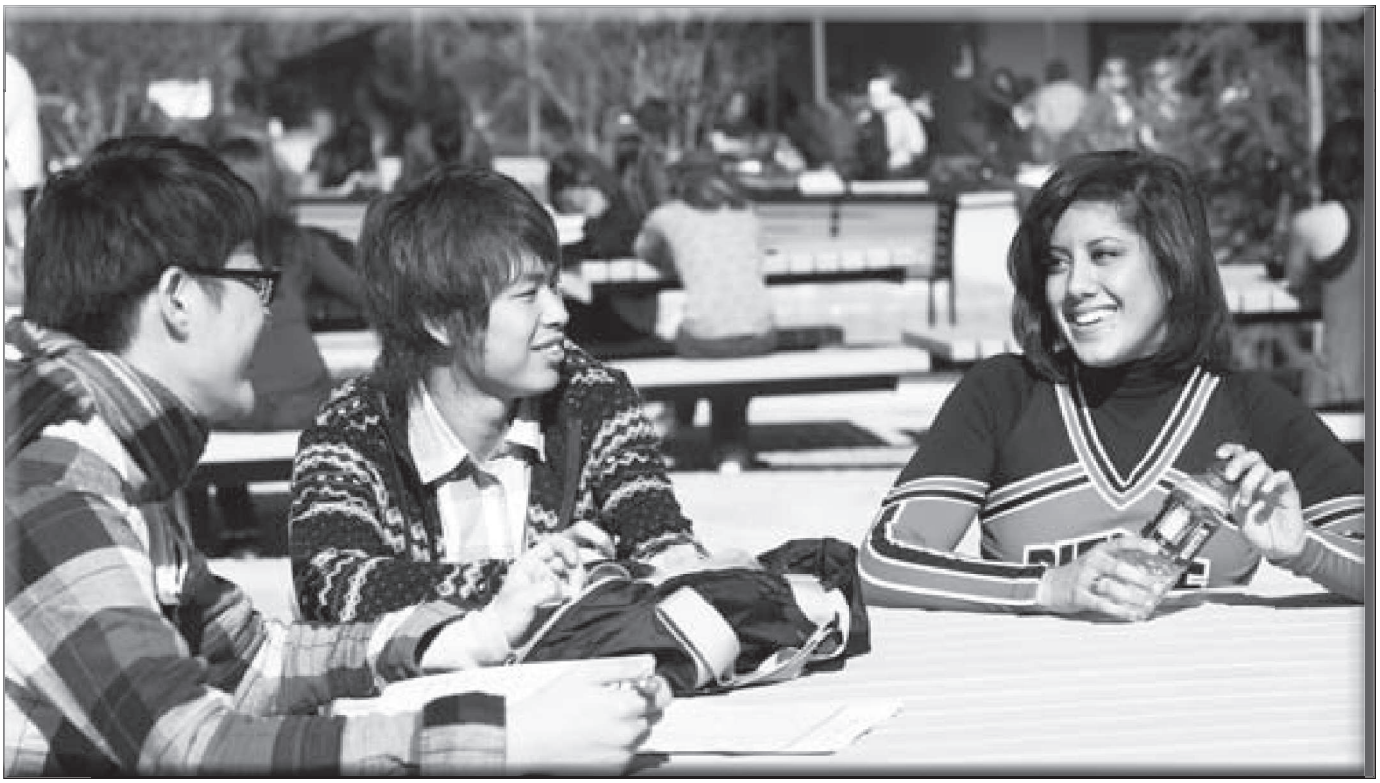
Exceptions on the maximum units requirement will be made for students enrolled in recognized Los Angeles Community College District programs where the combination of program units and prerequisites may exceed the 80 transferable units limit.

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)

   General Education Learning Outcomes:

   - **Communication:** The student will demonstrate proficiency in communication skills, including active listening, textual interpretation and comprehension, and oral and written expression.
   - **Critical Thinking:** The student will demonstrate proficiency in identifying and clarifying issues, problems, questions, and assumptions; analyzing data and relevant information including alternative approaches; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning to support conclusions.
   - **Research and Information Literacy:** The student will demonstrate proficiency in modes of inquiry specific to the discipline of study and discernment of relevant and appropriate sources of information.
   - **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society and the relevant principles, concepts, and arguments that guide ethical decision-making.
   - **Quantitative Analysis and Scientific Reasoning:** The student will demonstrate proficiency in the interpretation and description of quantitative data and situations and relevant graphs, symbols, or mathematical relationships and concepts to solve problems.
   - **Arts & Cultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and understanding of, cultural practices and social structures.

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: (Board Rule 6201.13)**
   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, 319, 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
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 2012-2013

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), 17; 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, 17; 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; Sociology 31.

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; 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, 319; Sociology 1, 2, 3, 4, 8, 11, 13, 15, 17, 21, 28, 29, 31, 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) 2012-2013

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; 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, 31, 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 /	General Agriculture	
Pre-Veterinary Sciences	Horse and Equine Science	
Horticulture & Landscaping	Natural Resources Management	
Veterinary Science & Technology		
ANTHROPOLOGICAL & GEOGRAPHICAL SCIENCES	**Diane Levine**	**710-2876 FO 2903**
Anthropology	Archaeology	
Geography	Geographic Information Systems	
Linguistics	Meteorology	
ART/ARCHITECTURE	**Greg Gilbertson**	**719-6475 ART 3303C**
Architecture	Architectural History	Art History
Ceramics	Drawing	Fine Art
Graphic Design	Painting	Sculpture
Web Design	Digital Imaging	Multimedia
ATHLETICS	**Bob Lofrano**	**710-2823 SOUTH GYM**
Physical Education (Intercollegiate Athletics)		
BUSINESS ADMINISTRATION	**David Braun**	**719-6479 BUS 3213D**
Accounting	Business	Business Law
Finance	International Business	Management
Marketing	Real Estate	Supervision
CENTER FOR ACADEMIC SUCCESS		**719-6414 VLGE 8401**
Learning Skills	Tutoring	Computer Labs
CHEMISTRY	**Isidore Goodman**	**719-6464 CFS 91041**
CHILD DEVELOPMENT EDUCATION	**Joleen Voss-Rodriguez**	**719-6402 BEH 1306**
Child Development Education		
COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES	**Lyn Clark**	**710-4244 BUS 3210C**
Administrative Professional	General Administrative	
Business Communications	Internet	
Computer Applications	Legal Office Procedures	
Computerized Accounting	Office Procedures	
Desktop Publishing	Web Site Construction	
COMPUTER SCIENCE INFORMATION TECHNOLOGY	**David Schamus**	**710-4393 COSC 1505 A**
Computer and Network Technology	Programming for Business	
Programming for Computer Science		
COOPERATIVE EDUCATION	**Ron Smetzer**	**710-4291 VLGE 8200**
COUNSELING	**Rudy Dompe**	**719-6440 STUDENT SERVICES BLDG. 150**
Personal Development		
ENGLISH	**Donna Accardo**	**710-2879 FO 2501**
English		
English as a Second Language		
HISTORY/HUMANITIES		
HONORS PROGRAM	**Elizabeth Strother**	**710-2224 VLGE 8340**

Department & Disciplines	Chairperson(s)	Phone/Office
INDUSTRIAL TECHNOLOGY	**Tom Fortune**	**710-4320 AT 3803**
Automotive Service Technology	Drafting, Mechanical	Electronics
Engineering, Mechanical	Machine Shop-CNC	Welding
Robotics		
LIBRARY SCIENCE	**Paula Paggi**	**719-6409 LIBRARY**
LIFE SCIENCES	**Lyn Koller**	**710-4138 CFS 91042**
Anatomy	Biology	
Microbiology	(Including Marine Biology)	
Physiology		
MATHEMATICS	**Robert Martinez**	**710-4347 MATH 1409 H**
MEDIA ARTS	**Jill Connelly**	**710-4235 VLGE 8100**
Broadcasting	Cinema	Journalism
Photography	Public Relations	Multimedia
MODERN LANGUAGES	**Fernando Oleas**	**719-6452 VLGE 8340**
American Sign Language	French	
Italian	Japanese	Spanish
MUSIC	**Wayne Skip Perkins**	**710-2900 MUS 3416D**
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	**Shilo Nelson**	**710-2524 NGYM 5614 C**
Health Education		
Physical Education	Recreation	
PHYSICS & PLANETARY SCIENCES	**John Zayac**	**710-2218 CFS 91040**
Astronomy	Environmental Science	
Geology	Oceanography	
Physical Science	Physics	
POLITICAL SCIENCE / ECONOMICS / CRIMINAL JUSTICE	**Kathy Oborn**	**710-2587 LIBRARY ROOM 1**
Criminal Justice	Economics	Law
Chicano Studies	Political Science	
PSYCHOLOGY	**Chadwick Snow**	**710-4315 BEH 1306 B**
Addiction Studies	Statistics	
Psychology		
SPECIAL EDUCATION	**Stephanie Schleicher**	**710-4228 STUDENT SERVICES BLDG. 166**
SPEECH COMMUNICATION	**Jennifer Rosenberg**	**710-4297 FO 2705**
THEATER AND DANCE	**Valorie Grear**	**710-4379 PAC 4470**
Dance	Theater	

Educational Programs
2012-2014

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).

	Degree	Certificate
Addiction Studies	AA	C
Agriculture		
Floral Design and Management		C
General Agriculture	AS	C
Horse Science	AS	C
Horticulture		
General Horticulture	AS	
Landscape Planning and Design	AS	
Basic Gardening (Advanced)		C
Pre-Veterinary Medicine	AS	
Veterinary Technology	AS	
American Sign Language (Interpreting)	AA	
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	
Business Administration	AS-T	
Tax Preparation		C
General Business	AA	
International Business		C
Management and Supervision	AA	
Retail Management		C
Marketing	AA	C
Child Development		
Pathway to Bachelor's Degree	AA	
Terminal Vocational Degree	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
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
Office Clerical		C
Office Communications		C
Web Site Construction and Maintenance		C
Computer Science		
Programming for Business	AA	C
Programming for Computer Science	AS	C
Computer and Network Technology	AS	
Personal Computer Service Technology		C
Network Technology		C
Website Development		C
Web Development, Programming and Scripting		C
Criminal Justice	AA	

Educational Programs

Electronics	AS	
Digital Option		C
Communications Option		C
Analog Option		C
Environmental Science and Technology	AA	
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		
Industrial Technology		
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	
Numerical Control Programming	AS	C
Italian	AA	
Journalism	AA	
Latin American Studies	AA	
Mathematics	AA AS-T	
Music	AA	
Nursing	AA	
Photojournalism	AA	
Political Science	AA	
Pre-Engineering	AS	
Spanish	AA	
Theater Arts	AA	
Costume Option	AA	
Technical Theater Option	AA	C

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 64 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. Degrees with an AS-T designation allow students to transfer to a California State University as an upper division student. 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 50 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Abide by laws and ethical standards of the profession concerning addiction studies.
- Utilize a variety of area-specific counseling skills; e.g., family, couples, skills training, adolescent, etc. concerning addiction studies.
- Demonstrate a basic set of helping skills (warmth, empathy, reflective listening) needed for entry employment in the addictions field.
- Identify and demonstrate the 12 Core Functions of a chemical dependency counselor.
- Practice professional workforce behaviors; e.g., be on time, meet deadlines, have appropriate boundaries, etc. concerning addiction studies

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Abide by laws and ethical standards of the profession concerning addiction studies.
- Utilize a variety of area-specific counseling skills; e.g., family, couples, skills training, adolescent, etc. concerning addiction studies.
- Demonstrate a basic set of helping skills (warmth, empathy, reflective listening) needed for entry employment in the addictions field.
- Identify and demonstrate the 12 Core Functions of a chemical dependency counselor.
- Practice professional workforce behaviors; e.g., be on time, meet deadlines, have appropriate boundaries, etc. concerning addiction studies

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

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Using the elements and principles of floral design and basic color theory as well as industry standards, create basic floral arrangements and corsages.
- Identify by common and botanical names numerous flower and foliage varieties and determine the post-harvest care and handling procedures.
- Create industry-standard floral designs for categories of special events, such as wedding décor, sympathy tributes, window displays, permanent botanicals, and event designs.
- Apply business concepts to the management of a floral business, including issues related to accounting, marketing, and general management.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply the fundamental tenets of animal science disciplines to practical experiences with a range of livestock, and poultry. These experiences include creating and demonstrating the use of behavioral, environmental, and nutritional enrichment to maximize animal welfare considerations.
- Apply the fundamental tenets of plant science, including soils and general horticulture, to the preparation, planting, maintenance, and harvesting of one or more food animal crops.
- Demonstrate safe and effective restraint of poultry and livestock species for the administration of medicines and application of common husbandry procedures.
- Recognize the difference between injurious and noxious plants from native species commonly consumed by livestock.
- Create nutritionally sound diets for poultry and major livestock species based on animal requirements and sound economics.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply the fundamental tenets of animal science disciplines to practical experiences with a range of livestock and poultry. These experiences include creating and demonstrating the use of behavioral, environmental, and nutritional enrichment to maximize animal welfare considerations.
- Apply the fundamental tenets of plant science, including soils and general horticulture, to the preparation, planting, maintenance, and harvesting of one or more food animal crops.
- Demonstrate safe and effective restraint of poultry and livestock species for the administration of medicines and application of common husbandry procedures.
- Recognize the difference between injurious and noxious plants from native species commonly consumed by livestock.
- Create nutritionally sound diets for poultry and major livestock species based on animal requirements and sound economics.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply equine husbandry skills and management successfully.
- Demonstrate the safe handling of horses from an equestrian viewpoint, including catching, restraining, mounting, and riding a horse at varying gaits.
- Using the fundamentals principles of plants and soils, animal science, anatomy, and nutrition, create a nutritionally sound diet for varying ages and production requirements of horses.
- Set up a preventative disease control management program for a small equine facility, including assisting in the diagnosis and treatment of common equine disorders.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply equine husbandry skills and management successfully.
- Demonstrate the safe handling of horses from an equestrian viewpoint, including catching, restraining, mounting, and riding a horse at varying gaits.
- Using the fundamentals principles of plants and soils, animal science, anatomy, and nutrition, create a nutritionally sound diet for varying ages and production requirements of horses.
- Set up a preventative disease control management program for a small equine facility, including assisting in the diagnosis and treatment of common equine disorders.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Identify and practice the safe use of tools, equipment, and supplies used in horticulture careers, including the maintenance of trees and shrubs from youth to specimen maturity.
- Propagate, grow, and maintain plants in horticulture production systems utilizing fundamental principles of soils, botany, and principles of horticulture.
- Identify and categorize regional and California plants by common name, growth, morphological characteristics, genus, and species.
- Design, construct, and install plants for both indoor and outdoor landscape projects.
- Develop solutions for a wide variety of plant health issues, including common pests and microbial diseases.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Identify and practice the safe use of tools, equipment, and supplies used in horticulture careers, including the maintenance of trees and shrubs from youth to specimen maturity.
- Design irrigation systems meeting varying specifications as outlined by blueprint drawings and estimate costs.
- Identify and categorize regional and California plants by common name, growth, morphological characteristics, genus, and species.
- Design, construct, and install plants for both indoor and outdoor landscape projects. Select plants in horticulture production systems utilizing fundamental principles of soils, botany, and principles of horticulture.
- Develop solutions for a wide variety of plant health issues, including common pests and microbial diseases.

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

BASIC GARDENING (ADVANCED)

■ 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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Identify and practice the safe use of tools, equipment, and supplies used in horticulture careers, including the maintenance of trees and shrubs from youth to specimen maturity, in such careers as gardening or landscape technician.
- Propagate, grow, and maintain plants in horticulture production systems utilizing fundamental principles of soils, botany, and principles of horticulture.
- Identify and categorize regional and California plants by common name, growth, morphological characteristics, genus, and species.
- Install and maintain irrigation systems meeting varying specifications as outlined by blueprint drawings.
- Develop solutions for a wide variety of plant health issues, including common pests and microbial diseases.

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)

CERTIFICATE - TOTAL UNITS **20**

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

Department Subject Advisor: Dr. Lee Shapiro

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate capabilities in the safe restraint of multiple species of animals; in the taking of TPRs, and the recording of animal observations.
- Develop and balance appropriate rations for herbivores (grazing animals), carnivores, and omnivores.
- Differentiate species and breeds of livestock and poultry as to their nutritional and reproductive needs, basic husbandry requirements, genetics, disease control and prevention, and general management of respective herds and flocks.
- Create and demonstrate the use of behavioral enrichment, environmental enrichment and nutritional enrichment to maximize animal welfare considerations in poultry, sheep, goats, cattle and horses.
- Demonstrate a clear understanding in using common SOAP protocol in the assessment, observations, diagnosis, treatment of very common disorders in companion animals, livestock and poultry under the direction of a CA licensed veterinarian.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Be proficient in the Essential Tasks as required by the AVMA
- Possess the knowledge, skills and abilities to pass state and national board exams
- Gain an understanding of the role of the Registered Veterinary Technician on a veterinary team
- Develop the ability to assess and respond appropriately to routine and emergency medical conditions
- Develop effective client communication skills

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.

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.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Develop receptive and expressive skills in American Sign Language and Fingerspelling.
- Develop knowledge and awareness of the similarities and differences between the Deaf Culture/Deaf community and the hearing community;
- Accurately interpret and transliterate between ASL and English in educational settings and community settings.
- Apply professional standards, practices, and ethics, not limited to the tenets of the Code of Professional Conduct, to interpreting.

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..*

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Recognize and critically analyze the elements and principles of architectural design and construction.
- Create architectural projects utilizing research, planning, analysis, and concept.
- Develop critical understanding of the practice of architecture and its components.
- Recognize and express structural, material and building system components as well as the code, safety, and site factors that go into construction and design.
- Recognize and execute cognitive, cultural, physical, social and sustainable factors in planning construction and the execution of architectural designs.
- Display competency with graphic communication of ideas.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Recognize and critically analyze the elements and principles of architectural design and construction.
- Create architectural projects utilizing research, planning, analysis, and concept.
- Develop critical understanding of the practice of architecture and its components.
- Recognize and express structural, material and building system components as well as the code, safety, and site factors that go into construction and design.
- Recognize and execute cognitive, cultural, physical, social and sustainable factors in planning construction and the execution of architectural designs.
- Display competency with graphic communication of ideas.

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.

PROGRAM INFORMATION

This degree is designed to provide students with a broad depth of exposure to the Art discipline.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional levels of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate functional levels of painting.
- Demonstrate an understanding of two- and/or three-dimensional design concepts, vocabulary, materials and processes through the construction of two- and/or three-dimensional objects or images.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional level of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate an understanding of three-dimensional design concepts, vocabulary, materials and processes through the construction of two and/or three-dimensional objects.
- Demonstrate an understanding of design concepts appropriate to ceramics, vocabulary, materials and processes through the construction of three-dimensional objects.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional level of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate an understanding of three-dimensional design concepts, vocabulary, materials and processes through the construction of two and/or three-dimensional objects.
- Demonstrate an understanding of drawing concepts, vocabulary, materials and processes through the creation of two-dimensional works.
- Demonstrate functional levels of painting.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional level of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate an understanding of two and three-dimensional design concepts, vocabulary, materials and processes through the construction of two and/or three-dimensional work.
- Demonstrate an understanding of drawing concepts, vocabulary, materials and processes through the creation of two-dimensional works.
- Research/utilize resources and practice aesthetic and technical problem solving in the painting process.

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	3
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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional level of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate an understanding of three-dimensional design concepts, vocabulary, materials and processes through the construction of two and/or three-dimensional objects.
- Demonstrate an understanding of sculpture concepts, vocabulary, materials and processes through the construction of three-dimensional objects.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional levels of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate functional levels of painting.
- Demonstrate an understanding of two- and/or three-dimensional design concepts, vocabulary, materials and processes through the construction of two- and/or three-dimensional objects or images.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Articulate foundational knowledge of the history of art, inclusive of methods, media and cultural context.
- Demonstrate functional levels of drawing skills with varied media and subjects.
- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate functional levels of painting.
- Demonstrate an understanding of two- and/or three-dimensional design concepts, vocabulary, materials and processes through the construction of two- and/or three-dimensional objects or images.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate a working vocabulary articulating concepts as they relate to studio applications.
- Demonstrate an understanding of two- and/or three-dimensional design concepts, vocabulary, materials and processes through the construction of two- and/or three-dimensional objects or images.
- Demonstrate the ability to design website graphics and animation that communicate original ideas.

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

BUSINESS ADMINISTRATION

■ Associate in Science for Transfer Degree (AS-T)

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

This degree is intended for students transferring to a California State University campus. It is not a requirement for transfer but may give students an admission advantage at some CSU campuses. Not all CSU campuses accept this degree as fulfillment of lower-division major requirements. Students should meet with a counselor to determine if this degree is a good option for them. Information on which CSU campuses accept this degree can be found at http://www.sb1440.org/

PROGRAM INFORMATION

Upon successful completion of the Pierce College Associate of Science in Business Administration for Transfer degree requirements, the student will have demonstrated an understanding of business, accounting and economics. This coursework will satisfy the lower division business administration requirements at some of the California State University campuses.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Describe the three major forms of business ownership and advantages.
- Describe the basic management functions.
- Outline the components of the two major financial statements.
- Apply and analyze the elements of a contract.
- Apply communication strategies to solve business problems.
- Apply computer applications to solve business problems.

MAJOR - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
ACCTG 2	Introductory Accounting II	5
ECON 1	Principles of Economics I	3
ECON 2	Principles of Economics II	3
BUS 5	Business Law I	3
Choose one course from the following:		4-5
MATH 227	Statistics (4 units)	
MATH 238	Calculus for Business and Social Sciences I (5 units)	
Choose two courses from the following:		6
CAOT 82	Microcomputer Software Survey in the Office (3 units)	
CO SCI 501	Introduction to Computers and Their Uses (3 units)	
CAOT 32	Business Communications (3 units)	
MAJOR - TOTAL UNITS		**29**

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR
Plan B: NOT AVAILABLE WITH THIS MAJOR
Plan C: CSU GE Breadth Certification Plan 39 units
Plan D: IGETC 34-39 units

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 and other business data 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.

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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Describe the three major forms of business ownership and the advantages.
- 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.

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 - ELECTIVE 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

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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**

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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

RETAIL MANAGEMENT
■ Certificate of Achievement

PROGRAM INFORMATION

The completion of the Retail Management Certificate program will result in two certificates being issued to the student, one certificate from Pierce College and another certificate from the Western Association of Food Chains. The student will need to apply directly to the WAFC for their certificate.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Enumerate and describe where retailing fits into the process of marketing a product.
- Analyze a retail business operation.
- Construct and communicate a basic merchandising plan.

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**

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 organization.
- Recognize and describe the components of the communication process.
- Diagram the process of marketing a product.

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

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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) Or	3
PUB REL 1	Public Relations (3 units)	
CERTIFICATE - TOTAL UNITS		**15**

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

PATHWAY TO BACHELOR'S DEGREE

■ Associate of Arts 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply evidence-based theoretical and practical concepts with typically and atypically developing young children and their families with a high level of technical proficiency in one of the specialization areas: Infants and Toddlers, Special Needs, School Age, or Administration.
- 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.

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
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
CH DEV 42	The Child in a Multicultural Society	3
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply evidence-based theoretical and practical concepts with typically and atypically developing young children and their families with a high level of technical proficiency in one of the specialization areas: Infants and Toddlers, Special Needs, School Age, or Administration.
- 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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply evidence-based theoretical and practical concepts with typically and atypically developing young children and their families with a high level of technical proficiency in one of the specialization areas: Infants and Toddlers, Special Needs, School Age, or Administration.
- 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.

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) Or	3
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.
- 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.
- Organize and develop resources and materials for implementing creative experiences for children with varying abilities in groups and on an individual basis.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate a working knowledge of all facets of preschool administration, including legal requirements, staffing issues, fiscal management and parent communication.
- Identify, appreciate, and demonstrate respect for inclusive practices and diversity within individuals, families, cultures and communities.
- Articulate and demonstrate professional ethics and conduct in all work with agencies, families, and children.
- Identify different leadership styles and evaluate their effectiveness in meeting the needs of parents and staff.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate a working knowledge of all facets of preschool administration, including legal requirements, staffing issues, fiscal management and parent communication.
- Identify, appreciate, and demonstrate respect for inclusive practices and diversity within individuals, families, cultures and communities.
- Articulate and demonstrate professional ethics and conduct in all work with agencies, families, and children.
- Identify different leadership styles and evaluate their effectiveness in meeting the needs of parents and staff.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
	Or	
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 11	Home, School and Community Relations	3
CH DEV 30	Infant Studies I (3 units)	3
	Or	
CH DEV 31	Infant Toddler Studies II (3 units)	
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply evidence-based theoretical and practical concepts with typically and atypically developing school age children and their families.
- Demonstrate competence in facilitating the development of school age children as unique individuals through the use of developmentally appropriate curriculum that promotes physical, cognitive and socio-emotional development.
- Organize and develop resources and materials for implementing creative experiences for children with varying abilities in groups and on an individual basis.

CERTIFICATE - REQUIRED COURSES		UNITS
CH DEV 1	Child Growth and Development	3
CH DEV 3	Creative Experiences for Children I (3 units)	3
	Or	
CH DEV 4	Creative Experiences for Children II (3 units)	
CH DEV 11	Home, School and Community Relations	3
CH DEV 46	School Age Programs I (3 units)	3
	Or	
CH DEV 47	School Age Programs II (3 units)	
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**

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, financial records, 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.

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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, financial records, 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.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, and databases.
- Demonstrate efficiently the use of the Internet to complete the following business-related activities: communication; research, including basic legal 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.
- Demonstrate competence in standard legal procedures to communicate effectively with law office personnel and clients and produce appropriate legal correspondence, documents, and records accurately using correct legal vocabulary and format.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, and databases.
- Demonstrate efficiently the use of the Internet to complete the following business-related activities: communication; research, including basic legal 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.
- Demonstrate competence in standard legal procedures to communicate effectively with law office personnel and clients and produce appropriate legal correspondence, documents, and records accurately using correct legal vocabulary and format.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, financial records, 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.
- Apply a range of business concepts to the management of office operations, including employee supervision, administrative support, financial statements, and customer service.

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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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, financial records, 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.
- Apply a range of business concepts to the management of office operations, including employee supervision, administrative support, financial statements, and customer service.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate a proficiency level in the use of computerized accounting software by accurately completing a variety of accounting transactions and producing financial reports and documents.
- 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 a level of competence in the use of state-of-the-art business-related software to create spreadsheets.

CERTIFICATE - REQUIRED COURSES		UNITS
ACCTG 1	Introductory Accounting I	5
	Or	
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	3
	Or	
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 basic competence in the use of state-of-the-art business-related software to create documents, spreadsheets, and databases.
- 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.
- Create, revise, and evaluate verbal and written business messages demonstrating correct grammar, spelling, punctuation, and language style.

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
	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
[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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 intermediate to advanced 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.
- Create, revise, and evaluate verbal and written business messages demonstrating correct grammar, spelling, punctuation, and language style.

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

Continued

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)	2
	Or	
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 Website 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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 intermediate to advanced competence in the use of state-of-the-art business-related software to create documents as well as develop and maintain 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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate proficiency in the use of graphic design and desktop publishing principles.
- Demonstrate competence in the use of state-of-the-art graphic design software to create professional-looking business documents.
- Develop methods for retaining information about computer software applications so that the information may be applied in practical situations and in solving challenging problems.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate basic competence in the use of state-of-the-art business-related software to create documents.
- 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.
- Demonstrate competence in standard legal procedures to communicate effectively with law office personnel and clients and produce appropriate legal correspondence, documents, and records accurately using correct legal vocabulary and format.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate advanced competence in the use of state-of-the-art business-related software to create documents.
- Create, revise, and evaluate verbal and written business messages demonstrating correct grammar, spelling, punctuation, and language style.
- 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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate intermediate keyboarding skill to prepare basic business communications.
- 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.

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 Or	3
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate basic keyboarding skill to prepare basic business communications.
- Demonstrate basic competence in the use of the Internet, the Windows computer operating system, and state-of-the-art business-related software to create documents and spreadsheets.
- Demonstrate basic competence in records management, telephone practices, work ethics, and job search techniques.
- Create, revise, and evaluate verbal and written business messages demonstrating correct grammar, spelling, punctuation, and language style.

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) Or	3
CAOT 82	Microcomputer Software Survey in the Office (MS Office 2010)	3
CAOT 130	Communication Skills in the Workplace Or	3
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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate proficiency in the use of graphic design and desktop publishing principles.
- Demonstrate competence in the use of state-of-the-art graphic design and Web site authoring software to create and maintain professional-looking, functional Web sites.
- Demonstrate intermediate to advanced competence in the use of state-of-the-art business-related software to create online presentations.

CERTIFICATE - REQUIRED COURSES		UNITS
ART 604	Graphic Design I	3
[1]CAOT 108	Presentation Design for the Office (MS Powerpoint 2010) Or	2
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 50 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.

Prerequisite: MATH 115 or one year of high school algebra with a grade of "C" or better.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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).
- Understand how networks function and be able to do simple PC hardware troubleshooting.
- Have an additional area of expertise chosen from programming, Web/NOS or Information system classes.

MAJOR - REQUIRED COURSES

		UNITS
CO SCI 501	Introduction to Computers & Their Uses	3
CO SCI 533	Databases Using Access and SQL	3
CO SCI 541	Advanced Database Programming Using C#	3
CO SCI 547	Introduction to Digital Imaging Using Photoshop	3
CO SCI 548	Web Development Using Flash and ActionScipt	3
CO SCI 550	Website Development Using Dreamweaver and Javascript	3
CO SCI 560	Business Systems Design Using Oracle Developer	3
CO SCI 554	Server-Side Programming for the World Wide Web	3
CO SCI 556	Advanced Dreamweaver	3
CO SCI 572	Intro to Personal Computer Hardware and Operating Systems (3 units)	3
CO SCI 575	Programming Fundamentals for Computer Science	3
CO SCI 587	Introduction to Computer Networks	3

Math Elective (125 or higher) (3-5 units)

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), ,MATH 125 (5 units)

SEQUENCE 2) Web/Network OS - CO SCI 534 (3 units), CO SCI 535 (3 units), CO SCI 553 (3 units), CO SCI 555 (3 units)

SEQUENCE 3) Information Systems - ACCT 1 (5 units), ACCTG 2 (5 units), BUS 5 (3 units), BUS 21 (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

PROGRAMMING FOR BUSINESS

■ Certificate of Achievement

Prerequisite: 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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Develop, code and debug programs (using such programming languages as C++, C#, and/or Java).
- Use Word, Excel and PowerPoint competently in the workplace.
- 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.

CERTIFICATE - REQUIRED COURSES

		UNITS
ACCTG 1	Introductory Accounting	5
CO SCI 501	Introduction to Computers and Their Uses	3
[1]CO SCI 533	Databases Using Access and SQL	3
[1]CO SCI 541	Advanced Database Programming Using C#	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
CO SCI 575	Programming Fundamentals for Computer Science	3

CERTIFICATE - TOTAL UNITS **23**

[1]*See Catalog course description for pre-requisites.*

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.

Prerequisite: MATH 115 or one year of high school algebra with a grade of "C" or better.

NOTE: 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Be able to develop computer programs in at least 3 programming languages such as C, C++, assembly language, and Java.
- Be able to use the classic algorithms, data structures and object-oriented. programming commonly used in software development.
- Understand the impact that different computer architecture decisions have on system performance.

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 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

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.

Prerequisite: MATH 115 or one year of high school algebra with a grade of "C" or better. Verification required upon request.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Be able to develop computer programs in C, C++, assembly language, and Java.
- Be able to use the classic algorithms and data structures commonly used in software development.
- Be able to use object-oriented programming techniques.
- Be able to use pointers for creation of data structures and dynamic memory allocation.

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.

COMPUTER AND NETWORK TECHNOLOGY

■ Associate of Science Degree

Prerequisite: MATH 115 or one year of high school algebra with a grade of "C" or better. 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Configure, maintain, and troubleshoot personal computer hardware and operating systems.
- Implement, configure, and maintain servers and server operating systems, network switching topologies.
- Implement, configure, and maintain routers and routing protocols and integrate LAN and WAN technologies successfully.
- Implement troubleshooting strategies for desktops, servers, and network infrastructure.

MAJOR - REQUIRED COURSES		UNITS
CO SCI 501	Introduction to Computers and Their Uses	3
[1]CO SCI 514	Supporting Windows Desktops	3
CO SCI 533	Databases with Access and SQL	3
[1]CO SCI 534	Operating Systems	3
[1]CO SCI 535	Supporting Windows Servers	3
[1]CO SCI 537	LAN & VLAN Switching	3
CO SCI 538	Implementing Wide Area Networking	3
CO SCI 550	Introduction to Website Development Using Dreamweaver and CSS	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 and Routing Protocols	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 6 units from any of the courses listed below: 6

1) PROGRAMMING: CO SCI 541 (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

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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).

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

[1]See catalog course description for prerequisites.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Understand the key components of network design and infrastructure.
- Implement, configure, and maintain servers and server operating systems.
- Implement, configure, and maintain desktop operating systems.
- Understand and implement file system security on a variety of operating system.
- Apply a structured troubleshooting approach to solving system problems.

CERTIFICATE - REQUIRED COURSES		UNITS
[1]CO SCI 514	Supporting Windows Desktops	3
[1]CO SCI 534	Operating Systems	3
[1]CO SCI 535	Supporting Windows Servers	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)

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

CERTIFICATE - REQUIRED COURSES		UNITS
CO SCI 534	Operating Systems	3
CO SCI 547	Introduction to Digital Imaging Using Photoshop	3
CO SCI 553	Webpage Development	3
CO SCI 554	Server-Side Programming For The World Wide Web	3
CERTIFICATE - TOTAL UNITS		**12**

[1]See catalog course description for prerequisites.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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 software such as Dreamweaver, PHP, 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.

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**

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- **Critical Thinking:** The student will demonstrate proficiency in defining issues, problems, questions, and assumptions; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning (verbal or written form) to support conclusions when dealing with the three components of the criminal justice system: law enforcement, courts, and corrections.
- **Research and Information Literacy:** The student will demonstrate proficiency in modes of inquiry specific to criminal justice, and discernment of relevant and appropriate sources of information.
- **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society, and the relevant principles, concepts, and arguments that guide ethical decision-making.
- **Multicultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and sociological understanding of, cultural practices and social structures.

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 67	Community Relations and Diversity	3
ADM JUS 75	Introduction to Corrections	3
ADM JUS 160	Police Organization and Administration	3
ADM JUS 319	Research Methods & Statistics in Criminal Justice	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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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 2 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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply principles of electronics and electronic devices, linear circuits, and electronic communications.
- Safely and effectively use a variety of equipment to diagnose, analyze, and build or repair electronics systems.
- Provides the student with knowledge of digital circuits and microprocessors.

COMMUNICATIONS OPTION

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply principles of electronics and electronic devices, linear circuits, and electronic communications.
- Safely and effectively use a variety of equipment to diagnose, analyze, and build or repair electronics systems.
- Provides the student knowledge of communication and microwave electronics.

ANALOG OPTION

ELECTRN 26	Linear Circuits	3
ELECTRN 48A	Integrated Circuits	3
ELECTRN 48B	Integrated Circuits Laboratory	1
ELECTRN 63	Circuit Analysis Laboratory	1

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply principles of electronics and electronic devices, linear circuits, and electronic communications.
- Safely and effectively use a variety of equipment to diagnose, analyze, and build or repair electronics systems.
- Provides the student knowledge of circuit analysis as well as linear and integrated circuit operation.

CERTIFICATE - TOTAL UNITS 24

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.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Evaluate present and future environmental impacts resulting from human and natural processes and develop appropriate remediation strategies.
- Identify appropriate technologies to mitigate environmental problems resulting from social, political and/or economic policy decisions.
- Demonstrate a proficiency in the core scientific principles that underlie current and future environmental issues.
- Recognize the limits of technology in solving environmental issues that are structural in nature.

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 50 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

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 whenever 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Achieve oral, proficiency in target language [at appropriate level as measured by ACTFL].
- Demonstrate proficiency in the grammar, structure, tense, mood and syntax of the target language [class exam and oral presentations or oral interviews].
- Demonstrate Intermediate-High to Advanced Low proficiency in writing and reading comprehension in target language [Class exam and/or Writing Proficiency Exam].
- Exhibit basic knowledge of the social, political, cultural and economic conditions in the countries in which the target language is spoken [Writing exam and or power-point presentation or oral presentations or MLA final research paper.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- **Communication:** The student will demonstrate proficiency in communication skills, including active listening, textual interpretation and comprehension, and oral and written expression.
- **Critical Thinking:** The student will demonstrate proficiency in identifying and clarifying issues, problems, questions, and assumptions; analyzing data and relevant information including alternative approaches; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning to support conclusions.
- **Research and Information Literacy:** The student will demonstrate proficiency in modes of inquiry specific to the discipline of study and discernment of relevant and appropriate sources of information.
- **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society and the relevant principles, concepts, and arguments that guide ethical decision-making.
- **Quantitative Analysis and Scientific Reasoning:** The student will demonstrate proficiency in the interpretation and description of quantitative data and situations and relevant graphs, symbols, or mathematical relationships and concepts to solve problems.
- **Arts & Cultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and understanding of, cultural practices and social structures.

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 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) , 31 (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

CSU GE BREADTH CERTIFICATION PLAN

■ Certificate of Achievement

This general education certificate of achievement is awarded to students who receive full certification of the CSU GE Breath Certification Plan.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- **Communication:** The student will demonstrate proficiency in communication skills, including active listening, textual interpretation and comprehension, and oral and written expression.
- **Critical Thinking:** The student will demonstrate proficiency in identifying and clarifying issues, problems, questions, and assumptions; analyzing data and relevant information including alternative approaches; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning to support conclusions.
- **Research and Information Literacy:** The student will demonstrate proficiency in modes of inquiry specific to the discipline of study and discernment of relevant and appropriate sources of information.
- **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society and the relevant principles, concepts, and arguments that guide ethical decision-making.
- **Quantitative Analysis and Scientific Reasoning:** The student will demonstrate proficiency in the interpretation and description of quantitative data and situations and relevant graphs, symbols, or mathematical relationships and concepts to solve problems.
- **Arts & Cultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and understanding of, cultural practices and social structures.

See page 68 for requirements.

IGETC

■ Certificate of Achievement

This general education certificate of achievement is awarded to students who receive full certification of the Intersegmental General Education Transfer Curriculum (IGETC).

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- **Communication:** The student will demonstrate proficiency in communication skills, including active listening, textual interpretation and comprehension, and oral and written expression.
- **Critical Thinking:** The student will demonstrate proficiency in identifying and clarifying issues, problems, questions, and assumptions; analyzing data and relevant information including alternative approaches; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning to support conclusions.
- **Research and Information Literacy:** The student will demonstrate proficiency in modes of inquiry specific to the discipline of study and discernment of relevant and appropriate sources of information.
- **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society and the relevant principles, concepts, and arguments that guide ethical decision-making.
- **Quantitative Analysis and Scientific Reasoning:** The student will demonstrate proficiency in the interpretation and description of quantitative data and situations and relevant graphs, symbols, or mathematical relationships and concepts to solve problems.
- **Arts & Cultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and understanding of, cultural practices and social structures.

See page 69 for requirements.

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.

Faculty Advisor: T. H. Rosdahl

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Basic knowledge and skills for maintenance and repair of brakes and suspension systems.
- Knowledge and skills for maintenance and repair of electrical and electronic systems.
- Knowledge and skills for maintenance and repair of Powertrain and drive line systems.
- Knowledge and skills for maintenance and repair of Emission systems and Climate-comfort control systems.
- Knowledge of automotive technician performance applications.

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

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Basic knowledge and skills for maintenance and repair of brakes and suspension systems.
- Knowledge and skills for maintenance and repair of electrical and electronic systems.
- Knowledge and skills for maintenance and repair of Powertrain and drive line systems.
- Knowledge and skills for maintenance and repair of Emission systems and Climate-comfort control systems.
- Knowledge of automotive technician performance applications.

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 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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Maintain, diagnose, and repair basic automotive systems.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate the knowledge, skills, and abilities to successfully pass California smog license test.
- Knowledge of the California clean air rules and regulations.
- Working knowledge of automotive electronic computer control systems.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Maintain, diagnose and repair automotive drive line systems.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Knowledge and skills necessary 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Create and modify models, assemblies, and drawings using 2D and 3D CAD software.
- Evaluate and apply knowledge of the engineering design process, manufacturing processes, and materials to design and/or manufacturing projects.
- Apply and interpret dimensioning and tolerancing in accordance with industry standards.
- Collaborate and communicate effectively as members of a project team.
- Demonstrate proficiency in the use of computer software to control machine tools.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Knowledge to prepare NC programs that control the operation of various manufacturing equipment.
- Safely and effectively use a variety of machine tools.
- Work with inspection machines, woodworking machines, laser machines and robots.
- Ability to work independently or as a team member.

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

Faculty Advisor: (R. Smetzer)

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Knowledge to prepare NC programs that control the operation of various manufacturing equipment.
- Safely and effectively use a variety of machine tools.
- Work with inspection machines, woodworking machines, laser machines and robots.

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**

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 whenever 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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Achieve oral, proficiency in target language [at appropriate level as measured by ACTFL].
- Demonstrate proficiency in the grammar, structure, tense, mood and syntax of the target language [class exam and oral presentations or oral interviews].
- Demonstrate Intermediate-High to Advanced Low proficiency in writing and reading comprehension in target language [Class exam and/or Writing Proficiency Exam].
- Exhibit basic knowledge of the social, political, cultural and economic conditions in the countries in which the target language is spoken [Writing exam and or power-point presentation or oral presentations or MLA final research paper.

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 uni

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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 unit)	
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
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

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.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Know and understand the major historical, cultural, social, political, and economic problems facing the Latin American community
- Know the chief historical factors that gave rise to existing institutions and processes
- Reflect an informed awareness of literature, art, and music in Latin America, including familiarity with the work of several recognized Latin American artists and authors.
- Be able to read and speak Spanish and communicate effectively in English prose.
- Be able to engage in thoughtful dialogue about Latin America with educated Latin Americans
- Be able to locate Latin American ideas, historical events, and cultural phenomena in the Latin American context from which the originate.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.
- Evaluate derivatives, integrals, and solutions to differential equations whether the problem is given algebraically, graphically, numerically, or verbally.

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 261	Calculus I	5
MATH 262	Calculus II	5
MATH 263	Calculus III	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

MATHEMATICS

■ Associate in Science for Transfer (AS-T)

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

This degree is intended for students transferring to a California State University campus. It is not a requirement for transfer but may give students an admission advantage at some CSU campuses. Not all CSU campuses accept this degree as fulfillment of lower-division major requirements. Students should meet with a counselor to determine if this degree is a good option for them. Information on which CSU campuses accept this degree can be found at http://www.sb1440.org/

PROGRAM INFORMATION:

Upon successful completion of the Pierce College Associate in Science in Mathematics for Transfer degree requirements, the student will have demonstrated an understanding of Calculus of one and several variables, Linear Algebra, Differential Equations, and Mechanics. This coursework will satisfy the lower division mathematics requirements at the some of the California State University campuses.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.
- Evaluate derivatives, integrals, and solutions to differential equations whether the problem is given algebraically, graphically, numerically, or verbally.

MAJOR REQUIRED COURSES		UNITS
Math 261	Calculus I	5
Math 262	Calculus II	5
Math 263	Calculus III	5
Math 270	Linear Algebra	3
One course from the following:		
Math 275: Differential Equations, Physics 101: Physics for Engineers and Scientists I, Co Sci 539: Programming in C or Co Sci 575: Programming Fundamentals for Computer Science		3-5
MAJOR - TOTAL UNITS		**21-23**

REQUIRED GENERAL EDUCATION COURSES

Students must complete one of the following General Education Plans:

Plan A: NOT AVAILABLE WITH THIS MAJOR
Plan B: NOT AVAILABLE WITH THIS MAJOR
Plan C: CSU GE Breadth Certification Plan *39 units*
Plan D: IGETC 34-39 units

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Apply the common elements and organizational patterns of music through aural, verbal, and visual analyses.
- Demonstrate a basic knowledge of music history through the present time paired with an acquaintance with a variety of repertories.
- Perform standard repertoire competently and expressively in solo, chamber groups, and major ensembles. Critically review these musical performances and adapt to improve.
- Demonstrate elementary keyboard skills and basic competence with electronic music.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Utilize Marjory Gordon's Functional Health Patterns in client assessment to differentiate dysfunctional from functional health patterns.
- Formulate realistic and scientifically based client care plans using North American Nursing Diagnosis Association (NANDA) nursing diagnoses.
- Provide timely, safe, and effective client centered care to a group of clients while demonstrating the use of logical critical thinking to determine actions.
- Perform continual evaluation of client care interventions and revise plans/care actions as required.
- Consistently demonstrate ethical and professional behavior while performing nursing care.

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 will be applied to the GPA; College level, transferable English, minimum of three (3) semester units with a grade no less than a C. A "W" is considered an attempt at taking the course. However, course repetitions that are allowed pursuant to Board Rule 6701.20 – Repetition of Courses in Which A Satisfactory Grade Was Recorded – are exempt from this restriction.

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.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- 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.

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- **Critical Thinking**: The student will demonstrate proficiency in defining issues, problems, questions, and assumptions; analyzing data (quantitative and qualitative) and relevant information; differentiating between facts, opinions, and biases; synthesizing and generating solutions and possible outcomes; and using evidence and reasoning to support conclusions. (PS 30, 50)
- **Research and Information Literacy:** The student will demonstrate proficiency in modes of political inquiry, and discernment of relevant and appropriate sources of information. (edited see below for new version)
- **Civic Responsibility and Ethical Reasoning in a Diverse Society:** The student will demonstrate proficiency in understanding, and engaging with, contemporary notions of the public good in a democratic and diverse society, and the relevant principles, concepts, and arguments that guide decision-making in our political system. (PS 5, 19)
- **Multicultural Awareness:** The student will demonstrate proficiency in the identification, recognition, description, and explanation of his or her interaction with, and political understanding of, cultural practices and social structures. (PS 7, 14)
- **Research and Information literacy:** The student will demonstrate proficiency in knowledge of the basic structures of government and politics using relevant sources of information. (1, 2)

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
POL SCI 50	Introduction to Research in Political Science	3

MAJOR ELECTIVE COURSES:

Select a minimum of two courses (6 semester units) from the following:	6
POL SCI 14 (3 UNITS), 19 (3 UNITS), 30 (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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate an awareness of engineering careers and educational pathways.
- Be able to formulate and carry out plans to solve engineering problems using fundamental principles of chemistry and physics.
- Be familiar with computer programming and/or computer design tools used in solving engineering problems.

MAJOR - REQUIRED COURSES

Select a minimum of 34 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: **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 3: **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 4: **CO SCI** 516 Beginning Computer Architecture and Organization (3 units), **CO SCI** 539 Programming in C (3 units), **CO SCI** 540 Object Oriented Programming in C++ (3 units), **IND TEK** 110 Engineering Graphics (3 units)

MAJOR - TOTAL UNITS **34**

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Achieve oral, proficiency in target language [at appropriate level as measured by ACTFL].
- Demonstrate proficiency in the grammar, structure, tense, mood and syntax of the target language [class exam and oral presentations or oral interviews].
- Demonstrate Intermediate-High to Advanced Low proficiency in writing and reading comprehension in target language [Class exam and/or Writing Proficiency Exam].
- Exhibit basic knowledge of the social, political, cultural and economic conditions in the countries in which the target language is spoken [Writing exam and or power-point presentation or oral presentations or MLA final research paper].

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

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Research, identify, and describe major historical periods, cultural influences, notable figures, key terminology, and defining events in the development of world theatre.
- Critically analyze and interpret a theatrical text; distinguish a play's various dramatic components, such plot, character, language, action, imagery, structure, style, genre, and theme.
- Convey an understanding of the actor's process in creating a character and describe the physical, vocal, mental and emotional methods of preparing for the performance of a role.
- Express, dramatize, or demonstrate a required skill level as a valued member of a theatrical production team, thereby gaining confidence, experience and expertise in specific areas, such as, acting, directing, stage managing, costuming, makeup, lighting, sound, scenic design, set construction and special effects.
- Examine, illustrate and discuss the collaborative nature of live theatre as an art form.
- Develop and strengthen critical thinking, creative writing and observation skills through script analysis, self-reflective journal assignments, and written reviews of staged theater performances.

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) Or	2
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) Or	2-3
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 50 of this catalog for more information on transfer requirements and resources.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Develop a broad base knowledge of major historical periods, literary styles, significant plays and authors, cultural influences, and social customs inherent in the development of world theatre.
- Creatively analyze, research and interpret a dramatic text to be produced and staged before a live audience.
- Explore, coordinate, and partner with related disciples such as acting, directing, lighting and scenic design to achieve a unified artistic vision for the play.
- Demonstrate a sound level of technical expertise, organizational proficiency, time management, and creative problem solving skills throughout each phase of the costuming process.
- Recognize, categorize, and safely work with the basic tools, equipment, and materials used in costume and scenic construction, and makeup application.
- Recognize the roles, responsibilities, and collaborative contributions of each member of a professional theatrical production team.

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

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Describe the basic history, cultural significance and process of theatre as creative and collaborative art form.
- Read, analyze and interpret a dramatic text for production values, requirements and design challenges.
- Identify the specific functions and contributions of every artist involved in the creative process of theatre including actors, writers, directors, producers, designers and stage technicians.
- Develop and demonstrate a basic level of competency in stagecraft, scenic design, stage production, makeup, stage lighting and/or costuming for the theatre.
- Identify and safely operate the most commonly used tools, materials and equipment, both hand and power, utilized in all areas of stage production.
- Critically evaluate a live theatrical production from both a performance and technical level of proficiency and effectiveness.

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.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Read, analyze and interpret a dramatic text for production values, requirements and design challenges.
- Identify the specific function and contributions of every artist involved in the creative process of theatre including actors, writers, directors, producers, designers, managers and stage technicians.
- Demonstrate an understanding of the USITT (United States Institute of Theatre Technology) standards and utilize a basic set of rules and guidelines to better facilitate communication with other theatre professionals.
- Develop and demonstrate a basic level of competency in stagecraft, scenic design, computer aided drafting, stage production, stage lighting and stage management or costuming and makeup for the theatre.
- Identify and safely operate the most common used tools, materials and equipment, both hand and power, used in all areas of stage production.
- Critically evaluate a live theatrical performance from both a design and technical level of proficiency and effectiveness.

CERTIFICATE - REQUIRED COURSES		UNITS
THEATER 300	Introduction to Stagecraft	3
THEATER 310	Introduction to Theatrical Lighting	3
THEATER 315	Introduction to Theatrical Scenic Design	3
THEATER 320	Computer-aided Drafting and Design for Theater	3
THEATER 340	Theater Management-On and Off Stage (2 units)	2-3
	Or	
THEATER 411	Costuming for Theater (3 units)	
	Or	
THEATER 450	Theatrical Stage Makeup (2 units)	
THEATER 342	Technical Stage Production	2
CERTIFICATE - TOTAL UNITS		**16-17**

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)

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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

Educational Goals:

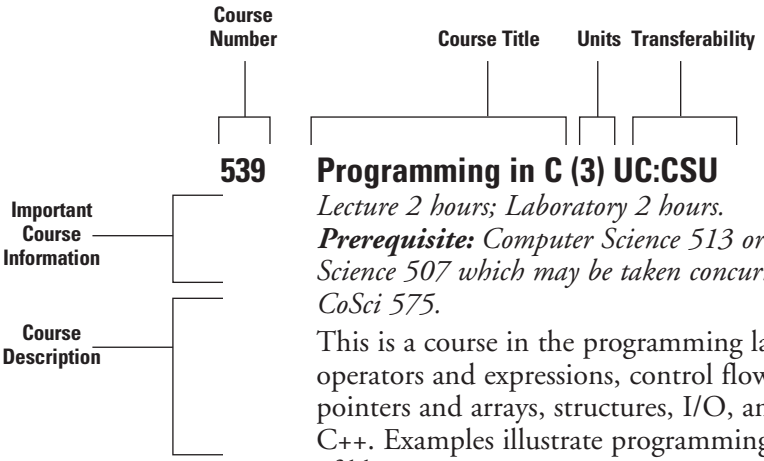
1. **Prepare for a new career (acquire new job skills)**
2. **Advance in current job/career (update job skills)**
3. **Discover/develop career interests, plans and goals**
4. **Obtain a two-year vocational degree without transfer**
5. **Obtain a two-year Associate's degree without transfer**
6. **Obtain 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
2012-2014

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 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.
This course provides an overview of the nature of addiction, counseling and the knowledge, skills, and attitudes required in professional practice as a competent, educated, trained and certified addiction counselor.

2 Drugs In Perspective (3)
Lecture 3 hours.
Students will study the 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 of substance use.

4 Addiction Counselor Training (3)
Lecture 3 hours.
Students are trained in the application of legal and ethical issues that impact the profession of addiction treatment. This course also emphasizes the assessment and diagnosis of co-occurring disorders as they apply to the scope of competence for addiction treatment counselors.

5 Group Skills For Addiction Counselors (3)
Lecture 3 hours.
This course trains students 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 addiction-specific issues in a group setting.

7 Addiction Treatment And Recovery (3)
Lecture 3 hours.
Students will learn 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) - RPT 2
Lecture 1 hour; Laboratory 6 hours.
Prerequisites*: Addiction Studies 1 or 2 with a grade of "C" or better..*
This is a supervised practicum, internship course. Participants must be already knowledgeable about addiction and its treatment. An opportunity to document at least 160 hours working at an agency or in some situation directly in the field of addiction treatment, 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.
Students will study addiction as a family disease focusing on many theoretical and practical issues including: assessment, treatment, recovery, interventions, family counseling and addictions' impact on children and the family system.

11 Drinking Driver Program 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.*
In this course, students will examine the pathology and nature of, and the intervention, treatment, and recovery processes involved in, a wide range of addictive diseases and lifestyle disorders: addiction, including nicotine; sexual addiction; gambling addiction; eating disorders (including anorexia and bulimia); compulsive spending; workaholics and type "A" behavior; violence addiction battering, child abuse, and incest.

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.*
This course focuses on developmental stages of body, mind, emotion, spirit (values and morals), and relationships, as they are affected by the disease process of addiction, and positively enhanced by the health process of recovery. Theorists include Piaget, Freud, Erikson, Kohlberg, Fowler, Keene, Maslow and Frankl.

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.*
Students will study the basic principles and concepts of sociology with special emphasis upon the social phenomenon of addiction, as it effects the family, and large sociological groups such as women, senior citizens and ethnic minorities.

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.*
This course provides a comparative analysis of women and addiction, their issues and related challenges for treatment and recovery. Those issues include alcohol, other drugs, eating disorders, nicotine abuse, 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.*
Students will learn about eating disorders and addiction. To work effectively in the profession of addiction treatment, one must understand the disease of eating disorders. This includes an understanding of such eating disorders as: compulsive overeating, bulimia and anorexia. Treatment, intervention and recovery from eating disorders will be the main focus of this course.

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.*
This course will explore 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.

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.*
This course is designed to meet the standards contained in California Penal Code 1203.098 for probation department approved batterers' intervention facilitators. The course content provides information outlining the basic knowledge and skills that are required to facilitate batterers' rehabilitation groups. Students will examine co-morbidity factors between domestic violence, substance abuse and addictions and present lesson plans and explanations for their use in a California "approved" 52-week intervention program for batterers.

25 Counceling Addiction and Concurring Disorders/Clinical Supervision (3)
Lecture 3 hours.
This is an advanced course designed to provide clinical supervision for the advanced fieldwork course, AS 91 - Field Work for Addiction Personnel, and examines techniques and dynamics of counseling clients with addiction and co-occurring disorders; and presents clinical supervision and its intrinsic value to the addiction treatment profession. Advisory: Prior completion of AS 9 - Field Work for Addiction Personnel, and AS 16 - Continuing Recovery - Specific Strategies and Basic Skills.

91 Field Work for Addiction Personnel (3)
Lecture 1 hour; Laboratory 6 hours.
***Prerequisite**: Addiction Studies 9 with a grade of "C" or better*
This is a supervised practicum course, advanced internship served at an addiction treatment and recovery facility to acquire, during the semester, 160 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
Lecture 3 hours.
A study of the origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search, and seizure; kinds 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
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.

67 Community Relations I (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.
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.
Students examine and analyze the history of criminal profiling. Crime scenes are analyzed in order to detect and identify the personality and behavioral characteristics of criminal offenders.

305 Criminal Intelligence and Data Analysis (3) CSU
Lecture 3 hours.
Students will learn the application of criminal intelligence and data analysis through critical thinking, language and logic, inductive and deductive reasoning. 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.

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.
This course allows students to pursue Directed Study in Administration of Justice on a contract basis under the direction of a supervising instructor.

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.
Advisory: *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.*
Advisory: *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).*
Advisory: *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.*
***Advisory**: 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.*
***Advisory**: 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.*
***Advisory**: 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.*
***Advisory**: 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
Laboratory 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*
Students study ASL/Deaf culture 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*
Anatomy 1 provides a basic course in human anatomy and histology. This course includes lectures and laboratory demonstrations on human organs, as well as microscopic examination of human tissues. Participation in Anatomy 1 requires each student to work with prosected human cadavers.

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.

181B Field Work (2)
Laboratory 6 hours.
Students participate in supervised job experience related to their occupational goals.

181C Field Work (3)
Laboratory 9 hours.
Students participate in supervised job experience related to their occupational goals.

181D Field Work (4)
Laboratory 12 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) - RPT 1
Lecture 2 hours; Laboratory 2 hours.
This introductory course covers the fundamentals of dog grooming, including terminology, safety, anatomy, breeds, grooming equipment, products and basic skills. The 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.*
This course focuses on the nursing care of small animals. Representative diseases from each system will be highlighted with an emphasis on the RVTs role in caring for patients with these diseases. Wellness protocols for dogs and cats will also be addressed, with an emphasis on vaccine programs.

411 Animal Nursing I Laboratory (1) CSU
Laboratory 2 hours.
Corequisite*: Animal Science 410.*
This course introduces students to specific skills involved with small animal nursing and provides opportunities to practice these skills under direct supervision in an academic environment. Areas of study include administering vaccinations, injection techniques, performing diagnostic tests and obtaining laboratory samples.

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 - RPT 3
Laboratory 2 hours.
Corequisite*: Animal Science 412.*
This course expands upon the skills and knowledge developed in Small Animal Nursing I Laboratory. Areas of study include emergency medicine, pharmacology skills and companion exotic animal clinical techniques.

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.
This course provides theoretical knowledge of anesthesia, surgical assisting and dental procedures as it relates to the role of the veterinary technician.

421 Clinical Procedures in Animal Care I Laboratory (1) CSU - RPT 3
Laboratory 2 hours.
***Corequisite**: Animal Science 420.*
Offered Fall semesters only.
This course prepares the student to perform anesthetic, surgical assisting and dental procedures on dogs and cats relevant to veterinary technology under the supervision of a veterinarian. Students are provided hands-on experience and practice opportunities for these skills.

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.
This course builds on knowledge acquired in AS 420, with an emphasis on anesthesia and surgical procedures in small animals.

423 Clinical Procedures in Animal Care II Laboratory (1) CSU
Laboratory 2 hours.
***Corequisite**: Animal Science 422.*
Offered Spring semesters only.
This course provides practical experience in anesthesia, surgical preparation and assisting. Students will participate with on-site surgical procedures on dogs and cats.

430 Veterinary Clinical Pathology (2) CSU
Lecture 2 hours.
***Prerequisite**: Approval to enter Animal Health Technology program.*
Offered Fall semesters only.
This course provides students with a comprehensive introduction to modern and practical methods in veterinary clinical laboratory analysis. This course includes the study of blood, urine, feces and skin scrapings tests with emphasis on small animal species.

431 Veterinary Clinical Pathology Laboratory (1) CSU - RPT 3
Laboratory 2 hours.
***Corequisite**: Animal Science 430.*
Offered Fall semesters only.
This course provides students with 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.
This course considers the radiological terms, safety, and techniques needed by veterinary technicians to provide the veterinarian with diagnostic quality x-rays.

436 Veterinary Radiography Laboratory (1) CSU
Laboratory 2 hours.
***Corequisite**: Animal Science 435.*
Offered Fall semesters only.
This course provides veterinary technology students with hands-on practice in safely taking diagnostic quality x-rays of animals.

441 Large Animal Nursing Laboratory (2) CSU - RPT 1
Laboratory 4 hours.
***Prerequisite**: Approval to enter Animal Health Technology program.*
Offered Spring semesters only.
This course provides students with hands-on practical experience in performing procedures and husbandry practices common to large and laboratory animal species. Extensive practice in handling and restraint will also be 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.*
This course presents students with an introduction to laboratory animal care and husbandry. Topics include care and restraint of rabbits, guinea pigs, rodents and other small lab animals. Laboratory regulations and 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.*
This course 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 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) - RPT 1
Lecture 2 hours.
***Advisory:** completion of Animal Science 180 and Animal Science 506*
This course introduces the student to the basic clinical skills and related theory needed to perform veterinary care and provide husbandry to companion exotic animal species. Blending lecture based classes with hands-on experiences, students will examine captive husbandry practices, nutrition and common health problems of avian, small mammal and reptile species. This course 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.
Students learn the physiology of animals and how it relates to animal health. It will also include 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) CSU - RPT 1
Laboratory 3 hours.
Corequisite*: Animal Science 515*
Advisory: *Completion of Animal Science 501 and 512.*
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 will be practiced..

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.

535 Sheep Production (3) CSU
Lecture 3 hours.
Students learn about sheep production in the United States and especially in California. Examines breeds, breeding practices, feeding equipment, and the problems of general care and management. Students are introduced to fattening lambs, establishment of farm flocks, and the use of range lands. The laboratory provides practical work with the college flock including essential Management skills.

537 Sheep Production Laboratory (2) CSU
Lecture 1 hour: Laboratory 2 hours.
Students study the practical application of the sheep management industry. By studying the college flock, students learn the farm management decisions and operational procedures that go into managing a flock.

540 Livestock Management Techniques (2) CSU - RPT 3
Lecture 1 hour: Laboratory 2 hours.
Advisory: *Completion of Animal Science 501*
This course covers practical applications of management aspects of the livestock industry. It encompasses on-the-job farm management decisions and operational procedures of the college's livestock. Options will include one or more of the following: beef, sheep, swine, and poultry animals.

577 Horse Judging (2)
Lecture 1 hour: Laboratory 2 hours.
A comprehensive study on form and function, evaluation of performance standards, movement, placing Western and English pleasure and the hunter jumper with emphasis on quarter horses, thoroughbred, Arabian, and Appaloosa horses.

579 Fitting and Showing Livestock (3) CSU - RPT 2
Lecture 2 hours: Laboratory 3 hours.
Hands on course involving the selection, fitting and showing of beef cattle, sheep and swine. Actual practice on college animals. Course includes classifying animals and groups in California and national livestock shows.

596 Agricultural Enterprise Projects (4) - RPT 4
Laboratory 9 hours.
Prerequisite*: Animal Science 540 with a grade of "C" or better.*
Students will study the planning, development and completion of an individual or group animal or crop production project under the guidance of a faculty advisor on the College farm. Usually the project will involve the purchase of animals or crops, associated production costs, and eventual profit at time of sale.

601 Horse Production (3) UC:CSU
Lecture 3 hours.
This course 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.
This course studies 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.
In this course students learn the practical application of the management aspects of the horse, including participation in the management decision 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)
Lecture 1 hours; Laboratory 2 hours.
Introduces and familiarizes students with the development of show horses. Organization and management of horse shows. Introduces the student to the skills required for a professional career in the field of performance horses.

620 Basic Equitation (1) CSU
Lecture 1 hour.
***Corequisite**: Animal Science 621.*
This course 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.*
In this fundamental course, the student will be introduced to basic Western and English riding. The course will focus on safely catching, haltering, grooming saddling, bridling and riding horses.

622 Horseback Riding Laboratory - Intermediate (1)
Laboratory 2 hours.
An intermediate but still fundamental class in Western and English riding designed to teach horseback riding to students with varying degrees of experience.

623 Horseback Riding Laboratory - Advanced (1) RPT 2
Laboratory 2 hours.
Prerequisite: Animal Science 621B.
An advanced class in basic 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.
This course is beginning equine training. Students will study 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.
This class expands the concepts learned in Agriculture 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.

650 Equine Health and First Aid (2)
Lecture 1 hour; Laboratory 2 hours.
***Prerequisite**: Animal Science 601 with a grade of "C" or better.*
Equine Health and First Aid provides an overall understanding of horse health issues so that those who work in the industry, or use horses for recreation, will understand and recognize common injuries and illnesses. Students will develop the skills and knowledge necessary to aid veterinary efforts to preserve and promote horse health.

185 Directed Study - Animal Science (1) CSU - RPT 2

285 Directed Study - Animal Science (2) CSU - RPT 3

385 Directed Study -Animal Science (3) CSU - RPT 3
Conference 1 hour per unit.
This course allows students to pursue Directed Study in Animal Science 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.
This course explores the field of physical anthropology emphasizing the evolution of the human species. Topics will 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.

102 Human Ways of Life: Cultural Anthropology (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
This class presents a broad survey of human culture including the study of human social organization, language, kinship, food getting, art, religion, political and economic organization, and culture change with examples drawn from contemporary preliterate, peasant, and urban societies.

105 Prehistoric Peoples (3) UC:CSU
Lecture 3 hours.
Surveys world prehistory from the appearance of anatomically modern humans to the development of urbanization. Traces the process and sequence of human cultural development around the globe, including Europe, the Americas, the South Pacific, Africa, and Asia.

106 Introduction to Archaeology (4) UC:CSU
Lecture 3 hours; Laboratory 2 hours.
This course introduces students to the field of modern scientific archaeology. Lectures outline 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.*
This course 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.
This course 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 People of North America (3) UC:CSU
Lecture 3 hours.
This course 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.
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
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
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.
This course allows students to pursue directed study in Anthropology on a contract basic 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 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.*
This third semester architecture studio course engages environmental, architectural, societal and sustainable design considerations. Concept, meaning, program, space, light, site and context are explored through research, field investigation, site analysis and building design Constraints of building structure and materials are introduced. Various environmental, aesthetic, political, social, and cultural issues impacting architectural design are explored. Field trips are required. students will create digital and printed portfolios of their work.

202 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.*
This fourth semester architecture studio course engages environmental, architectural, societal and sustainable design considerations. Concept, meaning, program, space, site and context are explored through research, field investigation, site analysis and building design. Context, and various environmental, aesthetic, political, social, and cultural issues impacting architectural design are explored. Integrating energy-using systems is introduced. Field trips are required. Students will create digital and printed portfolios of their work.

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.*
Third level architectural technical drawing methodology. Using computer software such as AutoCAD, students will develop a multiple story structure on a complex site addressing a range of contextual and environmental issues, including sustainable design principles. Different building materials such as concrete and metal will be studied and incorporated into the building. A complete set of design and technical drawings of the residence will be produced. Creative, conceptual and analytical skills are further developed. Fundamental computer drawing techniques as well as 3-d computer modeling methods are refined. Students will create a portfolio of their work.

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 Dir ected Study -Architecture (2) CSU

385 Directed Study - Architecture (3) CSU
Conference 1 hour per unit.
This course 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 - RPT 1
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.
In this course, students survey 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.*
This course surveys Western European art from the Late Gothic to the early twentieth century. The course will examine the social, economic politial, and religious influences on art production as well as the style and functions of works of art. Students will learn art vocabulary, how to do a visual analysis, and several different art historical and methodological approaches to analyzing works of art.

103 Art Appreciation I (3) UC:CSU
Lecture 3 hours.
Recommended for non-Art majors. Recommended but not required for Art majors.
In this course, students will understand and appreciate 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 Arts of Africa, Oceania, and Ancient America (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.
This course surveys the major trends and movements in Western Contemporary Art. Works of art are discussed both in class, in museums, and at site-specific locations.

119 Theories of Art (3) UC:CSU
Lecture 3 hours.
This course is geared to both studio and art history students. Students will analyze artistic and aesthetic theories from ancient times to postmodernism and will apply 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.
The course will cover the modern architecture from c. 1850, examining the changing range of architectural types and construction, the influence of Bauhaus, the theoretical schools, literary movements, and the socio-political impact on the look of buildings. Museum and on-site visits may be part of the curriculum.

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.

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.

307 Oil Painting I (3) UC:CSU
Lecture 1 hour; Laboratory 5 hours.
Stresses skills and techniques in the medium. Both traditional and contemporary approaches to ideas and materials are explored.

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.
This class 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 Exhibition Design (3) CSU
Lecture 2 hours; Laboratory 4 hours.
This course provides practical application of design concepts as they relate to museum and art exhibitions, environments, displays, and installations. Students will gain a working knowledge of commercial and non-profit galleries. Exhibition preparation, installation, funding, gallery visits, and guest lectures will be part of the curriculum.

604 Graphic Design I (3) CSU
Lecture 2 hours; Laboratory 2 hours.
Advisory: *Completion of Art 501*
This course introduces beginning graphic design students to the concepts, principles and procedures used in the field of graphic design.

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 course covers the principles of design for building websites for desktop and mobile delivery. Students will apply the knowledge they learn to create effectively designed sites.

700 Introduction to Sculpture (3) UC:CSU
Lecture 1 hour; Laboratory 5 hours.
This class provides experiences in designing and executing sculpture form. Techniques include modeling, casting, carving and fabricating with sculpture media. Historical and cultural antecedents are presented 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
Students in this beginning course learn basic methods of making pottery. Students make effective use of design factors unique to clay.

709 Ceramics I (3) UC:CSU
Lecture 1 hour, Laboratory 5 hours.
Prerequisite*: Art 708 with a grade of "C" or better.*
This course provides continuation of introduction to Ceramics. The emphasis of this course is forming on the throwing wheel, glaze formulation, and kiln management. The course material stresses further 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.*
This course provides continuing practice in ceramic forming processes and surface treatments with emphasis on three-dimensional design.

711 Ceramics III (3) UC:CSU
Lecture 1 hour, Laboratory 5 hours.
***Prerequisite**: Art 710 with a grade of "C" or better.*
This course is a continuation of Art 710 with increased emphasis on individually planned projects with artistic inspiration.

185 Directed Study - Art (1) CSU - RPT 2
Students pursue on their own an in depth study of a subject of special interest to them in studio art. Students work independently but consult with the instructor on a weekly basis to critique their work.

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.
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.
***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.
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.
Students study 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.

8 Shop Operations and Management I (4)
Lecture 2 hours; Laboratory 6 hours.
This course provides real world automotive shop experience in the diagnosis and repair of today's automobile and increased experience in the repair of automotive braking, chassis and suspension systems, standard transmissions, clutches, drive lines, differentials, air conditioning, engines, electrical, fuel, and emission systems.

9 Shop Operations and Management II (4)
Lecture 2 hours; Laboratory 6 hours.
This course provides additional real world automotive shop experience in the diagnosis and repair of today's automobile and increased experience in the repair of automotive braking, chassis and suspension systems, standard transmissions, clutches, drive lines, differentials, air conditioning, engines, electrical, fuel, and emission systems. Emphasis on preparation for ASE (Automotive Service Excellence) certification in areas A-1 through A-8.

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).
This Course 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.

38 Automotive Service Technology Projects Laboratory-Shop Operations (2) - RPT 3
Laboratory 6 hours.
This Shop Operations Projects Laboratory class is designed for students who need additional laboratory experience prior to and while beginning their career in the automotive industry. Practical experience in the following areas of on car system repairs are performed:engine, transmission, differential, braking, steering, suspension, electrical, heating and air conditioning systems.

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. This course is also designed for students wishing to improve their customer relations, pricing and sales technique skills.

53 Introduction to Alternative Fuels (3) - RPT 3
Lecture 2 hours; Laboratory 2 hours.
This course is an introductory course on alternative fuel vehicles in the automotive industry. Various alternative fuels will be compared, such as Electric, Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG), Ethanol, Methanol, Bio-diesel, electric vehicles, and hybrid electric vehicles. Topics will include alternative fuel theory, design, operation, and safety. Learning strategies include: multimedia presentations, discussions, research, and lab practice. Laboratory activities will include vehicle diagnosis, vehicle maintenance, and vehicle repair.

55 Hybrid Service and Safety (3)
Lecture 2 hours; Laboratory 2 hours.

This course is an introductory course on Servicing and Safety Issues on Hybrid-Electric Vehicles. Topics will include the various Hybrid-Electric designs, operation, service and safety of vehicles currently in production as well as those being developed for the future. Learning strategies include: multimedia presentations, discussions, research, and lab practice. Laboratory activities will include vehicle safety practices, diagnosis, maintenance, repair, and service procedures.

185 Directed Study - Automotive Service Technology (1) - RPT 2

285 Directed Study - Automotive Service Technology (2)

385 Directed Study - Automotive Service Technology (3)

This course allows students to pursue directed study in Automobile 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 health professions and research careers. 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, invertebrate animals and molecular biology.

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.*

This course in marine biology examines the nearshore marine communities of the Pacific coast of southern California and Baja California. Studies include the principles of community ecology and community analysis and the identification and biology of the algal, invertebrate and fish assemblage that form the nearshore communities. An emphasis is placed on the morphological, physiological and behavioral adaptations of organisms and on understanding the role that biological interactions play in determining the community structure and organization.

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.

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 become knowledgeable in oceanographic research techniques and 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 - RPT 1
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. Students will produce content in the form of podcasts, live shows, radio documentaries, broadcast news spots, etc. Basic writing for broadcast, audio storytelling and editing will be covered. Ethical and legal aspects of broadcast communication and radio journalism are also covered.

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, such as microphone techniques, reading for the camera, interviewing techniques, preparing continuity and transitions for commercial copy, promotional and public service announcements, news copy, weather and sports announcing. An opportunity may be provided to create programming for the campus radio station or Internet radio station.

114 Sound Design for Digital Film/Video/Radio (3)
Lecture 2 hours. Laboratory 2 hours
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.

185 Directed Study- Broadcasting (1) CSU - RPT 2
Lecture 1 hour.

285 Directed Study- Broadcasting (2) CSU
Lecture 2 hours.

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.

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.
Same as Environmental Science 34.
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.*
***Advisory**: 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.*
***Advisory**: 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.

This course 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.

20 The Mexican-American in California (3) UC:CSU

Lecture 3 hours.

This course surveys the political, economic, social, cultural and intellectual history of Mexicans on the Pacific Coast from Pre-Columbian times, through the Spanish Colonial era, the Mexican period, and to the Euro-American presence. Special emphasis will be placed on California.

80 Chicano Politics (3) UC:CSU

Lecture 3 hours.

Students examine U.S. history and political issues relevant to the Chicano community; the strategies of Chicano political activism in the United States; social change movements, issues, and problems that are relevant to the Chicano Community.

185 Directed Study - Chicano Studies (1) UC:CSU - RPT 2

Lecture 1 hours.

285 Directed Study - Chicano Studies (2) UC:CSU

Lecture 2 hours.

385 Directed Study - Chicano Studies (3) UC:CSU

Lecture 3 hours.

This course allows students to pursue directed study in Chicano Studies on a contract basis under the direction of a supervising instructor.

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.

7 Introduction To Curriculum In Early Childhood (3) UC:CSU
Lecture 3 hours.

Exploration of appropriate curriculum and environments for young children. Students examine a teacher's role in supporting development and positive learning experiences for all young children using observation and assessment strategies and emphasizing the essential role of play. Planning, implementation and evaluation of curriculum includes but is not limited to: language and literacy, social and emotional learning, sensory learning, art and creativity, math, natural and physical sciences.

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**s: 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.

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.

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 Early Intervention for Children with Special Needs (3) CSU
Lecture 3 hours.
The course is designed for students interested in working with young children with special needs and their families. Instruction focuses on accommodating and adapting the physical environment, instructional strategies and curriculum to meet the needs of differently abled children from birth through preschool

45 Programs for Children with Special Needs (3) CSU
Lecture 3 hours.
Overview of programs providing special education services for children with special needs focusing on preschool through school age. Includes a study of various programs, legislation, characteristics of exceptionalities and educational implications. Observation in schools will be required.

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.

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.
This course examines motion pictures as a communicative art form from late 1800s to present. Students will analyze 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.
This course includes a critical survey of motion pictures as a 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.
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.
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
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.
***Advisory**: 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 Internet for Business (3) - RPT 3
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.
This course gives students an introduction to the uses, concepts, techniques and terminology of computing. Lectures and course materials place the possibilities and problems of computer use in historical, economical and social contexts. The course provides college-level and workplace skills in word processing, spreadsheets and presentation graphics. The course also provides familiarization with databases and visual programming and includes Internet methods and procedures.

514 Supporting Windows Desktops (3) CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisites**: Computer Science 572 and 587 with a grade of "C" or better, which may be taken concurrently with Computer Science 514.*
This course covers deployment, installation, configuration, and maintenance of Windows desktops in networked environments with an emphasis on practical, hands-on learning strategies. Students will learn multiple installation and upgrade strategies, disk and device management, and basic network configuration for domain-based and workgroup-based networks. Techniques for performance monitoring and security will also be practiced. The course is designed to help students prepare for Microsoft certification.

516 Beginning Computer Architecture and Organization (3) UC:CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisites**: Co Sci 575 with a grade of "C" or better.*
This course covers 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, system and user stacks, 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, and combinational 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 Using Access and SQL (3) CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**: Computer Science 501 with a grade of "C" or better.*
This class includes a complete presentation of database management using Access, including database design, queries, macros, toolbars, VBA and SQL. Also included in this course are advanced work in Excel, the use of the Internet for these products and OLE product integration. We are currently teaching Microsoft Operating System and advanced Microsoft Office (Excel and Access) with emphasis on Access and SQL.

534 Operating Systems (3) UC:CSU
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 Supporting Windows Services (3) CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite:** Computer Science 587 with a grade of "C" or better*
Students will learn strategies for deploying, installing and configuring Windows Server operating systems and their application layer services. Deployed services will include Web services, File and Printer sharing, FTP, Terminal Services, and handling media. The basics of file system, printing, and web security will be addressed.

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.*
This course is an introduction to data structures and their applications and includes the role of the abstract data type in object-oriented programming design. This course also includes the definition, implementation, and application of data structures: stacks, queues, linked lists, trees, and graphs. The course also includes a study of recursion, a comparative study of sorting and searching algorithms, and 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.*
This course will cover the concepts and configuration strategies associated with local area network (LAN), and virtual local area network (VLAN) switching. The course will cover basics of switch configuration file and operating system management along with basic command line skills. Loop prevention with the Spanning Tree Protocol (STP) will be discussed. Creating and managing VLANs using 802.1Q protocols, along with VLAN Trunking Protocols (VTP) will be covered and students will implement VLANs and redundancy with both network simulation tools and a physical network lab. This is course 3 in the Cisco program.

538 Implementing Wide Area 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, 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**s: Co Sci 575 with a grade 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*
This course teaches object Oriented Programming in C++. Object-oriented programming methodology includes encapsulation, data hiding, inheritance and polymorphism -- with emphasis on classes, constructors, destructors, friend functions, virtual functions, general and operator function overloading. These topics are studied and implemented in programming assignments and a project due at end of the semester.

541 Advanced Database Programming Using Visual C# (3) CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**s: CoSci 533 and Co Sci 575*
This course focuses on programming on personal computers for database applications in a Windows environment. Students use C# programming language for the front-end interface for database access which includes building complete database management applications. The course also covers ADO and SQL.

546 Advanced Computer Architecture and Organization (3) UC:CSU
Lecture 2 hours; Laboratory 2 hours.
***Prerequisite**s: Computer Science 516 and 536, both with a grade of "C" or better.*
Course topics include: analysis of digital and sequential logic circuits; design of the main memory systems, including considerations of caching, error detection, and error correction; cpu design, including binary arithmetic, register usage, and a comparison of different addressing schemes; bus design, including its use in I/O; and performance-enhancing innovations such as superscalar architecture, pipelining, and multiprocessing. The student may write C++ programs simulating various architectural features studied.

547 Introduction to Digital Imaging Using Photoshop (3) CSU - RPT 3
Lecture 2 hours; Laboratory 2 hours.
Introduction to computer graphics and imaging concepts. 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 other consumer and commercial 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**s: 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.*
This course 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
Lecture 2 hours; Laboratory 2 hours.
This course is an introduction to the hardware found in various personal computers (such as desktop and laptop computers), 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.*
In this course, you will learn how to perform basic router configuration, operating system maintenance, and file management. But the key emphasis is on learning to configure a variety of routing strategies including static routing and dynamic routing with RIP (V1 and V2), EIGRP, and industry-standard OSPF. This is the second course in the Cisco Academy CCNA preparation program.

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.*
This course covers fundamentals of computer networking and is the first course in the Cisco Network Academy program for CCNA preparation. Students will learn about common network functionality and topologies; the functions and applications of the TCP/IP protocols; the relationship of the OSI model to TCP/IP based networking; and basic router and switch architecture. The course also places a major focus on understanding IP Addressing rules, subnet masking, and CIDR. Additionally, the course will cover network cable types and use.

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
Health
Industrial Technology General
Journalism
Music
Nursing
Photography
Physical Education
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

General work experience education is supervised employment which is intended to assist students in acquiring desirable work habits, attitudes and career awareness. The work experience need not be related to the student's educational goals. Students must be employed or volunteering/interning in order to participate in the program. Cooperative Education, General is approved for Cooperative Education, Work Experience, and Internships. See listing under Cooperative Education. Each 75 hours of paid work equals one semester credit. Each 60 hours of non-paid work equals one semester credit.

Criminal Justice

See **Administration of Justice**

Dance Specialties

402 Afro Hip Hop (1) UC:CSU - RPT 3
Laboratory 2 hours.

Afro Hip Hop as a jazz style of dance will be explored through movement and sound/body rhythms. Hip Hop is grounded in percussive rhythms of high energy and urban influences. Each week will include pre-warmups, warm-ups and movement techniques which will include several styles of hip hop and traditional African movement combinations. The language of dance, especially relative to jazz and movement performance will be broadened. Students will be challenged to develop a philosophy of this style of jazz and specifically in relation to styles learned and performed in the current social strata.

441 Latin Social and Salsa Dance (1) UC:CSU - RPT 3
Laboratory 2 hours.

This course features Latin social dances, which develop into contemporary popular social and ballroom styles in America. Students will have an opportunity to learn a variety of rhythms indigenous to the Latin cultures which develop into current ballroom styles: Merengue, Cha Cha, Rhumba, Samba, Tango, and Salsa.

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 in Dance Theatre (2) CSU - RPT 3
Laboratory 4 hours.

Students will gain practical experience and an awareness of the social, cultural and historical influences that create art and dance. Students will be coached to develop personalized projects based on individual dance theater interests. The primary objective is to increase knowledge and experience in the creative areas of Dance Theater such as, choreographic design, performance dynamics, costume preparation, movement analysis, dance production administration and musical interpretation. Students are given the opportunity to produce choreography, direct rehearsals and develop audition committees for dance productions.

801 Modern Dance I (3) UC:CSU
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.

805 History and Appreciation of Dance (3) CSU - RPT 2
Lecture 3 hours.
This course will examine dance for its historical, religious, social, and artistic functions. "Dance Appreciation" is intended to be an introduction to many world dance forms. This course provides a historical perspective of dance from ritual to contemporary theatrical dance forms. This course will examine the progression of dance throughout western society in the forms of court dance, ballet, modern dance, musical theater, dance theater, tap, jazz and ballroom dance. Dances will be viewed live as well as in video form throughout the course. Class lectures and discussions will broach the topics of dance as it relates to religion, history, sociology, aesthetics, and to the cultures where the forms are manifest.

822 Dance Rehearsals and Performances (1) UC:CSU - RPT 3
Laboratory 2 hours.
Students will gain practical experience and an awareness of the social, cultural and historical influences that create art and dance. Traditional and contemporary dance techniques will be explored and presented in dance concerts and site specific locations. Emphasis is place on developing skills in chorographic design, performance dynamics and movement analysis.

***UC Credit** limit for Dance activity courses is 4 units.*

285 Directed Study - Dance (2) CSU
Allows students to pursue Directed Study in Dance under the direction of a supervising instructor.

Dance Techniques

101 Dance to Fitness (1) UC:CSU - RPT 3
Laboratory 2 hours.
Using a variety of dance styles and movement forms students with different physical abilities will be able to participate in a fitness program that develops flexibility, strength and cardiovascular endurance. The course includes movement phrases which are designed to develop an understanding of rhythm and increase coordination. Each class will consist of a warm-up, introduction of basic rhythmic skills, dance workout, choreography with soft-rebound and smooth-impact movement phrases, stretching techniques and a cool down. Each individual will find his/her own Personal Training Zone (PTZ).

401 International Folk Dance (1) UC:CSU - RPT 3
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
Laboratory 2 hours.
Students learn basic Modern Dance steps and combinations, terminology, music, and appreciation of dance as a performing art.

434 Ballet (1) UC:CSU - RPT 3
Laboratory 2 hours.
This course emphasizes and introduces students to ballet through basic steps and combinations, terminology, music, and appreciation of dance as a performing art.

437 Jazz Dance (1) UC:CSU - RPT 3
Laboratory 2 hours.
This course teaches the principles of kinesiology, technique, terminology and practice of jazz dance. It will emphasize correct alignment, placement and execution of a wide variety of jazz movements. It will also teach various styles and the roots and history of jazz in a contemporary society.

440 Social Dance (1) UC:CSU - RPT 3
Laboratory 2 hours.
This course provides an overview of the American Ballroom and Swing dance forms including but not limited to East Coast Swing, Shag, Charleston, Lindy, Balboa, Shim Sham, Fox-trot or Quick Step. The course will also provide an overview of popular Latin dance forms such as Salsa, Cha-Cha, Rumba, Samba and Bachata. Emerging social dance trends of today; Tango, West Coast Swing, Blues dancing and Country dance forms may also be explored.

446 Tap Dance (1) UC:CSU - RPT 3
Laboratory 2 hours.
Students learn basic tap dance steps and combinations, terminology, music, and appreciation of dance as an art form.

452 Introduction To Choreography (1) CSU - RPT 3
Laboratory 2 hours.
This course is an introduction to basic principles of dance composition and choreography. It includes theory and practice using improvisation, critical analysis, and implementation of the elements of space, time, and energy in student projects.

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 Dance and Pilates for Movement Fundamentals (1) CSU – RPT 3
Laboratory 2 hours.
This course will progress through a lecture and lab experience in movement fundamentals based in Pilates and dance techniques. The course will focus on alignment, articulation and range of motion through a series of exercises designed to optimize postural alignment and muscular balance. Introductory techniques and intermediate variations are used to enable the maximum range of movement essential for various dance styles. Core and centering exercises will provide the strength required to control and stabilize all forms of movement. This class has an easy progression to follow and includes appropriate modifications for various fitness levels.

***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.
Students learn the 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.
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.
This course allows students to pursue directed study in Economics on a contract basis under the direction of a supervising instructor.

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

Education

6 Methods and Materials of Tutoring (1) - RPT 3
Lecture .33 hours; Laboratory 1.33 hours
This is 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.

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 K-5 setting is required.

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

Electronics

4A Fundamentals of Electronics I (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 I (1) CSU
Laboratory 3 hours.
In this course, students will deal with 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 II (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. Emphasizes the solution of alternating current circuit problems.

6B Fundamentals of Electronics II (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 (3) CSU
Lecture 3 hours.
Advisory: *Completion of Electronics 4A and 4B, 6A and 6B and concurrent enrollment in Electronics 8B.*
Students will learn 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, tubes. 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 (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 ans 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 systems, digital communications systems and modems are built and tested. Communications test equipment usage, including signal generator, oscilloscope, FFT spectrum analyzer.

48A Integrated Circuits (3) CSU
Lecture 3 hours.
Advisory: *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.
Advisory: *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 I (3) CSU
Lecture 3 hours.
***Advisory**: Electronics 6A and 6B. Concurrent enrollment in Electronics 8A recommended.*

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 I (1) CSU
Laboratory 3 hours.
***Advisory**: 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 Digital Circuits II (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 Digital Circuits II (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 2
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.

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

Engineering

101 Introduction To Science, Engineering And Technology (2) UC:CSU
Lecture 2 hours.

This course provides an introduction to the engineering profession and its different fields, and an understanding of engineering processes and tools including experimentation, data analysis, and computer and communication skills. Emphasis is given to technical communications, ethical considerations, and engineering design and analysis skills. Students are introduced to computer systems used in engineering practice such as spreadsheets, computer-aided design, and computational software.

131 Statics (3) UC:CSU
Lecture 3 hours.

This is a first course in engineering mechanics. The course covers 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.*

English 21 is designed to improve the writing of sentences, paragraphs, and short essays. It covers punctuation, spelling, and sentence structure and develops the ability to read analytically and think logically. Other objectives are to assist students to write effectively, to introduce a variety of literary types and to encourage more careful reading at a level that challenges their present understanding.

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.*
Students study literature and literary criticism in order to develop critical thinking, reading and writing skills beyond the level achieved in English 101, emphasizing logical reasoning, analysis, and strategies of argumentation.

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.*
This course 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 1608 to the Civil War, emphasizing major writers and works.

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.

214 Contemporary Literature (3) UC:CSU
Lecture 3 hours.
***Prerequisite**: English 101 with a grade of "C" or better.*
English 102 recommended but not required.
Concentrates on significant literature since 1920, primarily American and British. Includes lectures and discussions, oral and written reports. Emphasis is placed upon critical analysis of short story, novel, drama, and poetry.

215 Shakespeare I (3) UC:CSU
Lecture 3 hours.
***Prerequisite**: English 101 with a grade of "C" or better.*
English 102 recommended but not required.
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

285 Directed Study - English (2) CSU

385 Directed Study - English (3) CSU
Conference 1 hour per unit.
This course 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: 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.
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.
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.
This course presents a survey of modern water treatment methods for drinking water, industrial water, and facilities water systems. Discussions include methods for removal of particles, dissolved chemicals and disinfection. Methods of water monitoring and conservation and intererpretation of water quality reports will also be examained.

34 EPA Methods for Environmental Analysis (4)
Lecture 3 hours. Laboratory 2 hours.
Same as Chemistry 34.
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.
Students study 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.
***Advisory**: 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.*
***Advisory**: 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.*
***Advisory**: 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.*
***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.*
***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 pass/no pass 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.
A study of the origins, growth, and development of French civilization in its many forms with special emphasis on modern France and Francophone countries and its literary movements, ideas, sciences and the arts. Designed as a humanities course for all college students. Recommended for French majors. Lectures and readings are in English. Basic computer skills required for accessing online information.

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.*
This course provides students with a brief survey of the fundamentals of Geographic Information Systems (GIS). The course will provide hands on experience with hardware and software elements used in GIS with an emphasis on vector-based data structures using ArcView. Raster-based data structures and software will also be presented. Specific topics will include hands-on experience in map scales, coordinate systems, data sources and accuracy, data structures, working with spatial data, map features and attributes, map overlays, manipulation of databases, creation of charts and graphs and presentation of data in map layouts. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

33 Intermediate GIS Applications: ArcView (3) CSU - RPT 3
Lecture 2 hours; Laboratory 2 hours.
Same as Geography 33. Credit not given for both courses.
Advisory: *Completion of Geography 32 or GIS 32.*
This course provides students with more in-depth use of GIS software and familiarization with more advanced GIS software operations. Students will apply 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.*
Students will receive a comprehensive study of GIS cartography including cartographic principles, data acquisition methods used in map production, and methods of base map development. The course will include an in depth study of cartography (history, principles, map projections, scales, and map accuracy). Methods of data acquisition will be include the basic principles used in remote sensing, aerial images and the use of Global Positioning Systems (GPS) in the field for map feature locations. Techniques used in GIS base map development (scanning, digitizing and coordinate geometry) will also be introduced. The course will include production of professional quality maps using ArcView software. May include field trips.

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.*
Students are introduced to the basic use of a hand-held Global Positioning System (GPS) unit in the field. The course will include an introduction to the terminology, hardware and technology used in GPS. Instructions will include the fundamentals of operating a hand-held GPS unit. The course will introduce the basic techniques used in the determination of location and completion of a traverse using a GPS unit and topographic map, as well as collecting data to be used in production of a GIS-generated map.

38 Spatial Analysis and Modeling (3) CSU
Lecture 2 hours; Laboratory 2 hours.
Same as Geography 38. Credit not given for both courses.
Prerequisites*: Geography 31 or GIS 31, and Geography/GIS 32 (ArcView) with a grade of "C" or better or equivalent.*
This course will introduce students to spatial analysis. The course will briefly review the principles of statistics and relate them to methods used in analysis 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. Applications and problems in spatial correlation will be discussed including interpretation of results of spatial analysis.

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.*
Students will apply classroom instruction to real-world GIS projects in the community in a business, government or non-profit agency under the supervision of a faculty advisor. The short-term internship will include periodic meetings with the advisor, the completion of interim reports, and the presentation of a final report at the completion of the internship.

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.

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.

This course provides 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.*

This course 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.

19 Introductory Meteorology Laboratory (2) CSU
Lecture 1 hour. Laboratory 2 hours.

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.

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.)

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 GIS 32. Credit not given for both courses.)
***Advisory:** Geography 31 or GIS 31, and Computer Science 501.*

This course provides students with a brief survey of the fundamentals of Geographic Information Systems (GIS). The course will provide hands on experience with hardware and software elements used in GIS with an emphasis on vector-based data structures using ArcView. Raster-based data structures and software will also be presented. Specific topics will include hands-on experience in map scales, coordinate systems, data sources and accuracy, data structures, working with spatial data, map features and attributes, map overlays, manipulation of databases, creation of charts and graphs and presentation of data in map layouts. (Currently using ESRI's ArcGIS software: versions upgraded to maintain currency with industry software usage.)

33 Intermediate GIS Applications: ArcView (3) CSU - RPT 3
Lecture 2 hours; Laboratory 2 hours.
(Same as GIS 33. Credit not given for both courses.)
***Advisory:** Geography 32 or GIS 32.*

This course provides students with more in-depth use of GIS software and familiarization with more advanced GIS software operations. Students will apply 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.*

Students will receive a comprehensive study of GIS cartography including cartographic principles, data acquisition methods used in map production, and methods of base map development. The course will include an in depth study of cartography (history, principles, map projections, scales, and map accuracy). Methods of data acquisition will be include the basic principles used in remote sensing, aerial images and the use of Global Positioning Systems (GPS) in the field for map feature locations. Techniques used in GIS base map development (scanning, digitizing and coordinate geometry) will also be introduced. The course will include production of professional quality maps using ArcView software. May include field trips.

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.*

Students are introduced to the basic use of a hand-held Global Positioning System (GPS) unit in the field. The course will include an introduction to the terminology, hardware and technology used in GPS. Instructions will include the fundamentals of operating a hand-held GPS unit. The course will introduce the basic techniques used in the determination of location and completion of a traverse using a GPS unit and topographic map, as well as collecting data to be used in production of a GIS-generated map.

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.*
This course will introduce students to spatial analysis. The course will briefly review the principles of statistics and relate them to methods used in analysis 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. Applications and problems in spatial correlation will be discussed including interpretation of results of spatial analysis.

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.

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.
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.

22A Geology Field Study - Mojave (1) UC:CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

22B Geology Field Study - Basin and Range (1) UC:CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

22C Geology Field Study - Yosemite (1) UC:CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

22D Geology Field Study - Death Valley (1) UC:CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

22E Geology Field Study - Joshua Tree (1) UC:CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

22F Geology Field Study - San Andreas Fault (1) CSU
Lecture 0.5 hours; Laboratory 1 hours.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the selected field area. This course includes a multi-day field excursions to various locales of geological interest and may involve camping in primitive wilderness environments.

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.
Students study 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.
Women's Personal Health addresses Socio-cultural influences and a study of factors affecting physical, social, and the emotional well-being of women in our society.

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.*
Principles of Healthful Living offers health concepts to use today and tomorrow as guidelines for self-directed responsible living. Emphasis is placed on relating health concepts to the student's mental, emotional, spiritual, and physical well-being.

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.
The course 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.
The course 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.

5 History of the Americas I (3) UC:CSU
Lecture 3 hours.
Course 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.
The course 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 inter-political relationship.

11 Political and Social History of the United States I (3) *UC:CSU
Lecture 3 hours.
May be offered as an honors section.
The course 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.
The course 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.

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.

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.
The course 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.

86 Introduction to World Civilizations I (3) UC:CSU
Lecture 3 hours.
This course traces the development and interrelationships of the major world civilizations and their cultural traditions and contributions from the earliest times to the era of European expansion in the sixteenth century.

87 Introduction to World Civilization II (3) UC:CSU
Lecture 3 hours.
The course 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 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.
A study in some depth of cultural history from the Industrial Revolution to the present. The approach is interdisciplinary, involving art, music, literature, drama, philosophy, and history. The emphasis is upon the evolutionary development which has influenced and shaped modern culture.

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.

A study in some depth of cultural history from the Industrial Revolution to the present. The approach is interdisciplinary, involving art, music, literature, drama, philosophy, and history. The emphasis is upon the evolutionary development which has influenced and shaped modern culture.

33 Energy Auditing and Management (3)
Lecture 3 hours.

This course 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

385 Directed Study - Industrial Technology (3) CSU
Conference 1 hour per unit.

This course 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 with GD&T (3) CSU
Lecture 2 hours; Laboratory 2 hours.

Provides training in reading basic engineering prints as used in contemporary manufacturing industries. Both the visualization and interpretation aspects of print reading are covered. Reviews history of engineering drawing and tolerancing and overviews geometric dimensioning & tolerancing standards and applications.

110 Engineering Graphics (3) UC:CSU
Lecture 2 hour; Laboratory 2 hours.

This introductory course covers the fundamentals of technical drawing and an introduction to computer-aided design (CAD) with a focus on mechanical applications. Topics include the development of visualization and technical sketching skills in conjunction with orthographic projections; dimensioning and tolerancing practices, including an introduction to geometric dimensioning and tolerancing (GD&T); and descriptive geometry with applications to engineering. Lab work includes hand sketching and the use of two- and three-dimensional CAD systems. Students use one or more CAD software packages to draft and model various objects. The use of CAD software is an integral part of the course.

115 Fundamentals of 2D CAD (2) CSU
Lecture 1 hour; Laboratory 3 hours.

This course teaches the fundamentals of 2D computer-aided design and drafting. Students will utilize CAD software such as AutoCAD to create and modify two-dimensional drawings, with a focus on mechanical parts. Students will learn and apply intermediate CAD skills in drawing, plotting, and dimensioning and tolerancing in accordance with industry standards. The course assumes the student has some prior knowledge of technical drawings, either by taking IND TEK 110 or an equivalent Engineering Graphics course, or through relevant industry experience.

210 3D Computer-Aided Design (3) CSU
Lecture 1 hour; Laboratory 5 hours.

This course teaches the fundamentals of 3D solid modeling. The topics include sketching, part modeling, assembly modeling, and engineering drawing creation using 3D parametric modeling software. The course assumes the student has prior knowledge of technical drawings, either by taking IND TEK 110 or an equivalent Engineering Graphics course, or through relevant industry experience.

212 Computer-Aided Design Projects Laboratory (1) RPT 2
Laboratory 3 hours.

This laboratory course provides the Engineering Design & Technology student with increased experience and competency in the use of 3D CAD (computer-aided design) software.

310 Engineering Design (3) CSU
Lecture 2 hour; Laboratory 2 hours.

This course provides an introduction to mechanical design for drafters, designers, and engineers. Topics include the design process and methodologies, documentation practices, an overview of mechanisms and mechanical devices, material selection, manufacturing processes, and technical communication. The use of 3D CAD software and a design project are integral to the course.

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.
This introductory course provides the student an overall picture of the history of numerical control, the wide variety of CNC equipment available, basic coding systems, axes designation and notation, and cnc program preparation equipment. Students will develop cnc programs for assigned projects and 'run' their programs on a CNC mill.

230 Technology of Metal Machining Processes II (3)
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 130.*
In this course, students will increase their depth and breadth of understanding of the theoretical concepts and practical skill introduced in IT 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.*
This course continues the study of CNC programming begun in IND TEK 140. This course introduces CNC turning using the popular Haas cnc turning machine tool. Expanded exposure to axes designation and word address formats for cnc part programming. The student will develop and 'run' CNC part programs for facing, turning, drilling, boring, and threading.

248 CNC Programming and Machine Operation - Mill (3)
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 130 and 140.*
This course acquaints the advanced student with three axis CNC applications involving manufacturing planning, CNC paperwork, CNC mill programming using linear and circular interpolation, bolt hole patterns, pocketing, cutter compensation, and implementation of programs using the Haas machining center. Lab emphasizes writing and running CNC mill programs, machining parts representative of typical industry hardware.

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 IT 130 & IT 230 for those persons who will be employed in the metal machining industry. Close tolerance work will be required. Additional techniques such as EDM and Jig Boring will be introduced. The student will be required to begin designing and building a major project (that may span several semesters).

332 Projects Laboratory in Metal Machining Processes I (3) - RPT 2
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 230.*
This course develops skills in the techniques of design, planning and execution. Prototype work not possible in regular machine shop 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
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 140.*
Computer-aided manufacturing CNC programming using SURFCAM software. 2-D and 3-D geometry creation and manipulation, cutter selection & parameters, tool path creation and verification covered. Students will complete CNC programming assignments using the current SURFCAM software called VELOCITY.

444 Projects Laboratory-CNC Lathe Programming (3) - RPT 1
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 244.*
This course develops skills in the techniques of design or selection of an advanced project, planning, and execution of CNC lathe program(s) to complete project. Part programs and CNC programming practices not possible in IT 244 may be covered. Emphasis is placed on developing a project to be programmed and machined using CNC turning machines, requiring extensive job planning and independent study.

448 Projects Laboratory-CNC Mill Programming (3) - RPT 1
Lecture 1 hour; Laboratory 5 hours.
Advisory: *Completion of Industrial Technology 248.*
This course develops skills in the techniques of design or selection of an advanced project, planning, and execution of cnc mill program(s) to complete project. Part programs and CNC programming practices not possible in IT 248 may be covered. Emphasis is placed on developing a project to be programmed and machined using CNC mill machines, requiring extensive job planning and independent study.

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

Industrial Technology (Pre-Engineering)

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.

Industrial Technology (Welding)

161 Oxy-Acetylene Welding I (3)
Lecture 1 hour; Laboratory 5 hours.
This course 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. Emphasize the rules of safety along with fundamental information on the tools and techniques used in the shielded metal process and welding electrodes.

262 Arc Welding II (3)
Lecture 1 hour; Laboratory 5 hours.
Provides the student with the intermediates level theory and techniques required for successful gas tungsten arc welding of ferrous and nonferrous metals. Review basic safety and equipment information then explores the gas metal and flux cored arc welding process.

361 Inert Gas Arc Welding I (3)
Lecture 1 hour; Laboratory 5 hours.
Gives the student a solid foundation in the principle and practices necessary to construct weldments using gas metal arc welding (GMAW). Stresses welding safety and elementary information on the equipment and procedures critical to GMAW.

362 Inert Gas Arc Welding II (3)
Lecture 1 hour; Laboratory 5 hours.
Provides the students 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 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.
This course 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.
***Advisory**: 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.*
***Advisory**: 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.*
***Advisory**: 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 (3) UC:CSU
Lecture 3 hours.
This course surveys the cultural development of Italy from the earliest period to the present day. Study of geography and history as well as of aspects of society and political institutions provides a framework for understanding Italian contributions to world civilization in the fields of art, architecture, literature, music and the sciences. This course is conducted in English.

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.
***Advisory**: 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.*
***Advisory**: 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.
The course provides additional training in the comprehension, speaking, grammar, reading and writing of modern Japanese. Topics and cultural information relevant to the daily lives of Japanese (i.e. food, transportation, seasons, geography, traveling and traditional customs) are included.

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 courses for authentic communication purposes. Explores the modern lives and customs of Japanese people and prepares for real encounters with Japanese culture. Includes intercultural comparisons between American culture and Japanese culture.

185 Directed Study - Japanese (1) CSU - RPT 3

285 Directed Study - Japanese (2) CSU

385 Directed Study - Japanese (3) CSU
Conference 1 hour per unit.
Allows students to pursue Directed Study in Japanese on a contract basis under the direction of a supervising instructor.

Journalism

100 Social Values in Mass Communication (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
UC credit limitation: Journalism 100 and 251 combined: maximum credit, one course.
A general interest survey and evaluation of the mass media in economic, historical, political, psychological and social terms. Focus is to help the media consumer better understand today's mass communications: newspapers, radio, television, motion pictures, magazines, advertising and public relations. Course content discusses relationships, ethics, rights and responsibilities of media in today's society.

101 Collecting and Writing News (3) CSU
Lecture 3 hours.
***Advisory**: 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.*
***Corequisite**: Journalism 217*
This course 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.
***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.
***Advisory:** Journalism 100,101; Photo 10.*
UC Credit Limitation: Journalism 100 and 251 combined; maximum credit, one course.
This 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. Emphasis is put on determining obvious and implied messages and their impact on individuals and society. This course 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.
***Advisory:** 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.

260 Media Design And Copy Writing (3) CSU
Lecture 2 hours; Laboratory 2 hours.
This course covers principles and theory of design as it relates to various forms of media, such as magazines, brochures, Web sites, newspapers, etc. The practical aspect of this class focuses on the news and public relations aspects of digital design and copy writing. A basic introduction to typography, color, print design and web design will be covered with an emphasis on journalism and public relations based projects. Headline and advertising copy writing and editing will be discussed, including formatting and style. An introduction to design software will be given.

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**.

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.
Students will receive individualized, self-paced work on punctuation, sentence structure and correctness, supplemented by computer-assisted instruction.

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
Physiology

Linguistics

1 Introduction to Language and Linguistics (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Surveys the great variety of ways humans communicate, both verbally and non-verbally. The course focuses on the structure, function, and history of language, with selections on the sociology and psychology of language, language learning, and the origins and evolution of language.

2 Introduction to Sociolinguistics (3) UC:CSU
Lecture 3 hours.
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.
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 Entrepreneurship (3) CSU
Lecture 3 hours.
This course presents a systematic approach to successful small business operations. Material covered includes 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 who wish to challenge the recommendation of the assessment test should consult a Mathematics Department advisor.

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

103 How to Succeed at Math (1) (NDA) - RPT 2
Lecture 1 hours.
This course covers basic study skills necessary to successfully complete mathematics courses. Topics include preparing for class, solving math problems, where to go for help, minimizing test anxiety, and memory techniques for recalling information, with a special emphasis on having a positive experience in math.

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.

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.

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.
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.

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 helminths (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.This course is recommended for students who wish to pursue professional degrees in such health fields as: BSN, Pharmacy, Veterinary medicine, Physician Assistant, Optometry.

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.
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.
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 Multimedia, Digital Video And Radio (3) CSU - RPT 3
Lecture 2 hours. Laboratory 2 hours
Intermediate course dealing with all aspects of digital media including multimedia/video/radio sound recording, mixing, and editing from theory to application, centering on learning the basic parts and functions of multimedia/digital video/radio sound equipment, as well as sound techniques and aesthetics with an emphasis on editing and post- production for digital media. Students will develop an audio portfolio specific to post-production. An emphasis will be placed on new and emerging forms of media and media dissemination, including dissemination to the internet and digital devices.

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 course in digital imaging covers the principles and procedures used in digital image manipulation to prepare images for print and multimedia delivery.

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 - RPT 2
Lecture 2 hours; Laboratory 2 hours.
Note: *Computer applications covered in this class are Adobe Illustrator and Macromedia Flash.*
This course in vector graphics for multimedia covers software to produce illustrations, graphics, icons and other artwork intended for interactive delivery. Students will apply vector graphics in various multimedia applications to produce interactive games, animation and mobile applications.

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.

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.*
This course is designed for Music Majors, but is open to the general student. It traces the evolution of musical thought and practice in the Western world from ancient Greece through the Medieval, Renaissance and Baroque periods, with particular focus on the function of music in various social, political and historical contexts and the emerging compositional styles and techniques.

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.*
This course is designed for Music Majors, but it is open to the general student. It traces the evolution of musical thought and practice in the Western world from the Classic period through the present day, with particular focus on the function of music in various social, political and historical contexts and the emerging compositional styles and techniques.

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).*
This course offers individual instruction of one-half hour per week in voice, piano, guitar, or band/orchestral instruments, with an assigned instructor on the Applied Music staff. Emphasis is placed on technical development, interpretation, and musicianship at the lower-intermediate level. Performance for a faculty jury is required at the end of the semester. All students must successfully audition to enroll.

182 Applied Music II (.5) UC:CSU
Laboratory 1 hour.
***Prerequisite**: Music 181 with a grade of "C" or better.*
This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons. Parallels the offering for and requirements of UC and CSU music majors.
Continuation of Music 181.

183 Applied Music III (.5) UC:CSU
Laboratory 1 hour.
***Prerequisite**: Music 182 with a grade of "C" or better.*
This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons. Parallels the offering for and requirements of UC and CSU music majors.
Continuation of Music 182.

184 Applied Music IV (.5) UC:CSU
Laboratory 1 hour.
***Prerequisite**: Music 183 with a grade of "C" or better.*
This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons. Parallels the offering for and requirements of UC and CSU music majors.
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.*
This course covers diatonic and beginning chromatic harmony. Topics will include secondary functions, modulations, harmonic and melodic sequences, binary and ternary forms, intermediate harmonic analysis and part writing.

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.*
This course covers chromatic harmony and includes an introduction to contemporary techniques. Topics will include Neapolitan chord, augmented sixth chords, modulation to distantly related keys, dodecaphonic music,and a survey of contemporary techniques.

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 2 hours; Laboratory 2 hours.
***Prerequisite**: Music 212 with a grade of "C" or better.*
This course is an advanced intermediate course in ear training; sight singing; rhythmic, melodic and harmonic dictation; basic keyboard harmony. Review of fundamentals of music theory.
Continuation of Music 212.

214 Musicianship IV (2) UC:CSU
Lecture 1 hours; Laboratory 2 hours.
***Prerequisite**: Music 213 with a grade of "C" or better.*
The student reads and plays advanced chromatic melodies, harmonies, and rhythms using sight singing, ear training, and dictation.
Continuation of Music 213.

250 Music Performance Workshop (1) CSU - RPT 3
Laboratory 3 hours.
Students work in a masterclass environment, rehearsing music appropriate to their instrument/voice and skill level. A final public performance is given.

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.*
Serious music students pursue concentrated study under the direct supervision of an instructor in selected areas through a series of projects designed to increase knowledge of musical aspects pertinent to the student's 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.*
This course, a continuation of Music 321, consists of learning new music, continuation of scale playing, use of piano pedals, sight reading, memorization, terminology and theory as related to the music studied.

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.*
This course is a continuation of Elementary Voice IV with an emphasis on repertoire, musical notation, diction and music industry.

453 Musical Theatre Repertoire for Singers (1) UC:CSU
Laboratory 3 hours.
This course presents a continued concentration of general basic fundamentals of singing dealing with vocal techniques as utilized in musical theater. Additional instruction will include basic body movement, acting techniques and musical theater song literature interpretation. (If prerequisite is not met, enrollment is subject to audition. Bring the music of a prepared song to the first class meeting.)

501 College Choir (1) UC:CSU - RPT 3
Laboratory 3 hours.
Open to all students, regardless of vocal experience.
This course provides an introduction to choral ensemble singing. Emphasis is placed on vocal technique and choral elements, such as blend, intonation, diction and music reading. Repertoire is chosen on the basis of the ensemble's ability and represents historical and current styles of music.

521 Concert Choir (1.5) UC:CSU - RPT 3
Laboratory 5 hours.
The Concert Choir is a carefully selected group that prepares and performs representative repertoire including motets, chanson, madrigals, popular music, jazz standards and multicultural music from a variety of periods in music history.

531 Philharmonic Choir (1) UC:CSU - RPT 3
Laboratory 3 hours.
***Note**: Some familiarity with choral repertoire and proper vocal technique is required.*
The Philharmonic Choir studies and performs major choral works such as oratorios, cantatas and masses with orchestra, as well as motets, chansons, madrigals, popular music, multicultural and vocal ensemble music from all periods of music.

601 Brass Instrument Instruction I (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student receives basic instruction on the brass instruments, including trumpet, French horn, trombone and tuba. Some instruments available to loan to enrolled students. Open to all students.

602 Brass Instrument Instruction II (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced brass instrument techniques with emphasis on the development of embrochure, range, endurance and music reading skills. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 601.

611 String Instrument Instruction I (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student receives basic instruction on the string instruments, either violin, viola, cello or bass. Some instruments available to loan to enrolled students. Open to all students.

612 String Instrument Instruction II (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced string instrument techniques with increased emphasis in all areas covered. Primary emphasis is on development of bow and fingering techniques and music reading skills. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 611.

613 String Instrument Instruction III (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced string instrument techniques with increased emphasis in all areas covered. Primary emphasis is on development of bow and fingering technique in third position and music reading skills. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 612.

614 String Instrument Instruction IV (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced string instrument techniques with increased emphasis in all areas covered. Primary emphasis is on interpretetation of advanced solo and small ensemble literature. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 613.

621 Woodwind Instrument Instruction I (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
This course provides elementary instruction on woodwind instruments, including tone production, fingering, breathing technique, dynamics and introduction to ensemble performance. It is recommended for students interested in learning an instrument or a second instrument, or those planning to teach instrumental music.

622 Woodwind Instrument Instruction II (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced woodwind instrument techniques with increased emphasis in all areas covered. Primary emphasis is on embrochure development, range, endurance and music reading skills. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 621.

623 Woodwind Instrument Instruction III (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced woodwind instrument techniques with increased emphasis in all areas covered. Primary emphasis is on interpretation of more complex ryhthmic notation and performance skills. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
Continuation of Music 622.

624 Woodwind Instrument Instruction IV (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
The student learns more advanced woodwind instrument techniques with increased emphasis in all areas covered. Primary emphasis is on interpretation of advanced solo and small ensemble literature. Some instruments available to loan to enrolled students. (If prerequisite is not met, enrollment is subject to audition.)
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.

701 Instrumental Ensemble (1) UC:CSU - RPT 3
Laboratory 3 hours.
This course involves preparation for concert appearances. It provides for the development of individual technical and artistic abilities, a more discriminating understanding of music through experience with a wide range of instrumental literature, and the opportunity to perform in public.

705 Chamber Music (1) UC:CSU - RPT 3
Lecture 0.5 hour; Laboratory 2.5 hours.
The student reads, studies and performs standard chamber music repertoire with special emphasis on preparing for recital. (Confirmation of enrollment subject to audition.)

711 Rehearsal Orchestra (1) UC:CSU - RPT 3
Lecture-Performance 3 hours.
This course involves preparation for concert appearances. It provides for the development of individual technical and artistic abilities, a more discriminative understanding of music through experience with a wide range of orchestral literature, and the opportunity to perform with more advanced players.

721 Orchestra (1) UC:CSU - RPT 3
Lecture-Performance 4 hours.
This course emphasizes performance. Opportunities are presented to expand repertoire and reading of standard symphonic literature through rehearsal and concert performance of that literature. Participation in a symphonic season of no less than four programs a year takes place.

745 Symphonic Band (1) UC:CSU - RPT 3
Laboratory 3 hours.
***Note**: Ability to play a wind or percussion instrument required.*
The student studies standard symphonic band literature with the intent to develop technical and artistic abilities through experiences with a wide range of band literature. Public performances are presented. (Confirmation of enrollment subject to audition.)

751 Wind Ensemble (1) UC:CSU - RPT 3
Laboratory 3 hours.
This course involves preparation for performances of wind ensemble repertoire and the development of individual technical and artistic abilities through experience with a wide range of wind ensemble literature.

755 Brass Ensemble (1) UC:CSU - RPT 3
Laboratory 3 hours.
This course involves preparation for performances of brass ensemble repertoire. It helps in the development of individual technical and artistic abilities through experience with a wide range of brass ensemble 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.

285 Directed Study - Music (2) CSU

385 Directed Study - Music (3) CSU
Conference 1 hour per unit.
This course 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 120.

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 (5) CSU
Lecture 2 hours; Laboratory 9 hours.
***Prerequisite**: Acceptance into the Nursing Program.*
This course 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 as related to theory are presented. The course encompasses physical, psychosocial, cultural, nutritional, developmental, and legal aspects in relation to the practice of nursing. The course includes clinical experience.

401 Client Care Seminar I (1) CSU
Lecture 1 hours.
An elective, but strongly recommended, instructor-guided course that emphasizes (1) physical assessment, (2) the Nursing Process, and, (3) Gordon's Functional Health Patterns to enhance planning of nursing care and performance of nursing skills. Selected client care experiences and nursing skills will be used.

402 Pharmacology (1) CSU
Lecture 1 hour.
***Prerequisite**: Acceptance into the Nursing Program.*
Students are introduced to basic knowledge and skills required for safe and effective drug therapy. The course includes mathematics used in the calculation of drug dosage. Specific drug classifications are discussed in conjunction with Gordon's Functional Health Patterns. The Nursing Process serves as a framework in the application of content of 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..*
This course introduces theory and concepts central to the practice of medical-surgical nursing, emphasizing short-term acute health problems and peri-operative care. It encompasses physical, psychosocial, cultural, developmental, and legal aspects. Students continue to expand knowledge of the Functional Health Patterns and use of the 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.*
This course 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. Content covers the normal maternity cycle, common problems, and the newborn. The course encompasses psychosocial, cultural, developmental, legal, and ethical aspects of maternity care. Women's health care is discussed in this course. Clinical experience is included.

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.*
This course introduces the concepts of psychiatric nursing utilizing Gordon's Functional Health Patterns and the Nursing Process. The course 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.*
This course builds upon previously learned concepts of medical-surgical nursing. Emphasis is on the chronically-ill adult and gerontology client with concurrent acute health problems. It 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.*
This course introduces the older adult/geriatric client including physical, psychological, social, spiritual, and intellectual aspects. The course emphasizes the interrelatedness of Gordon's Functional Health Patterns and Nursing Process, growth and development, and health problems in the aging client. This course includes clinical experience.

408 Psychological Aspects of Health Care (1) CSU
Lecture 1 hour.
***Prerequisite**: Acceptance into the Nursing Program.*
This course facilitates assessment and promotion of mental health perspective across the life span. It introduces the concepts of wellness and holistic health care while focusing on community mental health. The course also emphasizes nursing process and identification of behaviors which represent functional and dysfunctional health patterns as defined by Gordon. The course 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.*
This course is based on advanced theories and concepts of adult medical-surgical nursing with emphasis on complex and acute health problems. The course includes physical, psychosocial, cultural, developmental, and legal aspects. An in-depth clinical experience utilizing Gordon's Functional Health Patterns and the Nursing Process is part of the course. There is an emphasis on 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.*
This course 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. The course 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.*
This course examines current and relevant nursing issues within the context of historical development of organized nursing. Content Includes legal/ethical responsibilities, economic concerns and educational issues as they affect the emergence of the modern nurse. This course also 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.*
This course orients the advanced placement nursing student to the College and to the Nursing Program. In this course, students discuss the roles and responsibilities of the registered nurse. Instruction focuses on the application of the nursing process and its components, and the use of Gordon's Functional Health Patterns for assessment. This course also includes development of care plans for clients in a variety of settings.

444 Client Care Seminar III (1) CSU
Lecture 1 hour.
This is an elective, instructor-guided course to facilitate enrichment, tutorial study, the utilization of independent learning and nursing skills practice.

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) - RPT 2

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.
Students study 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) CSU - RPT 1

Lecture 1 hour.
No credit if taken after Personal Development 40.

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.
This course 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.

15 History of Contemporary Philosophy (3) UC:CSU
Lecture 3 hours.
This course studies recent philosophical developments in Continental and/or Anglo-American philosophy with readings from such figures as Nietzsche, Heidegger, Husserl, Derrida, Foucault, Gadamer, Ricouer, Habermas, Russell, Wittgenstein, Dewey, Quine, Davidson, and Rorty.

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)

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.

35 Judaism, Christianity, and Islam (3) UC:CSU
Lecture 3 hours.
This course 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, Zorastianism, 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.
Students are introduced to 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, and alienation. 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, 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, morality, mortality, along with other questions within the human quest that come under the role of philosophy. Also examines film philosophically, as a topic for philosophical inquiry.

185 Directed Study - Philosophy (1) CSU - RPT 2
Lecture 1 hours.
Students study Philosophy on a contract basis under the direction of a supervising instructor.

**UC Credit Limit: Philosophy 29 must be taken with Biology 40 to receive transfer credit.*

Photography

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.
***Prerequisite**: 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.

102 Advanced Digital Photography (3) CSU
Lecture 3 hours. Laboratory 3 hour.

This class provides theory and practice of contemporary use of the camera; includes expanded comprehension of exposure control with various light sources; introduction to studio lighting and on camera 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.

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.

This course is designed to provide various types of exercise with discussion on related topics throughout the semester. Areas of emphasis are fitness and conditioning, nutrition and weight control, and posture and will also include power walking, par course, relaxation, partner exercises, and isometric exercises. This course also provides training for Personal Trainers and Aerobic Instructors.

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**

102 Swimming Skills (1) UC:CSU - RPT 3
Lecture 0.5 hours; Laboratory 1.5 hours.

This course is designed to include all levels of swimmers. Fundamental swimming skills will be developed and expanded upon. Water orientation, safety, poolside etiquette and components of fitness are included.

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**
259	**Golf Skills**

203 Badminton Skills (1) UC:CSU - RPT 3
Activity 2 hours.

Badminton is a fitness class where students will develop basic skills and abide by rules and regulations set forth by the sport. Students will understand the care and selection of equipment and proper etiquette to be displayed during all phases of play.

212 Tennis Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course is designed to provide theory and instruction in the fundamental skills of tennis. Instruction and practice play is arranged to all levels of play. Fundamentals and related knowledge of all aspects of the game are presented through lecture, demonstration, group and individual drills, analysis, singles and doubles situations as well as competitive single and double matches. Emphasis is also placed on nutrition and physical fitness.

225 Yoga Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course teaches a 5,000 year old form of mostly isometric poses (asana), breathing techniques, and meditation. Yoga promotes mental, physical, and spiritual fitness. Yoga teaches a 'way of life'. There are brief lectures covering basic information on hypertension, exercise precautions, body composition, health style, flexibility, nutrition, supplements, water, physical fitness, nutrition myths, and stress management.

228 Body Conditioning (1) UC:CSU - RPT 3
Activity 2 hours.

This course will familiarize the student with procedures for evaluating fitness levels and will allow the student to experience the cognitive, affective and psychomotor levels of learning a variety of exercise programs and techniques which will improve the students' level of physical fitness.

230 Weight Training Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course covers the principles of weight training for men and women. It develops a general program of progressive resistance exercises with adaptation and implication for the student. Attention is given to terminology and use of equipment. Safety precautions, nutrition, weight control, and basic factors of anatomy and physiology are also covered. Textbook and materials needed for the course will be up to the instructor to disseminate to the student's.

259 Golf Skills (1) UC:CSU - RPT 3
Activity 2 hours.

Beginning, intermediate, and advanced levels accepted. Designed to meet the need of the student on all aspects of the sport of golf. Starting with the basics of the grip, stance, swing, posture, and advancing to the specifics of course etiquette, course management, driving, putting and chipping.

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**

304 Basketball Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course is designed to teach all levels the basic basketball skills of passing, dribbling, shooting, and rebounding. The course will also introduce individual and team offense and defense, as well as the rules, proper etiquette, terminology, and the components of fitness.

313 Soccer Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course emphasizes fundamental soccer skills, as well as the selection and care of equipment, rules, proper etiquette, terminology and strategies of the game. The student will be introduced to individual and team offense and defense as well as terminology and the five components of fitness.

322 Volleyball Skills (1) UC:CSU - RPT 3
Activity 2 hours.

This course is designed to teach the basic volleyball skills of passing, setting, spiking, serving, and blocking. The course will introduce individual and team offense and defense systems, as well as the rules, proper etiquette, terminology, components of fitness, nutritional and injury prevention strategies for volleyball.

514 Intercollegiate Sports - Tennis (1) UC:CSU - RPT 3
Laboratory 3 hours.

Tennis rules and regulations are reviewed with guidance in acquiring the proper equipment, playing on a regulation-size court and following the guidelines within the markers on the court. Learn how to correctly play the game. This is a course in tennis training. Training programs, sessions and conditioning drills to improve your fitness and performance on the court. Increase power, agility, and quickness and take your game to a higher level.

550 Intercollegiate Sports - Cheer/Yell Leaders/Marching Band (2) UC:CSU - RPT 3
Activity, 6 hours.

Technique, practice and development of skills and knowledge necessary to perform in cheer leading, yell leading, song leading and flag and baton twirling.

550A Intercollegiate Sports - Cheer/Yell Leaders/Marching Band (2) UC:CSU - RPT 3
Activity, 3 hours.

This course introduces fundamental and advanced principles/ theories of drill patterns, yell and cheer leading routines. Instruction, demonstration, and practice of yell/cheer leading skills. Students will be required to perform at athletic events as part of the course requirements. Competitions and extra events outside of athletic events are optional.

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)**

552 Athletics Pre-season Conditioning (1) UC:CSU - RPT 3
Activity, 3 hours.

This course is designed for the student athlete. The following areas are emphasized: the analysis and training of athletic skills, the analysis of offensive and defensive systems, physical conditioning, strength training and aerobic conditioning.

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**

556 Intercollegiate Sports- Strength/Fitness Training for Basketball (1) UC:CSU - RPT 3
Laboratory 3 hours.

This course is designed for the student athlete and is intended to provide focused strength and conditioning exercises with an emphasis on safety, injury prevention, and new rules and game plays for basketball.

558 Intercollegiate Sports- Strength/Fitness Training for Soccer (1) UC:CSU - RPT 3
Laboratory 3 hours.

This course is designed for the student athlete and is intended to provide focused strength and conditioning exercises with an emphasis on safety, injury prevention, and new rules and game plays for soccer.

560 Intercollegiate Sports- Strength/Fitness Training for Competitive Swimming (1) UC:CSU - RPT 3
Laboratory 3 hours.

This course provides an advanced strength and conditioning program specific to competitive swimming, emphasizing injury prevention and safety. The student also learns rules necessary for competition at advanced levels.

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 teaches body fitness. It emphasizes aerobics, proper nutrition, weight control, and strength training in accordance with the American College of Sports Medicine Guidelines. A variety of exercises and techniques will be used, based on personal needs, to establish programs that will achieve these goals.

675 Karate (1) UC:CSU - RPT 3
Activity, 3 hours.
Introduces students to the fundamental aspects of karate including basic kicking, punching, blocking, and grappling techniques. Through active participation, students will improve in the basic five components of fitness: cardiac respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition.

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.
Weight Training includes an emphasis in the knowledge, understanding and values of building muscle strength and endurance. The course includes instruction in the five health related components of fitness (body composition, muscle strength, muscle endurance, flexibility and cardiovascular fitness). The objective is to develop the student's ability to develop his/her own physical fitness program at any time in life based upon sound physiological principles.

185 Directed Study - Physical Education (1) CSU - RPT 2
Lecture 1 hours.
This course allows students to pursue directed studies in Physical Education on a contract basis, under the direction of a supervising instructor.

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.
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.
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
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.

12 Physics Fundamentals (3) **^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
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
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
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.

185 Directed Study - Physics (1) CSU RPT - 2
Lecture 1 hour.

285 Directed Study - Physics (2) CSU
Lecture 2 hour.

385 Directed Study - Physics (3) CSU
Lecture 3 hour.
Students study Physics on a contract basis under the direction of a supervising instructor.

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.
This course 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 Floral Design and Practices I (2) CSU
Lecture 1 hour; Laboratory 2 hours.
This course teaches students the flowers and plants in Southern California used primarily in the florist trade. It includes the use and care of equipment used in the trade. The course covers shop practice in flower care, corsage making and the basics of floral arrangements.

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 (3) UC:CSU
Lecture 2 hours; Laboratory 2 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.
Lecture and hands-on laboratory covers the basic methods of tree and shrub care. Emphasis is given to the selection, planting and maintenance of trees and shrubs from youth to specimen maturity along with cultural aspects in selection criteria. Extensive instruction in pruning and shaping are part of the hands-on laboratory.

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.*
This course involves plant identification, including woody and non-woody kinds. Emphasizes is placed on ornamental trees, shrubs, and vines, with some attention to annuals, perennials, flowers, succulents, and grasses. The course is designed 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.
This course considers plants used in landscaping and nursery occupations (ornamental plants), their pronunciation, botanical and common names and individual plant characteristics. The course 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.
This course includes the basic botany, habits, habitats, and culture of ornamental and fruit trees. The class emphasizes identification, selection, training, correct placement, planting, and all-around care of trees. The course considers problems of pruning, fertilization, pests and diseases and their treatment. The class 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.

807 Advanced Landscape Planning And Design (4) rCSU
Lecture 2 hours; Laboratory 4 hours.
***¬UC Credit Limit:** Plant Science 806 and 807 maximum of one course.*
***Prerequisite:** Plant Science 806.*
Continue plant science 806 with special emphasis on planting design oriented to commercial aspects, grading plans, construction drawings, specifications, cost estimates, and client relationships. Students practice solving 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.

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.
Students learn to interpret construction drawings and specifications for landscaping. Students will demonstrate quantity counts of plant, irrigation and hardscape materials, and will estimate the dollar costs of labor and materials.

816 Grading And Drainage Planning (1) CSU
Lecture 1 hour.
This course covers the grading and water drainage of landscaped areas as it applies to nuisance water removal. The course emphasizes contour grading, spot elevations, and surveying with building levels.

817 Landscape Contracting Practices (1) CSU
Lecture 1 hour.
Licensing requirements, testing procedures, and responsibilities of operating as a licensed landscape contractor.

818 Basic Construction Techniques (3) CSU
Lecture 2 hours; Laboratory 3 hours.
This course includes fundamental concepts, materials and methods of working with earth, wood, concrete concrete block, brick and stone, and irrigation and drainage as they apply to construction. Includes projects, blueprint reading, budget information, use of construction equipment and instruments as related to projects. Includes operation of power equipment.

820 Irrigation Design and Installation (3) CSU
Lecture 2 hours; Laboratory 2 hours.
This course covers the importance of irrigation as it relates to plant growth. Class content also includes 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.
This is an introduction course to AutoCAD (Computer Aided Design) 2010 with an overview of the program and its different functions. This class will provide you with the skills necessary to create Landscape Design plans using AutoCAD.

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
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 - RPT 3
Laboratory 12 hours.
In this course, students are involved in the planning, development and completion of an individual or group horticulture or crop 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.*
In this course, students study the development of the conservation ethic in the Unites States and the impact that human populations have on the natural world. Examines the ecological basis of conservation, major ecosystems, energy flow, population dynamics, pollution and pest control including invasive species. Discussions focus on government legislation and resource management strategies including soil, water, fish, rangeland, forest, air, and minerals.

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.

185 Directed Study - Plant Science (1)
Lecture 1 hour.

285 Directed Study - Plant Science (2)
Lecture 2 hour.

385 Directed Study - Plant Science (3)
Lecture 3 hour.
Allows students to pursue Directed Study in Plant Science on a contract basis under the direction of a supervising instructor.

Political Science

Also See **Chicano Studies 80**

1 The Government of the United States (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students study 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.
Students study 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.

5 The History of Western Political Thought (3) UC:CSU
Lecture 3 hours.
This course surveys important ideas and theories in political thinking that have been developed from the time of the ancient Greeks to the present day. Laboratory 2 hours. Students will analyze the relationship 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.

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.

50 Introduction to Research in Political Science (3) UC:CSU
Lecture 3 hours.
This class considers the logic of the scientific analysis of political and social institutions. Analyzes the various methodological tools utilized in social science research and emphasizes clarification of basic social science issues. Topics include research design, conceptualization, measurement, sampling methodology, and both qualitative and quantitative data analysis. Students will analyze specific data collected from existing statistical sources.

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.
Students have the opportunity to complete directed studies in Political Science on a contract basis under the direction of a supervising faculty member.

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 Biological Psychology (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.

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.*
This course will provide an introduction to the etiology, assessment, diagnosis and methods of therapy relevant to the major psychological disorders. Topics will include anxiety, mood, personality, dissociative and somatoform disorders. Additional topics will include schizophrenia, cognitive disorders, disorders of childhood and adolescence as well as sexual dysfunctions and substance-related disorders.

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.*
This course 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 relationships 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 will 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. Moreover, this course will provide an overview of women's issues from a psychological perspective ranging from a re-examination of traditional theories of personality to current topics of research interest. Where applicable, the course draws heavily from the research literature on sex differences and sex role socialization.

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.*
This course will provide an introduction to the psychological aspects of human sexual behavior with emphasis on how historical and current perspectives effects sexual attitudes, beliefs and behaviors. Topics will include sexual arousal and response, gender-related issues, attraction and relationships, sexual orientation, sexual dysfunctions and sexually transmitted infections. Additional topics will include pregnancy and contraception, sexual coercion, commercial sex and sexuality throughout the lifespan..

60 Stress Management (3) CSU
Lecture 3 hours.
This course will provide an introduction to the emotional, cognitive and physiological aspects of stress and stress management. Topics will include the psychology and physiology of stress, stress-related disorders, and stress-prone and stress-resistant personalities. Stress management practices will include various relaxation and meditation techniques, communication skills training, time management strategies and the role of physical exercise and nutrition.

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
Laboratory 2 hours.
***Prerequisite:** Psychology 2 or its college equivalent with a grade of "C" or better, or concurrent enrollment.*
This course introduce students to the scientific study of the physiological and neuroanatomical underpinnings of behavior and mental processes through research discussion and participation investigating core introductory psychology topics. Main topics include: nature (genetics/biology) and nurture (life experiences/culture/evolution), nervous system structure and function, behavioral neuroscience and neuropsychological research methods, sensation, perception, consciousness, motivation, vision, audition, touch, sensorimotor, chemical senses, hormones and reproductive behavior, emotions, stress, learning and memory.

74 Research Methods in Behavioral Sciences (3) UC:CSU
Lecture 3 hours.
***Prerequisite:** Psychology 1 or its college equivalent with a grade of "C" or better.*
***Prerequisite or Corequisite:** Statistics 1 or its college equivalent with a grade of "C" or better.*
This course is an introduction to basic research concepts, designs, and statistical techniques used in the behavioral and social sciences. 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.
This course 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.*
This course builds upon the public relations writing techniques and strategic program planning taught in PR 001, while orienting the student toward the types of written products generated by public relations professionals. This advanced course will refine a student's writing skills while paying close attention to the various formats such as press releases, media advisories, crisis plans, press kits in addition to other widely used public relations tools while adhering to the ethical guidelines set by the Public Relations Society of America. The accompanying practicum gives students the opportunity to work with an on-campus or non-profit organization to create and implement a public relations plan.

Reading

See course listing under **English**

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.

Service Learning

1 Introduction to Service Learning (1) CSU
Lecture 0.5 hour; Laboratory 1 hour.
This is an activity course in which students provide service to public and private non-profit agencies and charities. The course 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, including the educational components of service-learning courses.

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.

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.

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.
***Advisory**: 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 questions in the present tense and understand and carry on simple conversations on familiar topics. This course is conducted primarily in Spanish. Heritage speakers should enroll in Spanish 4, 5, or 6

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).*
***Advisory**: 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).*
***Advisory**: 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).*
***Advisory**: 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.
Oral expression in Spanish is the main thrust of the course. The focus is on conversational skills revolving around everyday situations that a person may encounter when traveling or living in Spanish-speaking countries, or when interacting with Spanish-speaking people in the United States.

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.
An exploration of the histories, cultures and arts of Latin America. The focus of the course is to study the differences and similarities between the countries that comprise Latin America, noting the unifying forces as well as those that divide. The course also explores the relationship between Latin America and the United States throughout their histories.

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, independence, 1910 Revolution and present day Struggle.

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.

104 Argumentation (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
***Advisory**: Eligibility for English 28.*
This course 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.

113 English Speech as a Second Language (3) CSU - RPT 1
Lecture 3 hours.
This English speech improvement class stresses accent reduction, pronunciation, intonation, idiomatic expressions, phrasing, grammar and vocabulary. The course Includes speaking assignments prepared by students. It is designed mainly for those who need to learn to speak Standard American English pronunciation more effectively in a variety of different environments.

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.
Examines communication in the context of intercultural interactions. Explores verbal and nonverbal communication similarities and differences in communication across cultures. Provides strategies to enhance interpersonal communication skills within the context of intercultural communication.

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.*
This course 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.
This course allows students to pursue Directed Study in Statistics/ Psychology 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.

Theater

100 Introduction to the Theater (3) UC:CSU
Lecture 3 hours.
This is a survey and theatre appreciation course for both majors and nonmajors. The course is designed to provide the student with a wider basis for both evaluation and enjoyment of the theatrical experience. The class examines all elements of live theatre, its cultural and historical background, the contributions of various theatre artists, and its overall purpose and influence within our society. All aspects of play production are explored: playwriting, directing, acting, criticism, theatre architecture, set design, costume design, lighting design, 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.
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 - RPT 3
Lecture 1 hour; Laboratory 4 hours.
Prerequisite: *Theater 270 with a grade of "C" or better.*
This course introduces character building skills for the camera through in class performances of memorized material, including dramatic, comedic monologues, scenes, commercials and voice-overs. Instruction also integrates blocking, cold readings, audition techniques, rapid line learning and retention. Camera acting problem solving and business practices for a professional acting career provide the actor with tools for success in the television and film industry.

232 Play Production (2) UC:CSU - RPT 3
Laboratory 6 hours.
Prerequisite*: 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.
This course represents a culmination of the theatre experience by providing students with an opportunity to participate in a current production before a live audience of the general public. All areas, including acting, stage management, assistant directing, light and sound operation, costuming, props, and makeup are incorporated in this collaborative process. Students must be available to meet all scheduled technical rehearsal and performance dates.

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.
This course 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 - RPT 3
Laboratory 6 hours.
This course 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 design art. Introduces design principles, research methods, pattern and construction techniques, sewing equipment usage 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.

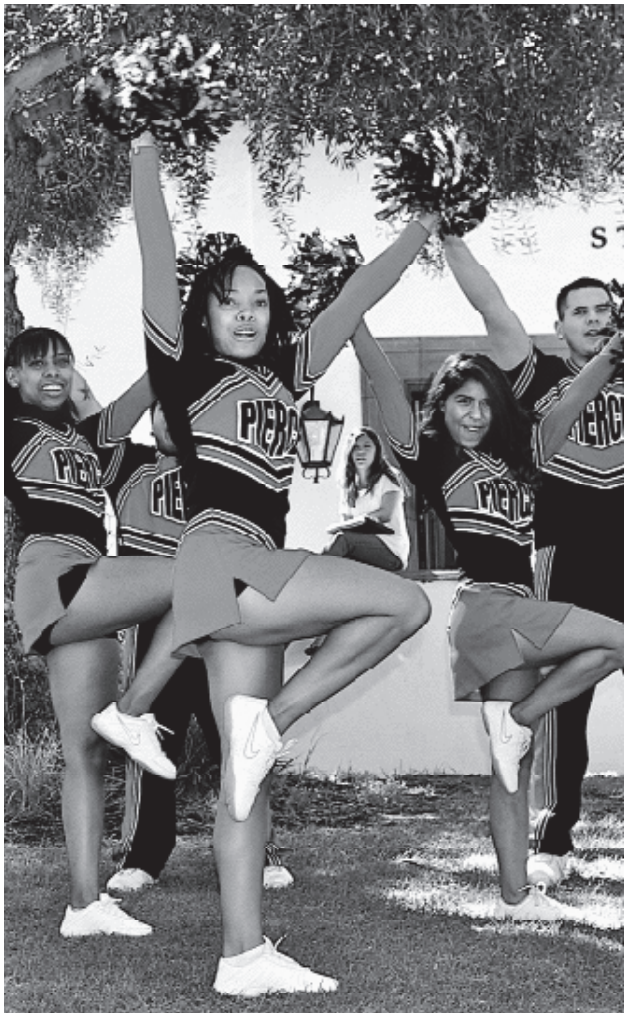
911-941
Cooperative Work Experience Education - Theater (1-4) CSU
See Cooperative Work Experience Education.
***UC Credit Limits:** Theater 279 and Music 776 combined; maximum credit, one course. Theater 280 and Music 777 combined; maximum credit,
one course.

Welding

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

Faculty
2012-2014

Pierce College



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Snow, Lila (2006)
Associate Professor of Child Development
B.S., M.A., California State University, Northridge

Soto, David (2010)
Assistant Professor of Mathematics
Assistant Professor of Math
B.S., M.S., California State University, Northridge

Sparks, Donald M. (1989)
Professor of Physics
B.S., Humboldt State University
M.S., M.A., California State University, Northridge

Stellwagen, Karin (2012)
Assistant Professor of Cinema
B.S., Tufts University
M.A., University of Southern California

Strother, Elizabeth (2007)
Assistant Professor of Counseling
B.A., M.A., M.S., California State University, Los Angeles

Sutton, Daryl Lynn (1979)
Professor of Nursing
B.S., University of California, Los Angeles
M.S.N., University of California, San Francisco
Ed.D., Nova Southeastern University

Tabatabai, Zhila (2002)
Associate Professor of Mathematics
B.E., Youngstown State University
M.S., University of Cincinnati
M.S., University of Arkansas

Taylor, Jamie (2009)
Assistant Professor of Life Science
A.A., Moorpark College
B.S., University of California, Los Angeles
M.S., California State University, Northridge

Thorne, Kirsten (2006)
Associate Professor of Spanish
B.A., Scripps College, Claremont
M.A., Ph.D., Yale University, New Haven

Thouin, Laurence G. Jr. (1982)
Professor of Biology
B.A., Occidental College
M.S., Ph.D., University of Southern California

Tiu, Concepcion (2005)
Associate Professor of Nursing
B.S.N., Pamantasan Ng Manila
M.S.N., California State University, Dominguez Hills

Traughber, Lucinda (2006)
Associate Professor of Nursing
B.S.N., M.S.N., University of Phoenix

Valdes, Lauren E. (2000)
Professor of Library Science
B.A., California State University, Long Beach
M.L.I.S., San Jose State University

Van Dyke, Michael (2009)
Assistant Professor of Automotive Technology
A.A., Los Angeles Pierce College

Veiga, Jacob (2011)
Assistant Professor of Mathematics
M.S., University of California, Irvine
B.S., University of California, Los Angeles

Villanueva, Donna-Mae (2000)
Dean, Academic Affairs
B.A., CUNY/Brooklyn College
M.A., New York University
Ph.D., Claremont Graduate University

Voss-Rodriguez, Joleen (2001)
Department Chairperson, Child Development
Professor of Child Development
B.A., M.A., California State University, Northridge

Walsh, Brian (2008)
Assistant Professor of History
B.A., American University, Washington DC
M.A., Monmouth University

Warner, Patricia (2009)
Assistant Professor of Equine Science
A.S., Pierce College

Weiser, Marian S. (1963)
Professor of Dance
B.S., University of Wyoming
M.A., Mills College

Wells, Raymond A. (1985)
Professor of Biology
B.A., M.S., California State University, Northridge
Ph.D., University of Southern California

Wessling, Margaret E. (2005)
Associate Professor of Physics
B.A., Amherst College
M.S., Ph.D., California Institute of Technology

White, Elizabeth G. (1982)
Professor of Veterinary Technology
A.S., Pierce College
A.H.T., State of California

Wittman, Darlene K. (1979)
Professor of America Sign Language Interpreter Education
B.A., M.A., California State University, Northridge

Wood, Mia (2007)
Assistant Professor of Philosophy
B.A., Pepperdine University
M.A., University of South Carolina

Yamada, Katsuya (1989)
Professor of Physics
B.S., Tokyo Denki Daigaku, Tokyo
M.S., Ph.D., University of Tennessee

Yates, Rebecca (2006)
Associate Professor of Animal Science
B.A., California State University, Humboldt
M.A., California State University, Dominguez Hills
D.V.M., University of California, Davis

Yoder, Kathie A. (1988)
Professor of Mathematics
B.A., Mount St. Mary's College
M.A., University of California, Santa Barbara
M.S., California State University, Northridge

Yoshiwara, Bruce W. (1989)
Professor of Mathematics
B.A., M.A., Ph.D., University of California, Los Angeles

Yoshiwara, Katherine (1980)
Professor of Mathematics
B.S., Michigan State University
M.A., University of California, Los Angeles

Youhanna, Adrian (2010)
Assistant Professor of Geography
B.A., M.A., California State University, Northridge

Zayac, John (2007)
Assistant Professor of Geology
Department Chairperson, Physics & Planetary Sciences
B.S., University of California, Santa Cruz
M.S., University of California, Santa Barbara

Zimring Towne, Joanna (2009)
Assistant Professor of Counseling
B.A., University of Wisconsin-Madison
M.S.W., M.P.A., University of Southern California

Zitzelberger, John F. (1987)
Professor of Electronics
A.S., Don Bosco Technical Institute
B.S., California State Polytechnic University, Pomona
M.S., California State University, Los Angeles

EMERITI

Abu-Ghazaleh, Nabil; 2006-2010
Vice President, Academic Affairs

Adelson, Ben H.; 1965-1981;
Professor of Journalism

Aguilar, Amara; 2008-2012
Assistant Professor of Journalism and Multimedia

Ahmadian, Jack; 1980-2012
Professor of Mathematics

Alberti, Leo; 1956-1980;
Professor of Chemistry

Allocco, Brenda K.; 1986-2001;
Professor of Nursing

Alvarez, E.C.; 1955-1983;
Professor of Computer Science

Aminoff, Susan; 1996-2010;
Professor of Sociology

Anderson, Arthur J.; 1955-1980;
Professor of Business Administration

Anderson, Donald; 1962-1995;
Professor of Philosophy

Anderson, Ellen S.; 1965-1993;
Professor of Business

Anderson, Marcia; 1989-2006;
Professor of Nursing

Anderson, Richard; 1964-2004;
Professor of Counseling;
Professor of Psychology

Anderson, Roger; 1994-1995;
Professor of Mathematics

André, Lawrence; 1998-2009;
Professor of Philosophy

Andrino, Ruben D.; 1966-1993;
Professor of Modern Languages

Baker, Robert S.; 1985-1995;
Professor of Theater Arts
Ball, Odis C.; 1975-1995;
Professor of Theater
Professor of Physical Education;
Barlow, John D.; 1949-1984;
Professor of Animal Science
Basil, Kathleene L.; 1965-2001;
Professor of Business
Department Chairperson, Office Administration
Bayer, Diana E.; 1967-1984;
Professor of Special Reading/English
Bell, Michael R.; 1968-2004;
Professor of Physical Education;
Department Chair, Physical Education Men's
Beller, Anthony; 1968-1998;
Professor of Business Administration
Beyer, Frank; 1968-2002;
Professor of English
Department Chair, English
Bird, Billy G.; 1968-1995;
Professor of Floral Design
Bixler, Margaret L.; 1979-1993;
Teacher, Campus Child Development Center
Boddicker, Kathleen; 2005-2012
Director, The Learning Center
Boyd, Barbara J.; 1966-1973;
Assistant Professor of Physical Education
Bravo, Edward; 1970-1991;
Professor of Physical Education
Brown, Roger A.; 1971-2004;
Professor of Counseling
Buchbinder, Sue; 1974-2008
Professor of Counseling
Cameron, Catherine M.; 1973-1994;
Professor of Nursing;
Acting Dean, Administration
Campbell, E. Dudley; 1975-1999;
Professor of Psychology
Campbell, Thomas R.; 1975-2006;
Professor of Biology
Carrillo, A. Alexander; 1968-1989;
Professor of Art
Carthew, John A; 1964-2010;
Professor of Geography
Cavenaugh, Jane T.; 1970-1982;
Professor of Psychology
Chambers, James V.; 1968-1983;
Professor of English
Chambers, Robert D.; 1957-1989;
Professor of Physical Education
Chapman, Norman C.; 1957-1968;
1977-1982;
Professor of Music;
Dean of Instruction
Chase, Robert; 1971-1985;
Dean of Academic Affairs
Chavarria, Mary M.; 1984-2012
Professor of English
Christensen, Audrey; 1965-2001;
Professor of Speech Communication
Christie, Evelyn G.;1965-1997;
Professor of Chemistry
Cluff, John M.; 1966-1989;
Professor of Political Science
Cohen, Sylvia L.; 1965-1995;
Professor of Psychology
Cook, Leslee; 1979-2009;
Professor of Counseling
Corbeil, John W.; 1965-1992;
Professor of Art
Cornner, Mike; 1975-2006;
Assistant Professor of Journalism
Crandall, James W.; 1965-1991;
Professor of Art
Crawford, Roger C.; 1971-1999;
Professor of Physics
Crossen, James; 2000-2012
Professor of Addiction Studies
Crozer, Norman; 1974-2010;
Professor of Special Education
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
Deutsch, Diana; 1978-2012
Professor of Child Development
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
Duxler, Mary; 1970-2012
Professor of Speech Communications
Duxler, William; 1972-2012
Professor of Physics
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
Harland, John; 2010-2012
Assistant 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
Larson, Eugene; 1970-2012
Professor of History
Lenier, Minnette G.; 1984-2001;
Professor of English
LeRoy, Martie F.; (2001)
Teacher, Child Development Center
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

Faculty

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

McCaslin, Joy; 1988-2012
Vice President, Student 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; 1989-2012
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

O'Hanlon, Lynne; 1969-2012
Professor of Computer Science &
Information Technology
Department Chairperson,
Computer Science and Information
Technology

Oliver, Tim; 1999-2006;
Vice President, Administration

Oliver, Tom; 2000-2006;
Vice President, Development

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

Ono, Robert K.; 1981-2012
Professor of Chemistry

Osborne, Philip R.; 1980-1999;
Professor of Vocational Education
Director, Cooperative Education

Oshima, David; (1997)
Professor of Art

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

Penton, Jennifer; (2009)
Assistant Professor of Cinema

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

Piazza, Stephen Paul; 1978-2012
Professor of Music

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

Pregerson, Bernadine S.; 1976-2012
Professor of Microbiology

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

Reiter-Vasquez, Kathleen L.; (1975-2012)
Professor of Child Development

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

Robin, Florence K.; 1975-2012
Professor of Library Science
Department Chairperson, Library

Rooney, Colleen; 1975-2006;
Professor of Counseling

Rose, Jacquinita; 2007-2011
Dean, Academic Affairs

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

Rowe, Bruce; 1971-2012
Professor of Anthropology

Rupert, Dorothy; 1994-2008;
Dean, Academic Affairs

Russell, William H.; 1984-2009
Professor of Geography

Salazar, Patrick; 2010-2012
Grant Writer

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

Schutzer, David; 1985-2012
Professor of Anthropology

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

Sheff, Eileen T.; (1979)
Professor of Counseling
Professor of Psychology

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

Takeda, Kenneth; 2007-2012
Vice President, Administrative
Services

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

Tishler, Roger; 1984-2012
Professor of Mathematics

Tontsch, John W.; 1965-1995;
Professor of Computer Science and
Information Technology

Toyoshima, Joe; 1964-1989;
Lecturer in History

Trester, Judith; 2002-2011
Director, Economic & Workforce
Development

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 Tamelen-Hall, Victoria; 1991-2012
Professor of Counseling

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

Whalen, Paul L.; 1985-2012
Dean, Academic Aff

Whitman, Orene; 1972-1989;
Professor of Nursing

Whalen, Paul; 1985-2012
Dean, Academic Affairs

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

Young, Sylvie; (2009)
Assistant Professor of French

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.

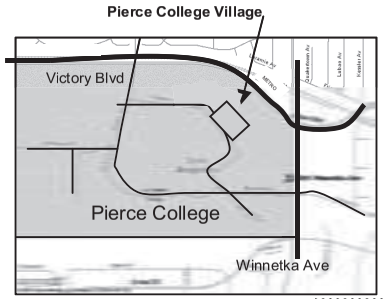
Units Completed - Total number of units in the courses for which a student received a grade of A, B, C, D, or CR.

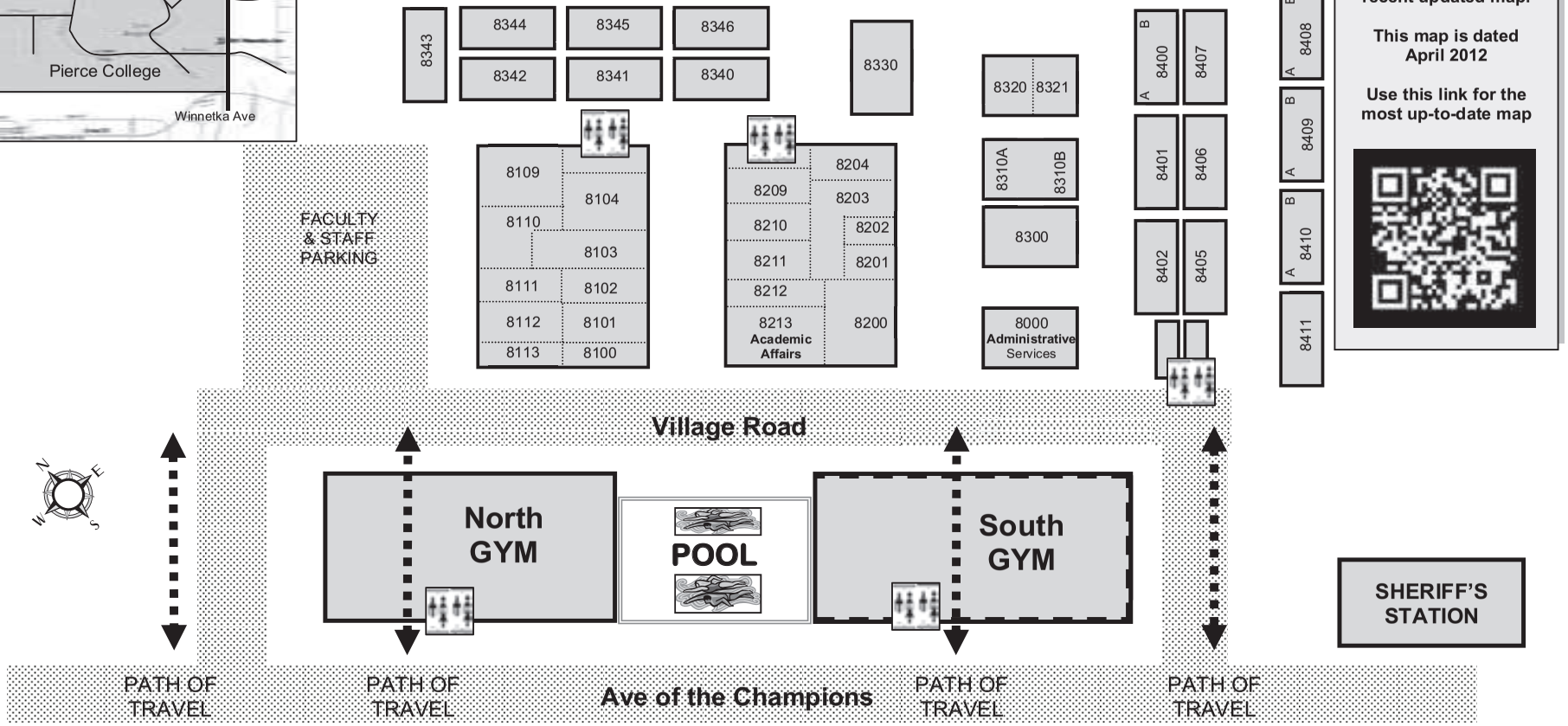
W - An administrative symbol assigned to a student's permanent record for all classes which a student has dropped or has been excluded from by the instructor after the end of the non-penalty drop date but before the last day to drop.

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 April 2012

Use this link for the most up-to-date map

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

Restrooms

2-29-12

Room	Activity
8200	Co-Op, Housing
8201-8202	Classrooms, Extension
8203	CTE Dean, Grants, Economic and Workforce Development Department
8204-8209	Classrooms
8210	Classroom
8211	Media Arts - Roundup
8212	Media Arts Dept / Internet Radio
8213	Academic Affairs

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

Room	Activity
8300	Digital Photo Lab
8310A	Encore
8310B	English Department Writing Lab
8320-8321	Environmental Science / Geology
8330	Classroom (Political Science)
8340	Bridge to Success, PACE, Honors, Foster
8341	Foundation, Market / PR
8342	Classroom (PACE)
8343	Classroom (Psychology)
8344	Classroom (History)
8345	Classroom (Addiction Studies)
8346	Faculty / Staff Offices

Room	Activity
8400A	Horticulture Classroom
8400B	Classroom (English)
8401	Center for Academic Success Tutor
8402	Center for Academic Success Tutor
8405	Classroom (History)
8406	Computer Lab Classroom
8407	Center for Academic Success Lab
8408A	Classroom (English)
8408B	Classroom (English)
8409A	Classroom (English)
8409B	Classroom (English)
8410A	Classroom (English)
8410B	Classroom (English)
8411	Classroom (Admin Justice)

Pierce College

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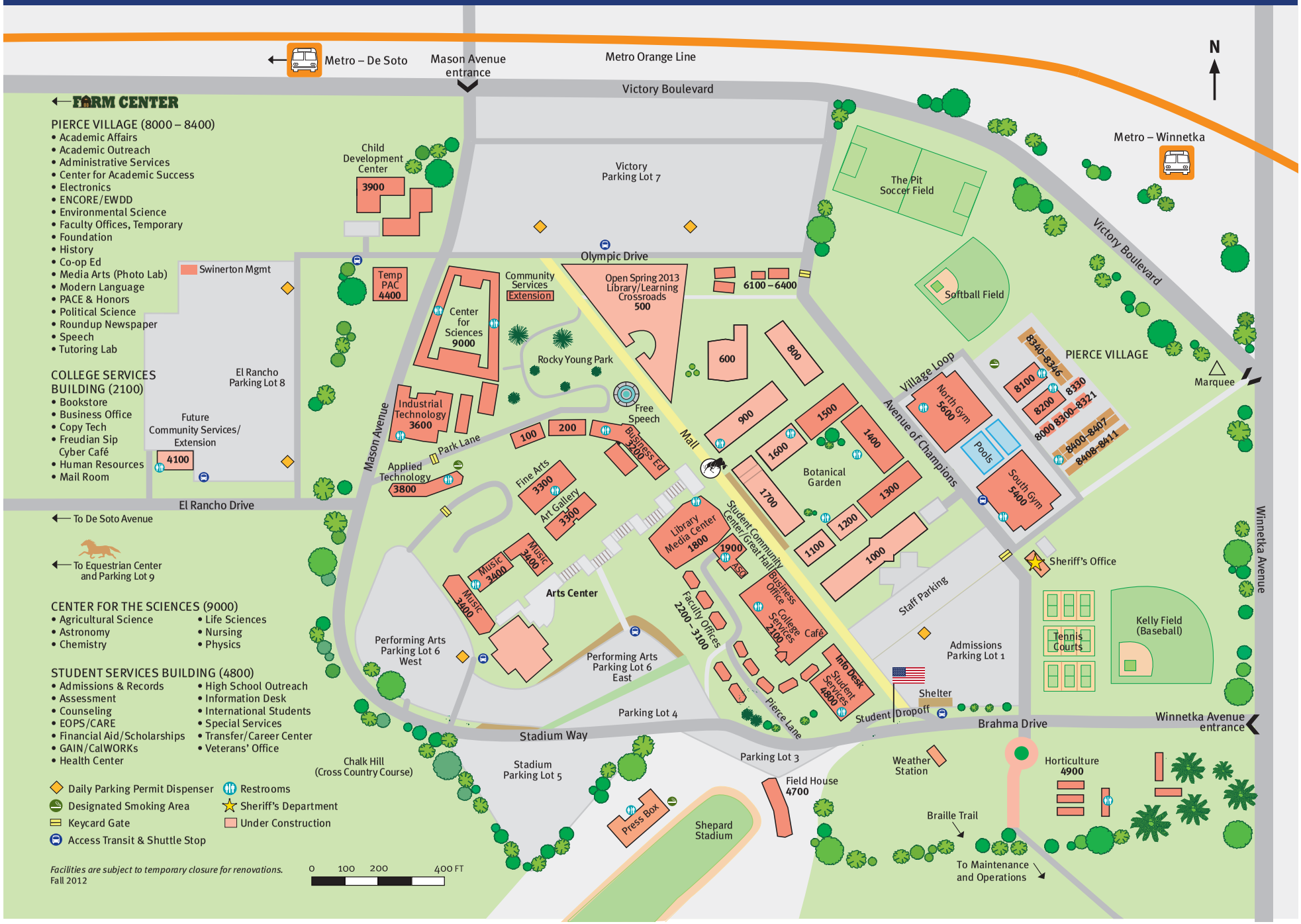
Campus Map



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