PIERCE COLLEGE 2014-2016

## General Catalog

## plerce colleGe



## 2014-2016 Academic Calendar

Fall 2014
REGISTRATION DATES
Online applications accepted for Fall 2014 semester .10/1/2013-08/15/2014
In person applications 9/2/2014
Continuing students online registration ..... 5/12/2014
New student online registration ..... 6/3/2014
GENERAL CALENDAR DATES
Day and Evening Classes Begin ..... 9/2/2014
Saturday Classes Begin ..... 9/6/2014
Last Day of Instruction. ..... 12/14/2014
Final Examinations 12/15/2014-12/21/2014
HOLIDAYS - NO CLASSES
Labor Day, college closed ..... 9/1/2014
Veteran's Day, college closed 11/11/2014
Thanksgiving, college closed 11/27/2014-11/28/2014
Winter Break, college closed .12/24/2014-1/1/2015
Spring 2015
REGISTRATION DATES
Online applications accepted for
Spring 2015 semester 10/1/2014-1/23/2015
In person applications ..... 2/9/2015
Continuing students online registration. 11/23/2014
New student online registration ..... 12/18/2014
GENERAL CALENDAR DATES
Day and Evening Classes Begin ..... 2/9/2015
Saturday Classes Begin. 2/21/2015
Last Day of Instruction. 5/31/2015
Final Examinations 6/1/2015-6/7/2015
HOLIDAYS - NO CLASSES
Martin Luther King Jr., college closed ..... 1/19/2015
President's Birthdays, college closed .2/13/2015-2/16/2015
Cesar Chavez Day, college closed ..... 3/31/2015
Spring Break. 4/4/2015-4/10/2015
Memorial Day, college closed. 5/25/2015
Fall 2015
REGISTRATION DATES
Online applications accepted for
Fall 2015 semester. .10/1/2014-8/22/2015
In person applications ..... 8/31/2015
Continuing students online registration. ..... 5/11/2015
New student online registration 6/2/2015
GENERAL CALENDAR DATES
Day and Evening Classes Begin ..... 8/31/2015
Saturday Classes Begin ..... 9/5/2015
Last Day of Instruction. ..... 12/17/2015
Final Examinations 12/4/2015-12/18/2015
HOLIDAYS - NO CLASSES
Labor Day, college closed ..... 9/7/2015
Veteran's Day, college closed. ..... 11/11/2015
Thanksgiving, college closed 11/26/2015-11/27/2015
Winter Break, college closed 12/24/15-01/1/16
Spring 2016
REGISTRATION DATES
Online applications accepted for Spring 2014 semester ..... 10/1/15-1/29/16
In person applications ..... 2/8/2016
Continuing students online registration. ..... 11/22/2016
New student internet registration ..... 12/17/2016
GENERAL CALENDAR DATES
Day and Evening Classes Begin ..... 2/8/2016
Saturday Classes Begin ..... 2/22/2016
Last Day of Instruction. ..... 6/2/2016
Final Examinations .6/3/2016-6/9/2016
HOLIDAYS - NO CLASSES
Martin Luther King Jr. college closed ..... 1/18/2016
President's Birthdays, college closed ..... 2/12/2016-02/15/2016
Cesar Chavez Day, college closed ..... 3/31/2016
Spring Break. .4/2/2016-4/8/2016
Memorial Day, college closed 5/30/2016


## LOS ANGELES PIERCE COLLEGE

6201 Winnetka Avenue, Woodland Hills, CA 91371
(818) 710-4100 | 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.

## PIERCE COLLEGE

6201 Winnetka Ave, Los Angeles, CA 91371
818.710.4100
www.piercecollege.edu

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## LOS ANGELES COMMUNITY COLLEGE DISTRICT

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## 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.

## 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.
Los Angeles Pierce College and the Los Angeles Community College District are fully committed to be in compliance with the Americans with Disabilities Act (ADA) and California State Law. As part of the compliance, Paul Nieman has been named the College ADA Coordinator for LAPC to coordinate compliance with the non-discrimination requirements contained in the Department of Justice regulations implementing Subtitle A of Title II of the ADA (42 U.S.C. 12131), which prohibits discrimination on the basis of disability by public agencies and Section 504 of the Rehabilitations Act, as well as California disability laws and regulations. You may contact Paul Nieman for all ADA accommodation requests from Staff, Faculty, and the Public:

LAPC - mailbox \#384
6201 Winnetka Ave.
Woodland Hills, CA 91371
Phone: (818) 710-4121
Email: NiemanP@piercecollege.edu

## A MESSAGE FROM THE PRESIDENT



W elcome to Pierce College and our 2014-2016 issue of the General Catalog. We are pleased you are viewing our Catalog, which provides a wealth of information about Pierce College, and especially gives you a more in-depth description of the courses presented in our Schedule of Classes.

In this update of our Catalog you'll find the first of our new Associate Degrees for Transfer (ADT), designed to streamline our students' transfer process to the California State University (CSU) system. These degrees arose out of 2010's Senate Bill 1440, which shaped an agreement between California Community Colleges and the CSUs that makes it easier for our students to transfer in many of the most popular majors. Benefits of the ADTs are that our students will know exactly what courses to take, earn an Associate degree, and need to take only 60 units after transfer to earn a B.A. or B.S. degree from a CSU campus. Best of all, students are given guaranteed admission into the CSU system, and receive priority consideration when applying to a particular program that is similar to the student's community college major.

Pierce has created ten ADTs , eight of which have been approved by the State Chancellor's office and are offered at this time: Administration of Justice, Business Administration, Early Childhood Education, Journalism, Mathematics, Political Science, Spanish, and Studio Arts. We are awaiting approvals on ADTS in Music and Theatre Arts.

Peruse this Catalog and then talk to a counselor to formulate your educational plan for the semesters ahead. The ADTs are only one of many opportunities we provide for you to achieve your educational goals, whether transfer or vocational. The resources are here for you; we hope you will take advantage of them and make a commitment to see your education through. It will make a positive difference in your life.

Sincerely,
Kathleen F. Burke


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# 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 and Learning Crossroads Building, Student Services Building, College Services Building, and Performing Arts Building.

## Regular Program

For the academic year 2014-2015 the fall semester will run from September 2 to December 21, 2014. The spring semester will follow from February 9 to June 7, 2015.

For the academic year 2015-2016 the fall semester will run from August 31 to December 18, 2015. The spring semester will follow from February 8 to June 9, 2016.

The regular program consists of two semesters, 16 weeks in length. Classes are generally scheduled from $7 \mathrm{a} . \mathrm{m}$. to $10: 10 \mathrm{p} . \mathrm{m}$. 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


## 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-centered 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

The Los Angeles Pierce College Strategic Master Plan 2014-2017 was born out of a desire to focus our efforts increasingly on college attainment through degree and certificate completion and to give a voice to the entire College community related to our mission and vision over the next four academic years. The overarching goals of the college include:

## ENGAGING THE COMPLETION AGENDA

- 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


## DEMONSTRATING ACCOUNTABILITY

- Improving financial reporting and operational efficiencies and processes
- Improving campus-wide health, safety, and security
- Improving facilities oversight of bond-related construction
- Generating revenue to support the goals of the college


## CULTIVATING PARTNERSHIPS

- Developing and enhancing revenues generated through grants, entrepreneurial ventures, and community partner ships
- Expanding productive sustainable community alliances
- Fostering partnerships with Business and Industry


## ENSURING STUDENT SUCCESS

- 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
- 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 life-long 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
5. 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 9 th 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 |  |

[^1]
## 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 the International Student Admissions 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 "adjust-ment-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 hours to complete and covers reading comprehension 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.

## 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 $w w w$.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

Beginning Fall 2014, all students new to the Los Angeles Community College District must complete matriculation services in order to be eligible for priority registration. New students must complete online orientation, assessment and counseling/educational planning to receive priority status.

## MATRICULATION EXEMPTIONS

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

## ASSESSMENT EXEMPTION CRITERIA

1. Students who have already earned an A.A./A.S. degree or higher.
2. Students who are attending Pierce with a goal of personal interest and who have completed fewer than 16 units of college credit.
Note: Students who have completed assessments or prerequisite courses at other colleges should present this documentation for verification to the Assessment Center. (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 12 th 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.
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.

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

## 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 $w w w$.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/assment_center/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 $w w w$.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 $w w w . f a f s a . g o v$ 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

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/offices/assessment_center/

## 4. COUNSELING/PREREQUISITES

See a Counselor well in advance of registration. Ask about degree and major requirements. Bring proof of prerequisite courses completed at other colleges to the Counseling Office in the Student Services Building.

## 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

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

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

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 and 9 units for intersessions. Please be aware unit maximum is calculated based on the total units attempted district-wide in a given semester or combined intersession (as in the case for multiple summer sessions). The normal class load for students in the Fall or Spring semester is from 12 to 19 units a semester and 6 units an intersession for full-time students (does not apply to financial aid or other program requirements). 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 $w w w$.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 2014-2015 tuition fee for non-resident students is $\$ 193$ per semester unit for students who are non-residents from another state; \$215 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.

## Fee And Refund Schedule

FALL AND SPRING SEMESTERS (Effective Fall Semester, 2014)

| AMOUNT | REFUND DEADLINE |
| :---: | :---: |
| Enrollment Fee <br> 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 the California Legislature different for each class) |
| Non-resident Tuition Fee <br> (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: \$193 per unit | End of the second week of the semester |
| Students from another country: \$215 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 |
| Other Fees |  |
| Emergency Processing of Transcript or Verification of Enrollment: \$10 |  |
| Verification of Enrollment* \$3 |  |
| Record of Work in Progress* \$3 |  |
| Transcript* \$3 <br> *The first two are free |  |
| Check Acceptance Policy <br> 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 <br> - Business/Corporate checks <br> - Third - party checks <br> - Government checks (different for each class) | - Insurance checks <br> - Payroll checks <br> - U.S. Treasury checks <br> - Federal Reserve checks |
| For questions please call: Business Office (818) 719-6432 <br> 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. <br> All fee refunds must be claimed in person at the Business Office. |  |

## Parking Fee

A parking permit is required at all times when using campus parking facilities during regular school hours.
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 (ASO), 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 ( $1,3,4,6,7,8$ and 9 ), as well as legally allowable street parking space. The non-preferred parking areas (permit required) is parking lot 5 and on El Rancho Drive.

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.

## 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* | $\$ 10.00$ |

* Any vehicle displaying a lost or stolen permit is subject to citation and/ or impoundment. Responsibility for loss or theft of permit rests solely with the puchaser. Ownership and/or assignment of this hanging tag is not transferable. Replacement permits will only be issued at the discretion of Pierce College.

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 |
| :--- | ---: |
| $\$ 7.00$ | $\$ 7.00$ |

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 | 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) |  |
| NP | No Pass (formerly No-Credit) (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.) |  |  |
| 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.

| SYMBOL | DEFINITION |
| :---: | :---: |
| $I P$ | 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.

| SYMBOL | DEFINITION |
| :---: | :---: |
| 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.

| SYMBOL | DEFINITION |
| :---: | :---: |
| 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.

| SYMBOL | DEFINITION |
| :---: | :---: |
| 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.

| SYMBOL | DEFINITION |
| :---: | :---: |
| P/NP | 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.

## 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 or email for the faculty member. This, however, does not guarantee students a seat in the class if they do not attend the first class meeting.

## 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.

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.

## 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.


Courses Offered on a Credit-By-Exam Basis

| American Sign Language | all courses |
| :--- | :--- |
| Animal Science | 501,510 |
| Architecture | 5 |
| Auto Service Technology | $1,2,3,4,5,6,7,25$ |
| Biology | 123 |
| Computer Science | $501,533,536,539,540,572,575,587$ |
| Electronics | $4 \mathrm{~A}, 4 \mathrm{~B}, 6 \mathrm{~A}, 6 \mathrm{~B}$ |
| Industrial Technology | $130,145,146,230,330$ |
| Journalism | 101,216 |
| *Music | $(201,202,203)(211,212,213,214)(221$, |
| Nursing | $422)(301,302,303)$ |
| Photography | $415,441,442$ |
| Physics | 10,20 |
| Special Education | 12 |
| Theater Arts | all courses |

*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 appointment with a counselor for transcript evaluation.

Disclaimer: Every effort has been made to ensure the articulation information for the California State Universities and the University of California institutions are accurate, including the CSU GE and IGETC areas. However, this information is unofficial and should be checked against the official information found on the ASSIST website at www.assist.org.

## FOREIGN TRANSCRIPT CREDIT POLICY

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

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

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

## Courses Offered on a Pass/No Pass Basis

## (FORMERLY CREDIT/NO CREDIT)

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

1. Students have the option of selecting Pass/No Pass only for those courses listed below.
2. Selection of courses to be taken on a Pass/No Pass basis must be made during the time indicated in the schedule of classes for the semester in which the course is taken. Late requests will not be accepted. Pass/No Pass 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 - 105, 106, 109, 111, 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
Communication Studies- 111, 113
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, 25, 33, 36, 37, 38
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
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
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 $-150 \mathrm{~A}, \mathrm{~B}$, 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

## 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: http://admission.universityofcalifornia. edu/counselors/exam-credit/ap-credits/index.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

Credit for Advanced Placement Exam

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 <br> 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 <br> 4 semester units | 6 sem units |
| Chemistry | 3, 4, 5 | 8 | 3 | Section A: Natural Science |  |  | 5 A 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 |  |  | $3 B$ and 6A 3 sem/4 qtr units | 8 qtr/5.3 sem units | $\begin{gathered} \text { C2 } \\ 3 \text { semester units } \end{gathered}$ | 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 | $\begin{aligned} & 4 \text { qtr/2.7 } \\ & \text { sem units } \end{aligned}$ | $\begin{aligned} & \text { NA^ (removal fall } \\ & 2009 \ddagger) \end{aligned}$ | 6 sem units |
| Economics Macroeconomics | 3, 4, 5 | 3 | 3 | Section B2: <br> Social and Behavioral Sciences |  |  | $\begin{gathered} 4 \\ 3 \text { sem } / 4 \\ \text { qtr units } \end{gathered}$ | $4 \mathrm{qtr} / 2.7$ <br> sem units | $\begin{gathered} \text { D2 } \\ 3 \text { semester units } \end{gathered}$ | 3 sem units |
| Economics <br> - Microeconomics | 3, 4, 5 | 3 | 3 | Section B2: <br> Social and Behavioral Sciences |  |  | $\begin{gathered} 4 \\ 3 \text { sem } / 4 \\ \text { qtr units } \end{gathered}$ | 4 qtr/2.7 <br> sem units | $\begin{gathered} \text { D2 } \\ 3 \text { semester units } \end{gathered}$ | 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 | $\begin{gathered} \text { A2 } \\ 3 \text { semester units } \end{gathered}$ | 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 |  |  | TM <br> 5 A with lab 3 sem/4 qtr units | 4 qtr/2.7 <br> sem units | B1 and B3 (B2 removal fall 2009ђ) <br> 4 semester units | 4 sem units |
| French Language | 3, 4, 5 | 6 | 3 | Section C: Humanities |  |  | $\begin{gathered} 3 \mathrm{~B} \text { and } 6 \mathrm{~A} \\ 3 \text { sem } / 4 \\ \text { qtr units } \\ \hline \end{gathered}$ | 8 qtr/5.3 sem units | $\begin{gathered} \mathrm{C2} \\ 3 \text { semester units } \end{gathered}$ | 6 sem units |
| French Literature | 3, 4, 5 | 6 | 3 | Section C: Humanities |  |  | 3 B and 6A 3 sem/4 qtr units | 8 qtr/5.3 sem units | C2 3 semester units (removal fall $2009 \ddagger$ ) | 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 | $\begin{gathered} \text { C2 } \\ 3 \text { semester units } \end{gathered}$ | 6 sem units |
| Government \& Politics: U.S. | 3, 4, 5 | 3 | 3 | Section B1: American Institutions |  | American Institutions Satisfied |  | $4 \mathrm{qtr} / 2.7$ <br> sem units | D8 and US-2 <br> 3 semester units | 3 sem units |
| Government \& Politics: Comparative | 3, 4, 5 | 3 | 3 | Section B2: Social and Behavioral Sciences |  |  | qtr units | $\begin{aligned} & 4 \text { qtr/2.7 } \\ & \text { sem units } \end{aligned}$ | $\begin{gathered} \text { D8 } \\ 3 \text { semester units } \end{gathered}$ | 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 | $\begin{gathered} \text { C2 or D6 } \\ 3 \text { semester units } \end{gathered}$ | 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 <br> 3 semester units | 6 sem units |
| Human Geography | 3, 4, 5 | 3 | 3 | Section B2: Social and Behavioral Sciences |  |  | 4 <br> 3 sem/4 qtr units | 4 qtr/2.7 <br> sem units | $\begin{gathered} \text { D5 } \\ 3 \text { semester units } \end{gathered}$ | 3 sem units |
| Italian Language \& Culture | 3, 4, 5 | 6 | 3 | Section C: Humanities |  |  | $\begin{aligned} & \text { 3B and 6A } \\ & 3 \text { sem } / 4 \\ & \text { qtr units } \end{aligned}$ | 8 qtr/5.3 sem units | 3 semester units | 6 sem units |
| Japanese Language \& Culture | 3, 4, 5 | 6 | 3 | Section C: Humanities |  |  | $\begin{gathered} \text { 3B and 6A } \\ 3 \text { sem } / 4 \\ \text { qtr units } \end{gathered}$ | 8 qtr/5.3 sem units | $\begin{gathered} \text { C2 } \\ 3 \text { semester units } \end{gathered}$ | 6 sem units |
| Latin Literature | 3,4,5 | 6 | 3 | Section C: Humanities |  |  | 3 B and 6A 3 sem/4 qtr units | $\begin{gathered} 4 \mathrm{qtr} / 2.7 \\ \text { sem units } \end{gathered}$ | $\begin{aligned} & \text { C2 } \\ & 3 \text { semester units } \\ & \text { (removal fall } \\ & 2009 \ddagger \text { ) } \end{aligned}$ | 6 sem units |
| Latin: Vergil | 3, 4, 5 | 6 | 3 | Section C: Humanities |  |  | $\begin{aligned} & 3 \mathrm{~B} \text { and 6A } \\ & 3 \text { sem/4 } \\ & \text { qtr units } \end{aligned}$ | 4 qtr/2.7 <br> sem units | $\begin{gathered} \mathrm{C} 2 \\ 3 \text { semester units } \end{gathered}$ | 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 | $\begin{gathered} 4 \mathrm{qtr} / 2.7 \\ \text { sem units } \end{gathered}$ | B4^ <br> 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 |  | $\begin{gathered} 2 \mathrm{~A} \\ 3 \text { sem } / 4 \\ \text { qtr units } \end{gathered}$ | 8 qtr/5.3 sem units | B4^ <br> 3 semester units | 6 sem units |



|  | $\begin{aligned} & \underset{\sim}{u} \\ & \stackrel{y}{0} \\ & \underset{0}{0} \\ & \text { n } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Music Theory | 3，4， 5 | 6 | 3 | Section C：Humanities |  |  | NA | 8 qtr／5．3 sem units | C1 <br> 3 semester units （removal fall 2009 $\ddagger)$ | 6 sem units |
| Physics B | 3，4， 5 | 6 | 3 | Section A：Natural Science |  |  | TM <br> 5 A with lab 4 sem／5 qtr units | 8 qtr／5．3 sem units | B1 and B3\％ 4 semester units | 6 sem units |
| Physics C <br> Mechanics | 3，4， 5 | 4 | 3 | Section A：Natural Science |  |  | TM <br> 5 A with lab 3 sem／4 qtr units | 4 qtr／2．7 <br> sem units | B1 and B3\％ 4 semester units | 4 sem units |
| Physics C Electricity \＆Magnetism | 3，4， 5 | 4 | 3 | Section A：Natural Science |  |  | 5 A with lab TM 3 sem／4 qtr units | $4 \text { qtr/2.7 }$ <br> sem units | B1 and B3\％ 4 semester units | 4 sem units |
| Psychology | 3，4， 5 | 3 | 3 | Section B2：Social and Behavioral Sciences |  |  |  | 4 qtr／2．7 <br> 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 | $\begin{gathered} \mathrm{C} 2 \\ 3 \text { semester units } \end{gathered}$ | 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 | $\begin{gathered} \mathrm{C} 2 \\ 3 \text { semester units } \end{gathered}$ | 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 <br> sem units | B4 <br> 3 semester units | 3 sem units |

@ 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 1 B 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.
$T M$ 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.

## Advanced Placement Information

## 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
$\dagger$ 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.
$\neq$ Students seeking certification in CSU GE Breadth prior to transfer must have passed the AP test before this date.
$\wedge$ 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 ${ }^{\circ}$ (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/diplomal

## 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 History: European | 3, 4, 5 | History 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AP Art History | 3, 4, 5 | Art 101 and Art 102 | AP History: United States | 3, 4, 5 | History 11 and History 12 |
| AP Art Studio: Drawing | 3, 4, 5 | Art 201 and Art 202 | AP History: World | 3, 4, 5 | History 86 and History 87 |
| AP Art Studio: | 3, 4, 5 | Art 501 Two-dimensional design | AP Human Geography | 3, 4, 5 | Geography 2 |
| AP Biology | 3, 4, 5 | Biology 3 | AP Macroeconomics | 3, 4, 5 | Economics 2 |
| AP Calculus AB | 3, 4, 5 | Math 261 | AP Microeconomics | 3, 4, 5 | Economics 1 |
| AP Calculus BC | 3, 4, 5 | Math 261 and Math 262 | AP Music Theory | 3, 4, 5 | Music 101 |
| AP Computer Science A | 3, 4, 5 | Co Sci 506 or Co Sci 575 | AP Physics B | 3, 4, 5 | Physics 6 and Physics 7 |
| AP Computer Science AB | 3, 4, 5 | Co Sci 536 | AP Physics C: Mechanics | 3, 4, 5 | Physics 101 |
| AP English Language and | 3 | English 28 | AP Physics C: | 3, 4, 5 | Physics 102 Electricity and |
| Composition | 4,5 | English 101 | Magnetism |  |  |
| AP English Language and | 3 | English 28 | AP Psychology | 3, 4, 5 | Psychology 1 |
| Composition | 4,5 | English 101 | AP Spanish Language | 3, 4, 5 | Spanish 1 |
| AP French Language | 3, 4, 5 | French 1 | AP Statistics | 3, 4, 5 | Math 227 |
| AP Government and Politic | 3, 4, 5 | Political Science 1 United States |  |  |  |

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

| CLEP EXAM | ACE RECOMMENDED SCORE | TOTAL SEMESTER UNITS AWARDED TOWARD ASSOCIATE DEGREE 1 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 | $60^{3}$ | 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 <br> 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 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 I: 1648 to Present | 50 | 3 | 3 | Section B2: Social and Behavioral Sciences |  |

Science and Mathematics

| Biology | 50 | 6 | 3 | Section A: Natural <br> Sciences |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculus | 50 | 3 | 3 | Section D2: <br> Communication and <br> Analytical Thinking | Mathematics <br> Competency Satisfied |  |
| Chemistry | 50 | 6 | 3 | Section A: Natural <br> Sciences |  |  |
| College Algebra | 50 | 3 | 3 | Section D2: <br> Communication and <br> Analytical Thinking | Competency Satisfied |  |

${ }^{1}$ The scores and credit hours that appear in this table are the cred-it-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.
${ }^{3}$ This score is recommended for exams administered after June 30, 2008. Sources:
bttp://www.collegeboard.com/student/testing/clep/about.htm

## LACCD Credit for International Baccalaurate (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 | $\begin{gathered} \text { B2 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Chemistry HL | 5 (ALL) | 6 | 3 | Section A: Natural Science |  |  | 5A (without lab) 3 semester/4 quarter units | $\begin{gathered} \text { B1 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Economics HL | 5 (ALL) | 6 | 3 | Section B2: Social and Behavioral Sciences |  |  | 4B 3 semester/4 quarter units | $\begin{gathered} \text { D2 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Geography HL | 5 (ALL) | 6 | 3 | Section B2: <br> Social and Behavioral Sciences |  |  | 4E <br> 3 semester/4 quarter units | $\begin{gathered} \text { D5 } \\ 3 \text { semester units } \end{gathered}$ |
| IB History (any region) HL | 5 (ALL) | 6 | 3 | Section B2: Social and Behavioral Sciences |  |  | $\begin{aligned} & 3 \mathrm{~B} \text { or } 4 \mathrm{~F} \\ & 3 \text { semester } / 4 \\ & \text { quarter } \\ & \text { units } \end{aligned}$ | $\begin{gathered} \text { C2 or D6 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Language A1 (English) HL | 4 (AA/AS) | 6 | 3 | Section D <br> Language \& Rationality: Area <br> 1. English <br> 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 <br> Language \& Rationality: Area <br> 1. English <br> 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 | $\begin{aligned} & 4 \text { (AA/AS) } \\ & 5 \text { (IGETC) } \end{aligned}$ | 6 | 3 | Section C: Humanities |  |  | 3B and 6A 3 semester/4 quarter units | N/A |
| IB Language A2 (any language, except English) HL | $\begin{aligned} & 4 \text { (AA/AS) } \\ & 5 \text { (IGETC) } \end{aligned}$ | 6 | 3 | Section C: Humanities |  |  | 3B and 6A 3 semester/4 quarter units | N/A |
| IB Language A1 (any language) HL | $\begin{gathered} 4 \text { (AA/AS) } \\ 4 \text { (CSU GE) } \\ 5 \text { (IGETC) } \end{gathered}$ | 6 | 3 | Section C: Humanities |  |  | 3B 3 semester/4 quarter units | $\begin{gathered} \mathrm{C} 2 \\ 3 \text { semester units } \end{gathered}$ |
| IB Language A2 (any language) HL | $\begin{gathered} 4 \text { (AA/AS) } \\ 4 \text { (CSU GE) } \\ 5 \text { (IGETC) } \end{gathered}$ | 6 | 3 | Section C: Humanities |  |  | 3B <br> 3 semester/4 quarter units | $\begin{gathered} \text { C2 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Language $\mathrm{B}^{1}$ (any language) HL | $\begin{gathered} 4 \text { (AA/AS) } \\ 4 \text { (CSU GE) } \\ 5 \text { (IGETC) } \end{gathered}$ | 6 | 3 | Section C: Humanities |  |  | Meets proficiency req. | N/A |
| IB Mathematics HL | $\begin{gathered} 4 \text { (AA/AS) } \\ 4 \text { (CSU GE) } \\ 5 \text { (IGETC) } \end{gathered}$ | 6 | 3 | Section D: Language \& Rationality: Area 2. Communication and Analytical Thinking | Mathematics Competency Satisfied |  | 2A <br> 3 semester/4 quarter units | $\begin{gathered} \text { B4 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Physics HL | 5 (ALL) | 6 | 3 | Section A: Natural Science |  |  | 5A (without lab) 3 semester/4 quarter units | $\begin{gathered} \text { B1 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Psychology HL | 5 (ALL) | 3 | 3 | Section B2: Social and Behavioral Sciences |  |  | $\begin{gathered} 41 \\ 3 \text { semester/4 } \\ \text { quarter } \\ \text { units } \end{gathered}$ | $\begin{gathered} \text { D9 } \\ 3 \text { semester units } \end{gathered}$ |
| IB Theater HL | $\begin{gathered} 4 \text { (AA/AS) } \\ 4 \text { (CSU GE) } \\ 5 \text { (IGETC) } \end{gathered}$ | 6 | 3 | Section C: Humanities |  |  | 3A 3 semester/4 quarter units | $\begin{gathered} \text { C1 } \\ 3 \text { semester units } \end{gathered}$ |

${ }^{1}$ 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://admission.universityofcalifornia.edu
http://www.calstate.edu/AcadAff/codedMemos/AA-2010-09.pdf
http://icas-ca.org/standards-policies-and-procedures-manual bttp://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/her 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 College 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 College 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 drugfree 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.justice.gov/dea/druginfo/factsheets.shtml


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: http://www.justice.gov/dea/druginfo/factsheets.shtml

## 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) http://laccd.edu/Departments/HumanResources/ Total-Wellness-Program/Pages/HR-ARFLbenefits.aspx; (800) 342-8111
- National Council on Alcoholism and Drug Dependence www.ncadd.org; (800) NCA-CALL
- Los Angeles County Alcohol and Drug Program Administration http://publichealth.lacounty.gov/sapc/; (626) 299-4193
- 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 http://www.familiesanonymous.org (800) 736-9805


## Penalties for Copyright Infringement and IIIegal 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

Pierce College offers a broad array of support services for students. The division of student services exists 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.

The Vice President of Student Services provides leadership and oversight of student services departments. The office ensures compliance with State and Federal laws and regulations. Student success is our highest priority. Students are encouraged to contact the Vice President of Student Services to provide feedback about our services and programs.

## 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.

## FINANCIAL AID SERVICE AREA OUTCOMES

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

The best time to submit the Free Application for Federal Student Aid (FAFSA) is between January 1st and March 2nd prior to the start of the academic year (Fall semester).

FOLLOW THE TIMELINE BELOW

| January 1-March 2 | FAFSA priority application |
| :---: | :---: |
| March 2 | Deadline to apply for Cal Grant |
| May 1 | Priority deadline to submit required <br> documents to the Financial Aid Office |
| September 2 | Extended competitive Cal Grant deadline <br> for CA 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 by June 30 of the award year, 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. Ifyou 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 $w w w . i r s . g o v$ 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: Due to the Higher Education Opportunity Act (HEOA), students have a maximum lifetime PELL Grant eligibility of 600\% ( 12 full-time semesters). 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 2nd prior to the start of the academic year. A second deadline for community college applicants is September 2nd, 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 appli-

 cable 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 $\$ 1,473$ 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.asp $x$

## 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 low-interest loan program for students and parents to help pay for the cost of higher education. Loans are made by the federal government. The following are types of Direct Loans:

- Subsidized Loans - students must demonstrate financial need; no interest is charged while in school or attending college at least half-time.
- Unsubsidized Loans - this loan is not based on financial need; interest is charged during all periods.
- PLUS Loan - Unsubsidized loans for parents of dependent students and for graduate/professional students. Interest is charged during all periods.

To learn more about the federal student loan program, visit the US
Department of Education at www.studentloans.gov.
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

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 refund preference. Students can choose to activate the card to receive financial aid disbursements or direct refunds 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 choose a refund preference, financial aid refunds 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. 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 refund information. Please note that the disbursement schedules are based on full-time enrollment. The actual refund 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 offuture 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 $\mathrm{EFC}=$ 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 <br> 9 MONTHS | LIVING AWAY FROM HOME |
| :---: | :---: | :---: |
| Fees | $\$ 1,220$ | $\$ 1,220$ |
| Books \& Supplies | $\$ 1,746$ | $\$ 1,746$ |
| Room \& Board | $\$ 4,599$ | $\$ 11,493$ |
| Transportation | $\$ 1,134$ | $\$ 1,278$ |
| Personal Expenses | $\$ 3,132$ | $\$ 2,871$ |
| Total | $\$ 11,831^{\star}$ | $\$ 18,608^{\star}$ |

*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)
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.
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 initially in good standing but now have a cumulative GPA of less than 2.0 and/or their cumulative non-grades are greater than $33 \%$ will receive Warning Letters but remain eligible for the following term of enrollment in the LACCD.
- 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 deficiencies:

- 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.

## 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 <br> 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 except for Federal student (Direct Stafford) or parent loans (Direct PLUS) retroactively for petitions received and approved after the payment period ends.
5. Petition 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. National Student Loan Database System - www.nslds.ed.gov

## TELEPHONE NUMBERS

1. Pierce College Financial Aid and Scholarships Office (818) 719-6428
2. Pierce College Veterans Office (818) 710-3316
3. California Student Aid Commission (888) 224-7268
4. Central Loan Administration Unit (Perkins Loan) (800) 822-5222
5. Department of Veterans Affairs (VA Benefits) (800) 827-1000
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:
uctransfer.universityofcalifornia.edu

## California State University Transfer Information:

CSU Mentor: www.csumentor.edu

## California Private and Independent Transfer Information:

AICCU: www.aiccu.edu

## 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 uctransfer.universityofcalifornia.edu

## PIERCE COLLEGE AND CALIFORNIA PRIVATE INSTITUTION TRANSFER PARTNERSHIPS

Through the Pierce Honors Program, we have transfer agreements with some private universities. The requirements for the Honors program at Pierce, as well as additional information, can be found on the Pierce College Transfer website or at the Honors 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 trans-fer-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 page 66 and page 67.


## Disclaimer

Every effort has been made to ensure the articulation information for the California State Universities and the University of California institutions are accurate, including the CSU GE and IGETC areas. However, this information is unofficial and should be checked against the official information found on the ASSIST website at www.assist.org.

## Special Instructional Programs

## Honors Program

The Pierce College Honors Transfer 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 approximately 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 nine (9) 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 Transfer 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 15 Honors units by taking five (5)
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 Transfer Program you must be eligible for English 101 and have completed 9 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 Transfer Program application through the honors' website at http://www.piercecollege.edu/offices/honors/. The copies of unofficial high school transcripts, unofficial transcripts for any college work, and the English placement test results should be submitted to the Honors Transfer Program office, VLGE 8340, the Pierce Mailroom located next to the Business Office, or they can be submitted via the U.S. Postal service to:

Pierce College Honors Transfer Program
6201 Winnetka Ave., Woodland Hills, CA 91371
Note: The Honors Office must have access to all official transcripts from all institutions and official AP scores. Check with your counselor to see if your records are on file in the Pierce College Admissions \& Records office. All official transcripts must be sent directly from the high school, university, college, College Board, etc. to the:

Admissions \& Records Office
Student Services Building
Pierce College
6201 Winnetka Ave, Woodland Hills, CA 9137

## PROGRAM BENEFITS

Students in the Honors Transfer 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 in areas such as Time Management, Conflict Resolution, Leadership Training and ESL to meet professional needs.
- We offer more than 200 online classes and online career training

For further information please visit bttp://extension.piercecollege.edu, or email Cindy Chang at changck@piercecollege.edu.

## 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) or Guardian Scholars, please call (818) 710-3352, 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.

## 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 through Thursday from 8:00 a.m. until 6:00 p.m. and Friday 8:00 a.m. to 4:00 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.
- Special classes
- Print magnifier
- Testing proctoring
- Special counseling
- Learning disability assessment
- Special parking
- Alternative media
- Specially adapted software technology
- Special orientation
- Adaptive furniture


## DISABLED STUDENTS PROGRAM AND SERVICES SERVICE AREA OUTCOMES

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

1. Students with declared majors will demonstrate a level of confidence choosing an educational goal and follow the recommendations of their Special Services Counselor taking the appropriate classes to achieve their academic goals.
2. Special Services students will:

- Describe their disability, strengths, and effective accommodations
- Understand and adhere to the Special Services policies and procedures
- Actively participate in counseling sessions and initiate accommodation requests in a timely manner
- Identify resources available on campus to enhance development and academic performance

3. Students placing in remedial English and Math will identify Special Services as a resource for disability assessment and potential accommodations.
4. Students will recognize the importance of self-management, developing workplace and professional skills, and self-advocacy.
5. Students will recognize the importance of time commitment and necessity to adhere to schedule LD assessment appointments to complete the comprehensive assessment.

## 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 statefunded 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 SERVICE AREA 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 Coun-ty-referred for post-employment or post-time limits services. Students receiving SSI, General Relief, Cal-Fresh (food stamps) only or MediCal 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:

- Priority registration
- 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 Student Admissions \& Services

International education is a major undertaking of Pierce College. The college seeks to foster mutual respect and understanding for the diversity of cultures, languages and ideas of the people of the world. The International Student Admissions Office serves prospective F-1 students which includes assistance with the application process. The International Student Services (ISS) Office provides advisement and resources for new and continuing nonimmigrant students visiting on an F-1 Visa.

Prospective F-1 students are advised to contact the International Student Admissions Office directly. Admissions requirements for international students differ from residents and non-residents visiting on other visas. The application package can be obtained online or from:

```
International Student Admissions: PMB 304
Student Services Building 48109 (1st Floor)
Pierce College
6 2 0 1 \text { Winnetka Avenue}
Woodland Hills, CA 91371 USA
```

website: www.piercecollege.edu/offices/international_students 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 check-in appointment. A counselor is available to assist students with academic, career, personal, and visa 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. Some of these requirements include: completion of 12 units every Fall and Spring semester, maintaining a 2.0 cumulative grade point average, refraining from unauthorized employment and maintaining a valid passport and I-20. Admitted students are required to seek advisement from a Designated School Official (DSO) in the International Students Services Office 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 Admissions Office.

## Current Students

International Student Services (ISS) is located in the Student Services Building, 2nd Floor (SSB 48271). (818) 719-6417.

## Library

The college library has a collection of more than 200,000 books which include over 96,000 eBooks. The library subscribes to approximately 150 print magazines, journals, and newspapers as well as 60 online databases.
The library web page, located at:
http://libguides.piercecollege.edu/content.php?pid=442777, provides links to Subject Guides, book catalog, online articles, and much more.

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 located on the second floor of the Library Learning Crossroads building ( 5200 ). With over 58,000 square feet, the library includes study carrels, group study rooms, comfortable seating, WiFi, computers and two Copy Tech rooms.

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 hours and 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 (LLC 5130)

The Center for Academic Success offers free individual tutoring, group tutoring, and workshops in a variety of subject areas. Students can make appointments in advance or walk in; 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 (LLC 5130) for more information.

Hours: Monday - Thursday 9 a.m. - 5:30 p.m. Friday - 10:00 a.m. 2:00 p.m.

## 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 $w w w . g i b i l l . v a . g o v$
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/veterans.asp. Or e-mail at pierce-veteran@pierccoollege.edu.

## Office Hours

Monday through Thursday, 8:00 am - 4:00 pm
Friday, 8:00 am - 12:00 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

After you receive your Student ID\#, make an appointment to take the Assessment Test and view the on-line Orientation. To learn the steps to matriculation, go to: bttp://www.piercecollege.edu/offices/assessment_center/maticulation.asp
2. Apply for VA Educational Benefits by completing the VA 22-1990 form online at bttp://www.benefits.va.gov.
3. Apply for financial aid at $w w w . f a f s a . g o v$. Make sure Pierce College federal school code (001226) is included in your FAFSA.
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. Schedule an appointment with a Veterans Counselor in the Counseling Office. Appointments must be made one week in advance. Please note that a student educational plan must be submitted to the Veterans Services along with other paperwork in order to be certified for VA benefits. Submit the following documentation to the Financial Aid Office, Scholarships \& Veterans Office located in the 2nd floor of the Student Services Building:
a. Student Educational Plan signed by you and the counselor. Note: Short term classes affect the VA monthly benefits. Please check with the Veterans representative for additional information.
b. Chapter 33 applicants must submit a Certificate of Eligibility letter awarded by the VA. This form is automatically sent to your home of record upon exiting the military. If you need to request an additional copy, call the VA Office at (888) 442-4551.
c. Submit a copy of your DD-214 (copy member-4) or NOBE (Notice of Basic Eligibility DD-2384).
d. Complete the Veterans Statement of Obligation and Responsibilities form available in the Veterans Services Office.

Make copies of all submitted documents for your own records.
6. To continue receiving benefits, visit the Veterans Services Center every semester to request VA Enrollment Certification.
7. You need to verify your attendance every month if you are receiving one of the benefits listed below. You may verify your enrollment by calling VA at (877) 823-2378 or online at https://www.gibill.va.gov/wave/index.do
a. Montgomery GI Bill - Active Duty
b. Montgomery GI Bill - Selected Reserve
c. REAP
d. VRAP

## 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 $9 / 11 \mathrm{GI}$ 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 COURSES (FORMERLY PERSONAL DEVELOPMENT COURSES)

Counseling courses are the instructional component of the Counseling Department. These courses are taught by Pierce College Counselors, and provide students with foundational skills in college success strategies, career and/or major exploration, educational planning, and more. Students will learn the various aspects of the Pierce College
campus including: student activities, support programs and resources, and campus policies and procedures. Counseling courses are offered in various formats, including: eight-week sessions, online only, as one element of a cohort (e.g. Summer Bridge Program, ASAP [Algebra Success at Pierce]), as well as traditional semester length courses. For more information regarding Counseling courses, please visit the official course descriptions within this catalog. For future course offerings, please view the Pierce College schedule of classes for the upcoming 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.

## 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


## Career Center

The Career Services provides 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


## 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 for 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. 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 6.8 children in each classroom.

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.

## CAMPUS CHILD DEVELOPMENT CENTER SERVICE AREA OUTCOMES

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

- Children will demonstrate continued growth in cognitive, creative, physical and social-emotional development.
- CDC Assistant Teachers will be able to demonstrate ability to create appropriate curriculum activities for children after professional development trainings.
- Instructional/Adult students will demonstrate, by their observation of or work in the CDC classrooms, knowledge of appropriate child-centered classroom activities.
- Parents will gain relevant information to improve parenting skills.


## 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, 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: 7:30 a.m. to 7:00 p.m., Monday through Thursday; 7:30 a.m. to 4:00 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 (323) 268-7632.

## 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 in the Media Center Building 1800.

## 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, as well as mobile media carts for classroom presentations. 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. The emergency phone number is (818) 710-4311.

## 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 and for voice paging via the campus telephone system.

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)7196450 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 $\$ 330$. 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.
The emergency phone number is (818) 710-4311.

## 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

As required by the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act ("Clery Act"), the college's Annual Security Report contains policy statements and crime statistics for the campus. The Annual Security Report includes statistics for the previous three years concerning certain reported crimes that occurred on campus, in off-campus buildings or property owned or controlled by the college, and on public property within or immediately adjacent to the college. The report also includes institutional policies concerning campus safety and security, such as policies on drug and alcohol use, crime prevention, the reporting of crimes, sexual assault, and emergency response and evacuation procedures. You can obtain the college's Annual Security Report online at http://www.piercecollege.edu/media/pdf/AnnualSecurityReport.pdf. You may also request a paper copy by contacting the Sheriff's Department at 818-710-6450.

## 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 W HEN PARKING IN THE COLLEGE PARKING LOTS. PAY VALIDATION MACHINES FOR GUEST PARKING ARE LOCATED IN LOT 1, LOT 5, LOT 6, 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 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 in parking lots 3, 5, and 6. 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 in parking lot 1 or 7. MOTORCYCLES ARE NOT PERMITTED ON INNER CAMPUS ROADWAYS.
9. Always lock your car and set brake 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 must lock your bicycles to bike racks which are provided near the entrances to the campus.
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.

Use of the Cross Country Track and adjacent areas are by permit only.
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. People with story ideas or questions can contact the newsroom in Village 8211. 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 thebullmag.com

The campus internet radio station, KPCRadio.com provides streaming content $24-7$, while live operating hours vary. Listen to the station at www.kpcradio.com. Podcasts, multi-media stories, music and other content are available at any time. The station is located in Village 8212.

## 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 le:
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 Mathematics Competency Examination (Intermediate Algebra).

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 baccalau-reate-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. Degree and Certificate programs are listed on page page 69 .

## 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: bttp://srtk.cccco.edu/index.asp.

## Transfer Students

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree.

California Community College students who are awarded an AA-T or AS-T degree will have completed lower-division major preparation requirements for the particular degree at a participating California (CSU) campus, are guaranteed admission with junior standing somewhere in the CSU system and are given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. Following transfer to a participating CSU campus, students will be required to complete no more than 60 semester units or 90 quarter units to obtain a bachelor's degree; however, some CSU campuses accepting this degree may require additional lower-division major preparation.

Please note: Priority Admission does not guarantee admission to specific majors or campuses. This degree may not be appropriate preparation for students transferring to a CSU campus not accepting this degree or to a university or college that is not part of the CSU system.

To view the most current list of Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://www.sb1440.org/counseling.aspx. Current and prospective community college students are encouraged to meet with a Pierce counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

At the time of catalog publication, the following AA-T or AS-T have been approved: Administration of Justice (AS-T), Business Administration (AS-T), Early Childhood Education (AS-T), Journalism (AA-T), Mathematics (AS-T), Political Science (AA-T), Spanish (AAT) and Studio Arts (AA-T). Other 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 $5 \S 55063$ ).
4. Certified completion of the Plan C: California State University General Education-Breadth pattern (CSU GE Breadth) (see page 66 and page page 67 for more information); OR the Plan $D$ : Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 67 for more information).

## Additional and Concurrent Associate Degrees

Students who have previously earned an associate degree from a United States regionally accredited institution may be granted an additional associate degree when the following requirements have been met:

1. Pursuant to catalog rights, described in Board Rule 6202, completion of all current degree requirements - i.e., scholarship, residency, competency, general education and major requirements.
2. Completion of a minimum of six (6) new units in a major. Major course requirements completed in previous degrees awarded can be used again for additional degrees.
3. All courses that count towards the associate degree major or area of emphasis must be satisfactorily completed with a grade of "C" or higher or " P " (pass). Major or area of emphasis courses for an AA-T or AS-T degree must be completed with a grade of "C" or higher or "P" (pass).
4. There is no limit to the number of additional associate degrees that can be awarded provided that all the above requirements have been met.
5. Completion of any additional requirements, including new units, as determined by the college through collegial consultation with the college Academic Senate in accordance with the provisions of Chapter XVII of the Board Rules - Academic Senate and the Board of Trustees Shared Governance Policy.

Concurrent degrees are degrees awarded in the same semester. Students may petition and be awarded concurrent associate degrees in different majors if the following criteria are met:

1. Pursuant to catalog rights, described in Board Rule 6202, completion of all current degree requirements: scholarship, residency, competency, general education and major requirements.
2. There is no maximum number of concurrent degrees that a student may be awarded.
3. If a course is a major requirement for each concurrent degree, it may be applied toward satisfaction of each major degree requirement.
4. If an Associate of Science and Associate of Arts degree can be awarded in the same major, only one degree will be granted as selected by the student.
5. Completion of the General Education requirements for one associate degree will fulfill the general education requirements for concurrent degrees, if the same general education pattern applies to the additional degree. If each degree requires the completion of different general education patterns, the general education pattern of each degree must be fulfilled. Courses may be applied toward the general education requirements for each concurrent degree.
6. The LACCD does not offer double majors.

## Procedure For Requesting the Degree

You must file a petition for the degree in the Graduation Office.
Please check the Graduation Office 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.

# Plan A - General Studies GE (General Education) Plan 

All Students must meet the following common Requirements (see page 2 for details)

```
1. UNIT REQUIREMENT
2. GENERAL EDUCATION REQUIREMENT
```

3.MAJORREQUIREMENT
4. SCHOLARSHIP REQUIREMENT
5. RESIDENCY REQUIREMENT
6. COMPETENCY REQUIREMENT


## A. Natural Sciences <br> 3 Sem/4 Qtr 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, 4B, 6A, 8A, 8B; Env Sci 1, 2, 7; Geog 1, 3, 15, 17; Geology $1,2,4,6,10,11,12,22$ ABCDEF; Meteor 3; Micro 1, 20; Oceano 1, 10; Phys Sc 4; Physics 6,7, 12, 15, 66, 67, 101, 102, 103; Physiol 1; PInt Sc 103, 711, 901 ; Psych 2, 73

## B. Social And Behavioral Sciences <br> 9 Sem/12 Qtr Units Minimum

## B1. AMERICAN INSTITUTIONS

## 3 Sem/4 Qtr Units Minimum

Chicano 7, 8; History 11, 12, 13, 14, 41, 42, 43, 44, 52, 56; Pol Sci 1, 19, 30

## B2. SOCIAL AND BEHAVIORAL SCIENCES 3 Sem/4 Qtr Units Minimum

Addicst 15; Adm Jus 1, 2, 4, 67,75, 383; Anthro 102, 105, 106, 109, 132, 141; Bus 1, 5; Chicano 2, 7, 8, 80; Ch Dev 1; Comm 121, 122 Econ 1, 2, 10, 16, 30, 60; Geog 2,7, 14, 21, 22,31; History 3, 4, 5, 6, 8, 11, 12, 13, $15,20,21,27,30,39,40,41,42,43,44,52,76,86,87$; 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, $16,17,32,40,41,52,66,69$; Soc $1,2,3,4,8,11,13,15$, $2128,29,31,35,37,86,87$; Spanish 10, 16, 26

## B3. MINIMUM OF 3 SEM/4 OTR UNITS

 ADDITIONAL FROM B1 OR B2 ABOVE.
## C. Humanities 3 Sem/4 Qtr Units Minimum

Asl 1, 2, 3, 4, 40; Anthro 105, 121, 161; Art 92, 101, $102,103,105,109,111,119,137,138,139,201,202$, 203, 501, 502, 503, 604, 605, 606, 700, 708, 709; Cinema 3, 104, 107; Dance 710, 801, 802, 814, 818, 860; English 102, 103, 127, 203, 204, 205, 206, 207, $208,210,211,214,215,216,219,239,240,250,252$, 270; French 1, 2, 3, 4, 5, 6, 8, 10; History 1, 2, 43, 44, 86, 87; Human 6, 31; Italian 1, 2, 3, 4, 5, 8; Japan 1, 2, 3, 4,27; Music 101, 111, 121, 122, 152, 181, 182, 183, $184,201,202,203,251,299,321,322,323,324,341$, $411,412,413,414,501,531,601,602,611,612,613$, 614, 621, 622,623, 624, 651, 705, 721, 745, 755, 777; Philos 1, 2, 12, 14, 15, 19, 20, 30, 35, 40, 41, 42; Photo 27, 36, 100, 101, 102 Soc 11; Spanish 1, 2, 3, 4, 5, 6, $8,9,11,12,15,25,26,27,35,36,37,65$; Theater 100, $110,125,265,270,271,273,300$

## D. Language And Rationality <br> 12 Sem/16 Qtr Units Minimum <br> D1. ENGLISH COMPOSITION 3 Sem/4 Qtr Units Minimum

English 28, 101, 102, 103; Journal 101, 108; Caot 31, 32

D2. COMMUNICATION AND ANALYTICAL THINKING 6 Sem/8 Qtr Units Minimum
Acctg 1; Adm Jus 305; Caot 77; Comm 101, 102, 103, 104, 121, 122, 151; Co Sci 501, 572, 575; Geog 31, 32, 33; GIS 25, 33; Lib Sci 102; Math 115, 117, 118, 125,215, 227, 228A, 228B, 235, 238, 240, 245,260, 261, 262, 263; Philos 5, 6, 9; Psych 66, 69, 74; Soc 4; Stat 1,7

D3. MINIMUM OF 3 SEM/4 QTR UNITS ADDITIONAL FROM D1 OR D2 ABOVE
E. Health And Kinesiology

3 Sem/4 Qtr Units Minimum
E1. HEALTH EDUCATION
1 Course Minimum
Health 2, 7, 8, 9, 11
E2. ONE ACTIVITY COURSE
1 Unit Minimum
Dance Specialties 401, 402, 431, 434, 437, 440, 441, 446, 490; Dance Studies 262, 452, 801, 802, 814, 820; Dance Techniques 101, 431, 434, 437, 440, 446, 710; Health 2; Kinesiology 90A, 90B, 91, $101,102,203,212,225,228,229,230,238,259$, 301, 304, 313, 322, 503, 504, 508, 511, 512, 513, $514,516,550,553,554,555,556,557,558,559$, 560, 561, 640, 665, 666, 675, 684, 690

## Plan B - Career and Technical GE (General Education) Plan

All Students must meet the following common Requirements (see page 2 for details)

1. UNIT REQUIREMENT
2. GENERAL EDUCATION REQUIREMENT
3. MAJOR REQUIREMENT
4. SCHOLARSHIP REQUIREMENT
5. RESIDENCY REQUIREMENT
6. COMPETENCY REQUIREMENT


## A. Natural Sciences <br> 3 Sem/4 Qtr 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, 4B, 6A, 8A, 8B; Env Sci 1, 2, 7; Geog 1, 3, 15, 17; Geology 1, 2, 4, 6, 10, 11, 12, 22ABCDEF; Meteor 3; Micro 1, 20; Oceano 1, 10; Phys Sc 4; Physics 6, 7, 12, 15, 66, 67, 101, 102, 103; Physiol 1; PInt Sc 103, 711, 901; Psych 2,73

## B. Social and Behavioral Sciences

3 Sem/4 Qtr Units Minimum

## B1. AMERICAN INSTITUTIONS

3 Semester Units Minimum
Chicano 7, 8; History 11, 12, 13, 14, 41, 42, 43, 44, 52, 56; Pol Sci 1, 19, 30

## C. Humanities

3 Sem/4 Qtr Units Minimum
Asl 1, 2, 3, 4, 40; Anthro 105, 121, 161, 162, 163; Art $92,101,102,103,105,109,111,119,137,138,139$, $201,202,203,501,502,503,604,605,606,700,708$, 709; Cinema 3, 104, 107; Dance 710, 801, 802, 814,; English 102, 103, 127, 203, 204, 205, 206, 207, 208, $210,211,214,215,216,219,239,240,250,252,270$; French 1,2, 3, 4, 5, 6, 8, 10; History 1, 2, 43, 44, 86, 87; Human 6,31; Italian 1, 2, 3, 4, 5, 8; Japan 1, 2, 3, 4, 27; Ling 1,2, 3; Music 101, 111, 121, 122, 152, 181, 182, 183, 184, 201, 202, 203, 251, 299, 321, 322, 323, 324, $341,411,412,413,414,501,531,601,602,611,612$, 613, 614, 621, 622,623, 624, 651,705,721, 745, 755, 777; Philos 1, 2, 12, 14, 15, 19, 20, 30, 35,40, 41, 42; Photo 27, 36, 100, 101, 102; Soc 11; Spanish 1, 2, 3, 4, $5,6,8,9,11,12,15,25,26,27,35,36,37,65$; Theater $100,110,125,265,270,271,273,300$
D. Language and Rationality

6 Sem/9 Qtr Units Minimum
D1. ENGLISH COMPOSITION
3 Semester Units Minimum
English 28, 101, 102, 103; Journal 101, 108; CAOT 31, 32

D2. COMMUNICATION AND ANALYTICAL THINKING 3 Semester Units Minimum
Acctg 1; Adm Jus 305; Caot 77; Comm 101, 102, 103, 104, 121, 122, 151; Co Sci 501, 572, 575; Geog 25, 33; GIS 25, 33; Lib Sci 102; Math 115, 117, 118, 125, 215, 227, 228A, 228B, 238, 240, 245, 260, 261, 262, 263; Philos 5, 6, 9; Psych 66, 69, 74; Soc 4; Stat 1

## E. Health and Kinesiology

3 Sem/4 Qtr Units Minimum

## E1. HEALTH EDUCATION

1 Course Minimum
Health 2, 7, 8, 11

## E2. ONE ACTIVITY COURSE 1 Unit Minimum

Dance Specialties 402, 440, 441, 446, 490; Dance Studies 262, 452, 801, 802, 814, 820; Dance Techniques 101, 431, 434, 437, 440, 446, 710; Health 2; Kinesiology 90A, 90B, $91,101,102,203,212,225$, $228,229,230,238,259,301,304,313,322,503,504$, $508,511,512,513,514,516,550,553,554,555,556$, $557,558,559,560,561,640,665,666,675,684,690$

# Plan C - Pierce College CSU General Education Certified Plan 2014-2015 

DISCLAIMER: 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

This CSU GE Plan totals approximately 39 CSU transferable semester units. A minimum of 60 CSU transferable semester units is required for transfer. You will need to complete additional coursework in your major and maybe some elective courses. Please consult ASSIST for applicable major coursework and see a counselor to develop an Educational Plan.

## AREA A - English Language Communication and Critical Thinking

9 semester or 12-15 quarter units. One course from each area.

## A1 - ORAL COMMUNICATION

Communication Studies 101, 102, 104, 121

## A2 - WRITTEN COMMUNICATION

English 101

## A3 - CRITICAL THINKING

Comm Studies 104; English 102, 103; Philosophy 5, 6, 9; Pol Sci 5; 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.

## B1 - PHYSICAL SCIENCE

Astronomy 1, 3; Chemistry 51, 60, 101, 102, 211,212, 221; Environmental Sci 1,7 (same as Geology 10); Geography 1, 3 (same as Meteorology 3), 17, 23; Geology 1, 2, 4, 10 (same as Environmental Science 7), 12; Meteorology 3 (same as Geography 3); Oceanography 1 ; Physical Science 4; Physics 6,7,11, 12, 15, 66, 67, 101,102, 103; PlantScience 103

## B2-LIFE SCIENCE

Anatomy 1; Animal Science 511; Anthropology 101; Biology 3, 6, 7, 10, 12ABC (12ABC must all be taken to receive certification credit), 110,121 , 123; Environmental Science 2; Microbiology 1, 20; Physiology 1 ; Plant Science 901; Psychology 2

## B3 - LABORATORY ACTIVITY

Anatomy 1; Animal Science 512; Anthropology 111; Astronomy 2, 3; Biology 3, 6,7, 10, 11ABC (11ABC must all be taken to receive certification credit), 110 , 122, 123; Chemistry $51,60,101,102,211,212,221$; Geography 15, 17, 19; Geology 4, 6, 7; Microbiology 1 , 20; Oceanography 10; Physical Science 4; Physics 6, 7,66, 67, 101, 102, 103; Physiology 1; Psychology 73

B4 - MATHEMATICS/QUANTITATIVE REASONING
Math $215,227,228 B, 238,240,245,260,261,262 ;$ Statistics 1

## AREA C - Arts and Humanities

9 semester or 12-15 quarter units. At least one course from C1 and one course from C2.

## C1 - ARTS (ARTS, CINEMA, DANCE, MUSIC, THEATER)

Art 101, 102, 103, 105, 109, 111, 137, 138, 139, 201, 501, 502, 700 Cinema 3, 104, 107; 113; Dance Studies 801, 802, 803, 804, 805, 814; English 213; Humanities 6,31,61; Music 111, 112, 121, 122, 226, 321,322, 323,324,341,411,412, 413, 414, 601,611,621,651; Photography 9, 27A, 27B; Theater 100, 110, 125, 270, 271,273

## C2 - HUMANITIES (LITERATURE, PHILOSOPHY, LANGUAGES OTHER THAN ENGLISH)

Anthro 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, , 77; Humanities 6, 31, 61; Italian 1, 2, 3, , , 5, 6; Japanese 1, 2, 3, 4, 8; Philosophy 1, 2, 12, 14, 15, 19, 20, 28, 29, 30, 33, 35, 40, 41, 42; Spanish $1,2,3,4,5,6,9,11,12,15,21,22$, $25,26,27,35,36,37,65$; Theater 125

## AREA D - Social Sciences

9 semester or 12-15 quarter units, with courses taken in at least two of the D-1 through D-0 categories below.

## D1 - ANTHROPOLOGY \& ARCHEOLOGY

Anthropology 102, 105, 106, 109, 132, 141, 161
D2-ECONOMICS
Economics 1, 2, 10, 16, 30, 60

## D3-ETHNIC STUDIES

Chicano Studies 2, 20, 80; History 43, 44; Spanish 10, 26

## D4 - GENDER STUDIES

Anthropology 109; History 52; Psychology 32; Sociology 31

D5 - GEOGRAPHY
Geography 2,7, 14

## D6 - HISTORY

Chicano 20; Econ 10; History 3, 4, 5, 6, 11, 12, 13, 29 , 40, 41, 42, 43, 44, 52, 56, 86, 87; Spanish 10,16

D7-INTERDISCIPLINARY SOCIAL/BEHAVIORAL SCIENCE
Broadcasting 1; Communication Studies 121, 122; Journalism 100, 251

D8 - POLITICAL SCIENCE, GOVERNMENT AND LEGAL INSTITUTIONS
Adm Jus 1, 2, 4; Chicano Studies 80; Political Science 1,2,5,7, 14, 19, 30, 50; Sociology 37

D9 - PSYCHOLOGY
Child Development 1; Psychology 1,3,6, 11, 12, 13, $14,16,17,32,40,41,52,66,69,74$

DO - SOCIOLOGY
Adm Jus 67,75, 319; Sociology 1, 2, 3, 4, 8, 11, 13, 15, 17,21,28,29,31,35, 37, 86, 87

## AREA E - Lifelong Learning and SelfDevelopment

3 semester or 4-5 quarter units, not all in 1-unit Physical Education/Dance Activity courses.
Counseling 20, 40; Dance Studies 801, 802, 815 ; Dance Techniques/Dance Specialties 101, 290, $401,402,431,434,437,440,446,466,490,535$, 710; Environmental Science 1; Health 2, 8, 9, 11; Philosophy 19; Kin 201, 229, 250, 251, 266, 268, 271, 287, 289, 291, 316, 316-2, 316-3, 316-4, 329, 350; Kin Athletics $503,504,508,511,512,513,514,516,550$, 550A, 552, 553, 556, 557, 558, 560; Kin Major 100, 101, 117; Psychology 3, 32, 40, 41, 52, 60; Sociology 17,28

## CSU Graduation Requirement In U.S. History, Constitution \& American Ideals

 CSU Requirement only.NOT PART OF CSU, BUT MAY BE COMPLETED PRIOR TO TRANSFER. For CSU GE certification purposes, courses used to satisfy this CSU graduation requirement may also be used to satisfy CSU GE Plan Subject Area D. However, if a course(s) is used to satisfy both an CSU GE subject-area requirement and the CSU United States History, Constitution and American Ideals graduation requirement, some CSU campuses may require students to take an additional course(s) after transfer. CSUN will NOT require an additional course(s). Other CSU campuses should be consulted directly regarding their policy.
*This requirement may be met before or after transfer to the CSU.

* If a course is approved for more than one US

Area, a student may use the course to satisfy all areas listed.

US-1: History 11, 12, 13, 41, 42, 43, 44, 52; Chicano 7,8
US-2: Political Science 1, 19
US-3: Political Science 1,19

# Plan D - Pierce College Intersegmental General Education Transfer Curriculum (IGETC) 2014-2015 

DISCLAIMER: 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
This IGETC Plan totals approximately 34-37 CSU/UC transferable semester units. A minimum of $60 \mathrm{CSU} / \mathrm{UC}$ transferable semester units is required for transfer. You will need to complete additional coursework in your major and maybe some elective courses. Please see a counselor to develop an Educational Plan so you can reach your goals.

A minimum " $C$ " grade is required in each college course for IGETC. A "C" is defined as a minimum 2.0 grade points on a 4.0 scale.

## AREA 1 - English Communication

CSU: 3 courses required, one each from Group A, $B$ and $C$.
$U C: 2$ courses required, one each from Group $A$ and $B$.

## 1A - ENGLISH COMPOSITION

English 101
1B - CRITICAL THINKING - ENGLISH COMPOSITION
English 102, 103; Philosophy 5
1C-ORAL COMMUNICATION
CSU requirement only
Communication Studies 101, 102, 104, 121

## AREA 2 - Mathematical Concepts \& Quantitative Reasoning

1 course -3 semester or 4-5 quarter units
Math 227, 238, 245, 260, 261, 262; Statistics 1

## AREA 3 - Arts and Humanities

At least 3 courses, with at least one from the Arts and one from the Humanities. 9 semester or 12-15 quarter units.

## 3A - ARTS

Art 101, 102, 103, 105, 109, 111, 137, 138, 139, 501,
502; Cinema 3, 104, 107, 113; Dance 802, 803, 804,
805; Music 111, 112, 121, 122; Photo 27A, 27B;
Theater 100, 110.

## 3B - HUMANITIES

Anthropology 121, 161; ASL 3, 4; English 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 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; Italian 3, 4, 5, 6; Japanese 3; 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 .

## AREA 4 - Social and Behavioral Sciences

At least 3 courses from at least two academic disciplines. 9 semester or 12-15 quarter units.
Adm Jus 1, 2, 4, 67; Anthropology 102, 105, 106, 109, 132, 161; Broadcasting 1; Chicano 2, 7, 8, 20, 80; Child Development 1; Communication Studies 121, 122; Economics 1, 2, 10, 30, 60; Geography 2, 7, 14, 21, 22; History 3, 4, 5, 6, 8, 11, 12, 13, 14, 29, 41, 42, 43, 44, 52, $56,76,86,87$; Journalism 100, 251; Political Science 1, 2, 5, 7, 14, 19, 30, 37, 42, 43, 50; Psychology 1, 6, 11, 12, 13, 14, 32, 41, 52, 66, 74; Sociology 1,2, 3, 4, 8, 11, $13,15,21,28,29,31,35,37,86,87$; Spanish 10, 16.

## AREA 5 - Physical and Biological Sciences

At least 2 courses, with one from the Physical Science and one from the Biological Science, at least one of the two courses must include a corresponding lab course. See Area 5C. 7-9 semester units or 9-12 quarter units.

## 5A - PHYSICAL SCIENCE

Astronomy 1,3; Chemistry 60, 101, 102, 211,212,
221; Environmental Science 1,7 (same as Geology
10); Geography 1,3 (same as Meteorology 3), 17, 23; Geology 1, 2, 4, 10 (same as Environmental Science 7) ; Meteorology 3 (same as Geography 3); Oceanography 1; Physical Science 4; Physics 6, 7, 11, $12,15,66,67,101,102,103$.

## 5B - BIOLOGICAL SCIENCE

Anatomy 1; Anthropology 101; Biology 3, 6, 7, 10, 110, 121, 123; Environmental Science 2; Microbiology 1, 20; Physiology 1; Psychology 2.

5C - LABORATORY SCIENCE REQUIREMENT
Anatomy 1; Astronomy 2, 3; Anthropology 111; Biology 3, 6, 7, 10, 11ABC (Biology 11ABC must be taken to receive certification credit), $110,122,123$; Chemistry 60, 101, 102, 211, 212, 221; Geography 15, 17, 19; Geology 4, 6, 7; Microbiology 1, 20; Oceanography 10; Physical Science 4; Physics 6, 7, 66, 67, 101, 102, 103; Physiology 1; Psychology 73.

AREA 6 - Language Other Than English
UC Requirement Only. Proficiency equivalent to two years of high school study in the same language.
ASL 2 or higher; French 2 or higher; Italian 2 or higher; Japanese 2 or higher; Spanish 1 or higher, $35,36,37$. If language level 3 or higher is used to satisfy this requirement, it may also be used in AREA 3B.

High school: 2 years of the same foreign language with "C-" or better GPA in the final second-year course.

AREA 7 - CSU Graduation Requirement In U.S. History, Constitution \& American Ideals
CSU Requirement only.
NOT PART OF IGETC, BUT MAY BE COMPLETED PRIOR TO TRANSFER. For IGETC certification purposes, courses used to satisfy this CSU graduation requirement may also be used to satisfy IGETC Subject Areas 3 and/or 4. However, if a course(s) is used to satisfy both an IGETC subject-area requirement and the CSU United States History, Constitution and American Ideals graduation requirement, some CSU campuses may require students to take an additional course(s) after transfer. CSUN will NOT require an additional course(s). Other CSU campuses should be consulted directly regarding their policy.
*This requirement may be met before or after transfer to the CSU.

* If a course is approved for more than one US

Area, a student may use the course to satisfy all areas listed.
US-1: History 11, 12, 13, 41, 42, 43, 44, 52
US-2: Political Science 1, 19
US-3: Political Science 1, 19

## Department \& Program Organization

| DEPARTMENT |  | CHAIRPERSON(S) | PHONE | OFFICE |
| :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE \& NATURAL RECOURCES |  | Dr. Leland Shapiro | 710-4254 | CFS 91043 |
| Animal Science / Pre-Veterinary Sciences Horticulture \& Landscaping Veterinary Science \& Technology |  |  | General Agriculture Horse and Equine Science |  |
| ANTHROPOLOGICAL \& GEOGRAPHICAL SCIENCES |  | Adrian Youhanna | 710-2940 | FO 2904 |
| Anthropology Geography Linguistics |  |  | Archaeology <br> Geographic Information Systems Meteorology |  |
| ART \& ARCHITECTURE |  | Melody Cooper | 610-6548 | ART 3308D |
| Architecture Architectural History Art History | Ceramics Drawing Fine Art |  | Graphic Design <br> Painting <br> Sculpture | Web Design Digital Imaging Multimedia |
| ATHLETICS |  | Bob Lofrano | 710-2823 | SOUTH GYM |
| Kinesiology-Athletics (Intercollegiate Athletics) |  |  |  |  |
| BUSINESS <br> ADMINISTRATION |  | David Braun | 719-6479 | BUS 3213D |
| Accounting <br> Finance <br> Marketing | Business International Business |  | Real Estate Business Law | Management Supervision |
| CENTER FOR ACADEMIC SUCCESS |  | Crystal Kiekel | 719-6414 | LLC 5130 |
| Learning Skills Computer Labs |  |  | Tutoring |  |
| CHEMISTRY |  | Isidore Goodman | 719-6464 | CFS 91041 |
| CHILD DEVELOPMENT \& EDUCATION |  | Joleen <br> Voss-Rodriguez | 719-6402 | CDAD 6101 |
| Child Development |  |  | Education |  |
| COMMUNICATION STUDIES |  | Jennifer Rosenberg | 710-4297 | FO 2705 |
| COMPUTER <br> APPLICATIONS AND OFFICE TECHNOLOGIES |  | Lyn Clark | 710-4244 | BUS 3210C |
| Administrative Professional Business Communications Computer Applications Computerized Accounting Desktop Publishing |  |  | General Administrative Internet <br> Legal Office Procedures Office Procedures 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 |  |
| COUNSELING |  | Rudy Dompe | 719-6440 | STUDENT <br> SERVICES <br> BLDG. 150 |
| Personal Development |  |  |  |  |
| ENGLISH |  | Donna Accardo | 710-2879 | FO 2501 |
| English |  |  | English as a Second Language |  |
| HISTORY \& HUMANITIES |  | Richard McMillan | 710-2893 | FO 3107 |


| DEPARTMENT | CHAIRPERSON(S) | PHONE | OFFICE |
| :---: | :---: | :---: | :---: |
| HONORS PROGRAM | Mitra Hoshiar | 710-2244 | VLGE 8340 |
| INDUSTRIAL TECHNOLOGY | Mike Van Dyke | 710-2266 | IT 3600 |
| Automotive Service Technology Engineering, Mechanical |  | Engineering Graphics \& Design Technology Machine Shop-CNC Welding |  |
| KINESIOLOGY | Shilo Nelson | 710-2524 | NGYM 5614 C |
| Health Education Recreation |  | Kinesiology |  |
| LIBRARY SCIENCE | Paula Paggi | 719-6409 | LIBRARY |
| LIFE SCIENCES | Larry Thouin | 710-4282 | CFS 91042 |
| Anatomy Microbiology Physiology |  | Biology (Including Marine Biology) |  |
| 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 | FO 3104 |
| American Sign Language <br> French <br> Italian |  | Japanese Spanish |  |
| MUSIC | Wayne Skip Perkins | 710-2900 | MUS 3416D |
| NURSING | Joan Schneider | 719-6477 | CFS 91031 |
| Registered Nursing (ADN) |  |  |  |
| P.A.C.E. | Dr. Arthur Gillis | 719-6485 | VLGE 8340 |
| PHILOSOPHY \& SOCIOLOGY | Dr. James McKeever | 710-2255 | FO 2601 |
| Philosophy |  | Sociology |  |
| PHYSICS \& PLANETARY SCIENCES | Dale Fields | 710-4262 | CFS 91040 |
| Astronomy <br> Environmental Science <br> 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 Psychology | Statistics |  |  |
| SPECIAL EDUCATION | Stephanie Schlatter | 710-4228 | STUDENT <br> SERVICES <br> BLDG. 166 |
| Learning Foundations |  |  |  |
| THEATER \& DANCE | Michael Gend | 710-2268 | PAB 3539 |
| Dance | Theater |  |  |

## Educational Programs 2014-2016

## 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.

## Associate of Arts for Transfer (AA-T) or Associate of Science for Transfer (AS-T)

California Community Colleges are now offering associate degrees for transfer to the CSU. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. Please refer to the previous section, Associate Degree Requirements for a description of our degree options. To view the most current list of Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://www.sb1440.org/counseling.aspx. Current and prospective students are encouraged to meet with a Pierce counselor to review their options for transfer and to develop an educational plan that best meets their goals.

## 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 |
| Administration of Justice | AS-T |  |
| Agriculture |  |  |
| Agriculture: General | AS |  |
| Agriculture Technology \& Sciences: General |  | C |
| Horse Science | AS | C |
| Horticulture |  |  |
| Floral Design and Management |  | C |
| Gardening: Advanced | AS |  |
| Horticulture: General | AS |  |
| Landscape Planning and Design | AS |  |
| Pre-Veterinary Medicine | AS |  |
| Veterinary Technology | AA |  |
| American Sign Language (Interpreting) |  |  |
| Architecture | AA | C |


|  | DEGREE | CERTIFICATE |
| :---: | :---: | :---: |
| Art |  |  |
| Art | AA |  |
| Ceramic Design | AA |  |
| Drawing | AA |  |
| Graphic Design | AA | C |
| Graphic Design for the Web |  | C |
| Painting | AA |  |
| Sculpting | AA |  |
| Studio Arts | AA-T |  |
| Business Administration |  |  |
| Accounting | AA |  |
| Business Administration | AS-T |  |
| General Business | AA |  |
| International Business |  | C |
| Management and Supervision | AA |  |
| Marketing | AA | C |
| Retail Management (WAFC) |  | C |
| Tax Preparation |  | C |
| Child Development |  |  |
| Child Development | AA |  |
| Early Childhood Education | AS-T |  |
| Associate Teacher |  | C |
| Infant Care Teacher |  | C |
| Preschool |  | C |
| Preschool Director |  | C |
| Preschool Teacher |  | C |
| School Age Child Care Teacher |  | C |
| Computer Applications \& Office Technologies |  |  |
| Administrative Professional | AA | C |
| General Administrative | AA | C |
| Legal Office Procedures | AA | C |
| Basic Computerized Accounting |  | C |
| Basic Internet |  | C |
| Basic Word Processing: Microsoft Word for Windows |  | C |
| Computer Applications |  | C |
| Desktop Publishing |  | C |
| Legal Office Skills |  | C |
| Office Administration: Advanced Computer Applications |  | 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 |  |
| Computer and Network Technology | AS |  |
| Personal Computer Service Technology |  | C |
| Network Technology |  | C |
| Website Development |  | C |
| Web Development, Programming and Scripting |  | C |


|  | degree | CERTIFICATE |
| :---: | :---: | :---: |
| Criminal Justice | AA |  |
| Electronics \& Electric Technology: Electronics | AS |  |
| Analog Option |  | C |
| Communications Option |  | C |
| Digital Option |  | C |
| Engineering Graphics \& Design Technology | AS | 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 Mathem |  |  |
| Social and Behavioral Sciences |  |  |
| Women's Studies |  |  |
| Industrial Technology |  |  |
| Automotive Emission Specialist |  | C |
| Automotive Light Service Tech |  | C |
| Automotive Service Technology | AS | C |
| Automotive Performance Applications |  | C |
| Automotive Powertrain Specialist |  | C |
| Numerical Control Programming | AS | C |
| Italian | AA |  |
| Journalism | AA, AA-T |  |
| Latin American Studies | AA |  |
| Mathematics | AA, AS-T |  |
| Music | AA |  |
| Nursing | AS |  |
| Photojournalism | AA |  |
| Political Science | AA-T |  |
| Pre-Engineering | AS |  |
| Public Relations | AA |  |
| Spanish | AA, AA-T |  |
| 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 61 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 47 of this catalog for more information on transfer requirements and resources.

## 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, 20 and 23.
With the exception of Addiction Studies 9, 11, \& 91, all Addiction Studies courses are CSU transferable as non-GE elective units.

## TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 47 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ADDICST 1 | Understanding Addiction and Counseling |
| ADDICST 2 | Drugs In Perspective: Pharmacology and Physiology ..... 3 |
| ADDICST 4 | Addiction Counselor Training |
| ADDICST 5 | Group Skills For Addiction Counselors . . . . . . . . . . . . . . . . 3 |
| ADDICST 7 | Addiction Treatment And Recovery |
| ADDICST 9 | Field Work For Addiction Personnel. |
| ADDICST 10 | Addiction And The Family. |
| ADDICST 13 | Addictive Diseases \& Lifestyle Disorders.................. 3 |
| ADDICST 16 | Continuing Recovery: Specific Strategies And Basic Skills . 3 |
| ADDICST 91 | Field Work For Addiction Personnel |

## MAJOR - ELECTIVE COURSES

SUBJECT \& NO. COURSE UNITS
Select a minimum of three courses ( 9 semester units) from the following: ..... 9
ADDICST 11 Drinking Driver Programs Personnel Training ..... 3
ADDICST 14 Addiction And Theories Of Human Development. ..... 3
ADDICST 15 Sociological Aspects Of Addiction ..... 3
ADDICST 17 Women And Addiction ..... 3
ADDICST 18 Addiction And Eating Disorders ..... 3
ADDICST 20 Domestic Violence Counselor Training. ..... 3
ADDICST 21 Problem Gambling Counselor Training. ..... 3
ADDICST 22 Prevention Specialist Training. ..... 3
ADDICST 23 Batterer's Intervention Facilitator Training ..... 3
ADDICST 25 Counseling Addiction and Concurring Disorders/Clinical
Supervision ..... 3
Select one course ( 3 semester units) from the following: .3
PSYCH 1 (3 units), 2 (3 units), 3 ( 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)Select 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 ( 3units), 43 ( 3 units), 44 ( 3 units), 52 ( 3 units); POL SCI 1 ( 3 units), 19 ( 3 units),
30 (3 units)
MAJOR - TOTAL UNITS45
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

## 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

| SUBJECT \& NO. | COURSE 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. |
| 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 |  |
| SUBJECT \& NO. | COURSE UNITS |
| Select a minimum of two courses ( 6 semester units) from the following: . . . . . . . . . . . . 6 |  |
| ADDICST 11 | Drinking Driver Programs Personnel Training............ 3 |
| ADDICST 14 | Addiction And Theories Of Human Development........ 3 |
| ADDICST 15 | Sociological Aspects Of Addiction ...................... 3 |
| ADDICST 17 | Women And Addiction . ................................ . 3 |
| ADDICST 18 | Addiction And Eating Disorders |
| ADDICST 20 | Domestic Violence Counselor Training.................. . 3 |
| ADDICST 21 | Problem Gambling Counselor Training |
| ADDICST 22 | Prevention Specialist Training. ........................ 3 |
| ADDICST 23 | Batterer's Intervention Facilitator Training . . . . . . . . . . . . 3 |
| ADDICST 25 | Counseling Addiction and Concurring Disorders/Clinical Supervision.................................................... 3 |

## Administration of Justice

## Associate of 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

Students completing this associate degree will have completed lower-division major preparation requirements for a criminal justice/ criminology degree, an emphasis or option within a criminal justice/ criminology degree, or a degree considered similar to criminal justice/ criminology at a participating California State University (CSU) campus. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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 to support conclusions when dealing with the three components of the criminal justice system: law enforcement, courts, and correction
- 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 - CORE COURSES

| SUBJECT \& NO. | COURSE |
| :--- | :--- |
| ADM JUS 1 | Introduction to Administration of Justice $\ldots \ldots \ldots \ldots \ldots .3$ |

ADM JUS 2 Concepts of Criminal Law. ..... 3
LIST A - Select two courses ( 6 semester units) from the following:. ..... 6
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 Procedures ..... 3
ADM JUS 67 Community Relations I ..... 3
ADM JUS 75 Introduction to Corrections ..... 3
LIST B - Select two courses ( 6 semester units) from the following: ..... 6
Any course from List A not already used
ADM JUS 160 Police Organization and Administration ..... 3
PSYCH 1 General Psychology I. ..... 3
SOC 1 Introduction to Sociology ..... 3
STAT 1 Statistics ..... 3
MAJOR - TOTAL UNITS. ..... 18
GENERAL EDUCATION - REQUIRED COURSES
Students must complete one of the following General Education Plans:$\begin{array}{ll}\text { PLAN A } & \text { NOT AVAILABLE WITH THIS MAJOR } \\ \text { PLAN B } & \text { NOT AVAILABLE WITH THIS MAJOR }\end{array}$PLAN B NOT AVAILABLE WITH THIS MAJORPLAN C CSU GE Breadth Certification Plan................ 39 units
PLAN D IGETC ..... 34-39 units

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: bttp://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| PLNT SC 701 | Retail Floral Design and Practices I |  |
| PLNT SC 711 | Botany for Horticulture |  |
| PLNT SC 714 | Principles of Horticulture. |  |
| PLNT SC 896A | Horticulture Projects A. |  |
| PLNT SC 896B | Horticulture Projects B. |  |

CERTIFICATE - ELECTIVE COURSES
Select a minimum of 7 semester units from the following: . . . . . . . . . . . . . . . . . . . . . 7
ACCTG 1 (5 units); ART 201 (3 units); BUS 5 (3 units); MGMT 13 (3 units); PLNT SC 829 (3 units)

Other courses may be substituted with prior approval of the Department Chair.
CERTIFICATE - TOTAL UNITS .18

## AGRICULTURE: GENERAL

## 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.

[^2]
## 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.
- Recognize the difference between injurious and noxious plants from native species commonly consumed by livestock.
- Demonstrate safe and effective restraint of poultry and livestock species for the administration of medicines and application of common husbandry procedures.
- Create nutritionally sound diets for poultry and major livestock species based on animal requirements and sound economics.

MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ANML SC 501 | Principles of Animal Science . |  |
| 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 |  |

## MAJOR - ELECTIVE COURSES

Select a minimum of one course from each group: . 5 Minimum
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), 520 ( 3 units), 521 ( 3 units), 530 ( 2 units), 531 ( 2 units), 535 ( 3 units), 537 ( 2 units), 540 ( 2 units), 579 (3 units), 596 (1-10 units)
GROUP 3: ANML SC 577 (2 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), 650 ( 2 units)
GROUP 4: PLNT SC 701 (2 units), 711 ( 3 units), 714 (3 units), 716 ( 1 unit), 756 (3 units), 757 (3 units)
GROUP 5: PLNT SC 800 (3 units), 801 (3 units), 802 ( 3 units), 803 (3 units), 806 ( 4 units), 807 ( 4 units), 812 ( 3 units), 815 ( 2 units), 816 ( 1 unit), 818 ( 3 units), 820 ( 3 units), 826 ( 3 units), 827 ( 3 units), 828 ( 3 units), 829 ( 3 units), 830 ( 3 units), 896A ( 1 unit), 896B ( 2 units), 901 ( 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), 401 ( 1 unit), 505 (3 units), 510 ( 3 units), 511 ( 3 units), 512 ( 1 unit), 515 ( 2 units), 516 ( 1 unit), 520 ( 3 units), 521 ( 2 unit), 530 ( 2 units), 531 ( 2 units), 535 ( 3 units), 537 ( 2 units), 540 ( 2 units), 579 ( 3 units) 596 ( 10 units), 601 ( 3 units), 602 (3 units), 603 (3 units), 620 ( 2 units), 621 ( 1 unit), 630 ( 2 units), 631 ( 2 units), 640 ( 2 units), 650 ( 2 units); GEOG/GIS 25 ( 4 units); GEOG/GIS 25 ( 4 units); PLNT SC 701 (2 units), 711 ( 3 units), 716 ( 1 unit), 800 ( 3 units), 801 ( 3 units), 802 ( 3 units), 806 ( 4 units), 807 ( 4 units), 812 ( 3 units), 816 ( 1 unit), 818 ( 3 units), 820 ( 3 units), 826 ( 3 units), 827 ( 3 units), 828 ( 3 units), 829 ( 3 units), 830 ( 3 units), 901 (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
PLAND IGETC $\quad 34-39$ units

## AGRICULTURE TECHNOLOGY \& SCIENCES: GENERAL

## 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

| SUBJECT \& NO. | COURSE |  |
| :---: | :---: | :---: |
| ANML SC 501 | Princip |  |
| O SCI 501 | Introd |  |
| PLNT SC 103 | Introd |  |
| PLNT SC 714 | Princi |  |
| CERTIFICATE - ELECTIVE COURSES |  |  |
| Select a minimum of 6 units from each group below: . . . . . . . . . . . . . . . . . . . . 6 |  |  |
| 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), 520 ( 3 units), 521 ( 2 units), 530 ( 2 units), 531 ( 2 units), 535 ( 3 units), 537 ( 2 units), 540 ( 2 units), 579 (3 units), 596 ( 10 units) |  |  |
| GROUP 2: PLNT SC 800 (3 units), 801 (3 units), 802 ( 3 units), 803 (3 units), 806 ( 4 units), 807 ( 4 units), 812 ( 3 units), 815 ( 2 units), 816 ( 1 unit), 818 ( 3 units), 820 ( 3 units), 826 ( 3 units), 827 ( 3 units); 828 ( 3 units); 829 ( 3 units); 830 ( 3 units), 896A (1 unit), 896B (2 units), 901 ( 2 units) |  |  |

Select a minimum of 1 course from each group below . . . . . . . . . . . . . . . . . . . . . . . 2-6
GROUP 1: ANML SC 601 (3 units), 602 ( 3 units), 603 (3 units), 620 ( 2 units), 621 ( 1 unit), 630 ( 2 units) 631 ( 2 units), 640 ( 2 units), 650 ( 2 units)
GROUP 2: PLNT SC 701, (2 units), 711 (3 units), 716 (1 unit)

Select a minimum of 3 courses from the list below:
10-13
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); GEOG/GIS 25 ( 4 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.

Department Subject Advisor: Paddy Warner

## 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.

## 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 47 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.
- Set up a preventative disease control management program for a small equine facility, including assisting in the diagnosis and treatment of common equine disorders.
- 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.


## ENTRY LEVEL - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ANML SC 601 | Horse Production. |  |
| ANML SC 602 | Horse Husbandry. | 3 |
| PLNT SC 103 | Introduction to Soils |  |

## MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ANML SC 501 | Principles of Animal Science |  |
| ANML SC 505 | Animal Nutrition |  |
| ANML SC 510 | Animal Health and Disease Control |  |
| ANML SC 511 | Anatomy and Physiology of Animals |  |
| ANML SC 512 | Anatomy and Physiology of Animals Laboratory. . |  |
| ANML SC 603A-E | Equine Management Techniques (2 units each) | 10 |
| ANML SC 620 | Basic Equitation . |  |
| ANML SC 621 | Horseback Riding Laboratory. |  |
| ANML SC 630 | Beginning Equine Training |  |
| ANML SC 631 | Advanced Equine Training. |  |
| ANML SC 650 | Equine Health and First Aid... |  |

## MAJOR - ELECTIVE COURSES

Select a minimum of 10 semester units from the following: $\qquad$
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), 470 ( 3 units), 480 ( 3 units), 506 (2 units), 515 ( 2 units), 516 ( 1 unit), 530 ( 2 units), 531 ( 2 units), 596 ( 10 units), 616 ( 2 units), 630 ( 2 units), 640 ( 2 units), 645 ( 5 units);

PLNT SC 110 ( 3 units), 701 (2 units), 711 ( 3 units), 714 (3 units), 716 (1 unit), 756 (3 units), 757 ( 3 units), 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), 815 ( 2 units), 816 ( 1 unit), 818 ( 3 units), 820 ( 3 units), 822 ( 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)
MAJOR - TOTAL UNITS.

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ANML SC 501 | Principles of Animal Science |  |
| ANML SC 505 | Animal Nut |  |
| ANML SC 510 | Animal Health and Disease Con |  |
| ANML SC 511 | Anatomy and Physiology of Animals |  |
| ANML SC 601 | Horse Productio |  |
| ANML SC 602 | Horse Husbandry |  |
| ANML SC 620 | Basic Equitation |  |
| ANML SC 621 | Horseback Riding Labora |  |
| ANML SC 630 | Beginning Equine Training |  |
| CERTIFICATE - ELECTIVE COURSES |  |  |
| Select a minimum of 7 semester units from the following courses: . . . . . . . . . . . . . . 7 |  |  |
| 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), $603 \mathrm{C}(2$ units), 603 D ( 2 units), 603E ( 2 units), 616 ( 2 units), 631 ( 2 units), 640 (2 units), 645 (5 units), 650 (2 units); PLNT SC 103 (3 units) |  |  |

## CERTIFICATE - TOTAL UNITS

## 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 47 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.
- Design, construct, and install plants for both indoor and outdoor landscape projects.
- Identify and categorize regional and California plants by common name, growth, morphological characteristics, genus, and species.
- Develop solutions for a wide variety of plant health issues, including common pests and microbial diseases.


## ENTRY LEVEL - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| PLNT SC 103 | Introduction to Soils |  |
| PLNT SC 711 | Botany for Horticulture |  |
| PLNT SC 714 | Principles of Horticulture. |  |
| PLNT SC 800 | Plant Identification and Use I |  |
| PLNT SC 818 | Basic Construction Techniques. |  |
| PLNT SC 828 | Sustainable Water Management \& Conservation | 3 |
| PLNT SC 829 | Sustainable Plant Selection. | 3 |
| PLNT SC 830 | Sustainable Pest Control |  |
| PLNT SC 896A | Horticulture Projects A. |  |
| PLNT SC 896B | Horticulture Projects B |  |
| PLNT SC 896C | Horticulture Projects C | 3 |
| MAJOR - REQUIRED COURSES |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| PLNT SC 716 | Arboriculture I (Care of Trees and Shrubs). | 1 |
| PLNT SC 756 | Greenhouse Plant Production |  |
|  | OR |  |
| PLNT SC 757 | Plant Propagation. | . 3 |
|  | OR |  |
| PLNT SC 827 | Sustainable Gardening for Landscapes |  |
| PLNT SC 806 | Landscape Planning and Design. . | . 4 |
| PLNT SC 812 | Landscape Installation and Maintenance I. . . |  |

## MAJOR - ELECTIVE COURSES

Select a minimum of 7 semester units from the following courses: . . . . . . . . . . . . . . . . 7
GEOG/GIS 25 ( 4 units); PLNT SC 701 (2 units), 801 (3 units), 802 ( 3 units), 807 ( 4 units), 815 ( 2 units), 816 ( 1 unit), 820 ( 3 units), 822 ( 3 units), 826 ( 3 units), 896A (1 unit), 896B (2 units), 896C (3 units), 901 (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

## 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 47 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.
- 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.
- Identify and categorize regional and California plants by common name, growth, morphological characteristics, genus, and species.
- Develop solutions for a wide variety of plant health issues, including common pests and microbial diseases.


## ENTRY LEVEL - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| PLNT SC 103 | Introduction to Soils |  |
| PLNT SC 711 | Botany for Horticulture |  |
| PLNT SC 714 | Principles of Horticulture. |  |
| PLNT SC 800 | Plant Identification and Use I |  |
| PLNT SC 818 | Basic Construction Techniques. |  |
| PLNT SC 828 | Sustainable Water Management \& Conservation. |  |
| PLNT SC 829 | Sustainable Plant Selection. |  |
| PLNT SC 830 | Sustainable Pest Control. |  |
| MAJOR - REQUIRED COURSES |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| PLNT SC 801 | Plant Identification and Use II |  |
| PLNT SC 802 | Plant Identification and Use III |  |
| PLNT SC 806 | Landscape Planning and Design. |  |
| PLNT SC 807 | Advanced Landscape Planning and Design . |  |
| PLNT SC 812 | Landscape Installation and Maintenance I. |  |
| PLNT SC 815 | Blueprint Reading and Cost Estimating. |  |
| PLNT SC 820 | Irrigation Design and Installation. . |  |
| PLNT SC 822 | Turf and Ground Cover Management |  |

## MAJOR - ELECTIVES COURSES

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

PLNT SC 701 (2 units), 716 (1 unit), 756 (3 units), 757 ( 3 units), 827 (3 units)
MAJOR - TOTAL UNITS .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

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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.


## CERTIFICATE - REQUIRED COURSES

Select a minimum of 20 semester units from the following courses:
PLNT SC 103 (3 units), 701 (2 units), 711 ( 3 units), 714 (3 units), 716 (1 unit), 756 (3 units), 757 ( 3 units), 800 ( 3 units), 801 ( 3 units), 802 ( 3 units), 806 ( 4 units), 807 ( 4 units), 812 ( 3 units), 815 ( 3 units), 816 ( 1 unit), 818 ( 3 units), 822 (3 units), 826 (3 units), 896 (3 units)

CERTIFICATE - TOTAL UNITS.

## PRE-VETERINARY MEDICINE

## Associate of Science Degree

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

Department Subject Advisor: Dr. Lee Shapiro

## PROGRAM INFORMATION

The Pierce College Pre-Veterinary Program has articulation agreements with UC Davis School of Veterinary Medicine, Western University's College of Veterinary Medicine, Ross University of Veterinary Medicine, and St. Mathews College of Veterinary Medicine. In addition, our students have been accepted into a total of twenty two 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 47 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.
- 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.
- 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.
- 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.



## ELECTIVES (OPTIONAL)

SUBJECT \& NO. COURSE UNITS

ANML SC 460 First Aid for Companion Animals........................... . . 2
ANML SC 596A-D Agricultural Enterprise Projects............................ . 10
ANML SC 601 Horse Production................................................. 3
ANML SC 602 Horse Husbandry................................................. 3
ANML SC 603A-E Equine Management Techniques ......................... 10
ANML SC 650 Equine Health and First Aid . . . . . . . . . . . . . . . . . . . . . . . . . . 2
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

## 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 47 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
- Develop the ability to assess and respond appropriately to routine and emergency medical conditions
- Gain an understanding of the role of the Registered Veterinary Technician on a veterinary team
- Develop effective client communication skills


## ENTRY LEVEL REQUIREMENTS

| SUBJECT \& No. | COURSE | UNITS |
| :---: | :---: | :---: |
| ANML SC 180 | Animal Care Exp |  |
| ANML SC 181A | Field Work |  |
| ANML SC 401 | Intro to Vet Tech |  |
| ANML SC 501 | Principles of Animal Science |  |
| ANML SC 510 | Animal Health \& Disease Control. |  |
| ANML SC 511 | Anatomy \& Physiology of Animals |  |
| ANML SC 512 | Anatomy \& Physiology of Animals Labora |  |
| BIOLOGY 3 | Introduction to Biology . ..... |  |
| CAOT 82 | Microcomputer Software Survey . OR |  |
| COSCI 501 | Personal Computer Application Software .... | .. 3 |
| CHEM 51 | Fundamentals of Chemistry 1 |  |
| ENGLISH 101 | College Reading \& Comprehension |  |
| MICRO 20 | General Microbiology |  |

## advanced veterinary technology classes

SUBJECT \& NO. COURSE 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. ....................................... 3
ANML SC 480 Clinical Experience for Vet Techs............................. 3
ANML SC 481 Clinical Experience for Vet Techs II. ......................... 3
MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 64
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 mustparticipate 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

## 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| A SL3 | American Sign Language III |  |
| A SL4 | American Sign Language IV |  |
| A SL5 | Introduction to Interpreting |  |
| A SL6 | English-to-Sign Interpreting/Transliterating. |  |
| A S L 10 | Sign-to-English Interpreting/Transliterating. |  |
| A S L 16 | Creative Signing |  |
| A S L 22 | Professional Issues and Practice I |  |
| A SL23 | Professional Issues and Practice II. |  |
| A S L 30 | Fingerspelling I |  |
| A S L 31 | Fingerspelling II |  |
| A S L 40 | Introduction to Deaf Culture |  |
| A S L 55 | Interpreting |  |
| A S L 65 | Transliterating |  |
| ENGLISH 101 | College Reading and Composition I. |  |
| ANTHRO 161 | Introduction to Language and Linguistics. | . 3 |
| COMM 121 | Interpersonal Communication . |  |
|  | OR |  |
| COMM 101 | Public Speaking. |  |
| MAJOR - TOTAL UN |  |  |
| 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 | units |
| PLAN C | CSU GE Breadth Certification Plan . | units |
| PLAN D | IGETC | units |

## Architecture

## ARCHITECTURAL 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ARC 110 | Introduction to Architecture. |  |
| ARC 111 | Methods of Construction. |  |
| ARC 121 | Freehand Drawing I. | 2 |
| ARC 151 | Materials of Construction |  |
| ARC 152 | Equipment of Buildings |  |
| ARC 162 | Computer Aided Design and Drafting | 3 |
| ARC 172 | Architectural Drawing I . | 3 |
| ARC 173 | Architectural Drawing II |  |
| ARC 201 | Basic Architectural Design I | 3 |
| ARC 202 | Basic Architectural Design II |  |
| ARC 221 | Architectural Rendering. | 2 |
| ARC 271 | Architectural Drawing III |  |
| ARC 272 | Architectural Drawing IV | 3 |
| ENV 101 | Elements of Architecture | 3 |
| MATH 125 | Intermediate Algebra. | 5 |
| RECOMMENDED BREADTH ELECTIVE |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| GIS 25 | Geographic Information Systems and Laboratory . OR | $\ldots .$ |
| GEOG 25 | Geographic Information Systems and Laboratory . | .... 4 |

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 |
| PLAND | IGETC . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 34-39 units |

Note: CA State Polytechnic Universities, San Luis Obispo and Pomona offer degrees in Architecture and Planning. Seeacounselor or department advisor for further information.

## ARCHITECTURAL 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ARC 110 | Introduction to Architecture. |  |
| ARC 111 | Methods of Construction. |  |
| ARC 121 | Freehand Drawing I . |  |
| ARC 151 | Materials of Construction |  |
| ARC 152 | Equipment of Buildings |  |
| ARC 162 | Computer Aided Design and Drafting . |  |
| ARC 172 | Architectural Drawing I . |  |
| ARC 173 | Architectural Drawing II |  |
| ARC 201 | Basic Architectural Design I | 3 |
| ARC 202 | Basic Architectural Design II |  |
| ARC 221 | Architectural Rendering. |  |
| ARC 271 | Architectural Drawing Ill. |  |
| ENV 101 | Elements of Architecture |  |
| RECOMMENDED BREADTH ELECTIVE |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| GIS 25 | Geographic Information Systems and Laboratory OR |  |
| GEOG 25 | Geographic Information Systems and Laboratory | .... 4 |

## 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 47 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

| SUBJECT \& NO. | COURSE |  |
| :--- | :--- | :--- |
| ART 101 | Survey of Art History I $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |

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 307 Oil Painting I........................................................ 3
ART 501 Beginning Two-Dimensional Design ....................... 3
ART 502 Beginning Three-Dimensional Design ..................... 3
ART 503 Intermediate Design............................................... 3
ART 700 Introduction to Sculpture...................................... 3
ART 708 Introduction to Ceramics...................................... 3
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
PLAND
IGETC ........................................ 34-39 units

## STUDIO ARTS

## Associate of Arts for Transfer Degree (AA-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 $h t t p: / / w w w . s b 1440.0 r g /$

## PROGRAM INFORMATION

Students completing this associate degree will have completed low-er-division major preparation requirements for a studio arts degree, an emphasis or option within a studio arts degree or a degree considered similar to a studio arts at a participating California State University (CSU) campus. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system.
To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Identify major movements and/or artist working in drawing.
- Convey ideas and concepts about artwork.
- Demonstrate knowledge and mastery of design and color.
- Possess knowledge and mastery of a variety of art making skills.
- Identify major movements/ and or artists working in 3-D.
- Identify and demonstrate knowledge of art objects and architecture from the Renaissance to Modern Periods

MAJOR - CORE COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 102 | Survey of Art History II |  |
| ART 201 | Drawing I |  |
| ART 501 | Beginning Two-Dimensional Design |  |
| ART 502 | Beginning Three-Dimensional Design |  |
| List A - Select one course (3 semester units) from the following: . . . . . . . . . . . . . . . . 3 |  |  |
| ART 101 | Survey of Art History I |  |
| ART 105 | History of Asian Art |  |
| ART 109 | The Arts of Africa, Oceania, and Ancient A |  |
| ART 111 | History of Contemporary Ar |  |
| List B - Select three courses (9 semester units) from the following:. . . . . . . . . . . . . . 9 |  |  |
| ART 204 | Life Drawing I |  |
| ART 307 | Oil Painting I. |  |
| ART 400 | Introduction to Printmaking |  |
| ART 503 | Intermediate Design I |  |
| ART 604 | Graphic Design I |  |
| ART 700 | Introduction to Sculpture |  |
| ART 708 | Introduction to Ceramics.... | $\ldots 3$ |
| MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24 |  |  |
| 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. | units |
| PLAN D | IGETC. | units |

## CERAMIC 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 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 47 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

| SUBJECT \& NO. | COURSE | UNI |
| :---: | :---: | :---: |
| ART 101 | Survey of Art History I. |  |
| ART 111 | History of Contemporary Art. |  |
| ART 102 | Survey of Art History II |  |
| ART 201 | Drawing I.... |  |
| ART 202 | Drawing II |  |
|  | OR |  |
| ART 503 | Intermediate Design. .................... | $\ldots 3$ |
| ART 501 | Beginning Two-Dimensional Design |  |
| ART 502 | Beginning Three-Dimensional Design |  |
| ART 700 | Introduction to Sculpture. |  |
| ART 708 | Introduction to Ceramics |  |
| ART 709 | Ceramics I. |  |
| ART 710 | Ceramics II. |  |
| ART 711 | Ceramics III... | ... 3 |
| 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 | 8 units |
| PLAN C | CSU GE Breadth Certification Plan. | 9 units |
| PLAN D | IGETC |  |

## 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 101 | Survey of Art History I. |  |
| ART 111 | History of Contemporary Art. | 3 |
| ART 102 | Survey of Art History II | 3 |
| ART 201 | Drawing I | 3 |
| ART 202 | Drawing II | 3 |
| ART 203 | Drawing III | 3 |
|  | OR |  |
| ART 207 | Life Drawing IV | 3 |
|  | OR |  |
| ART 400 | Introduction to Printmaking....... | $\ldots 3$ |
| ART 204 | Life Drawing I. | . 3 |
| ART 205 | Life Drawing II | 3 |
| ART 206 | Life Drawing III | 3 |
| ART 307 | Oil Painting I. | 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 101 | Survey of Art History I. |  |
| ART 111 | History of Contemporary Art. |  |
| ART 102 | Survey of Art History II |  |
| ART 201 | Drawing I |  |
| ART 202 | Drawing II |  |
| ART 203 | Drawing III |  |
|  | OR |  |
| ART 207 | Life Drawing IV |  |
|  | OR |  |
| ART 400 | Introduction to Printmaking. |  |
| ART 204 | Life Drawing I |  |
| ART 205 | Life Drawing II |  |
| ART 206 | Life Drawing III |  |
| ART 307 | Oil Painting I . | 3 |
| 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 | 8 units |
| PLAN C | CSU GE Breadth Certification Plan. | units |
| PLAN D | IGETC . . . . . . . . . . . . . . . . . . . . . . . . . . | 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 101 | Survey of Art History I . |  |
| ART 111 | History of Contemporary Art. |  |
| ART 102 | Survey of Art History II |  |
| ART 201 | Drawing I |  |
| ART 202 | Drawing II |  |
|  | OR |  |
| ART 503 | Intermediate Design. . . . . . . . . . . . . . . . . . | . 3 |
| ART 204 | Life Drawing I . |  |
| ART 501 | Beginning Two-Dimensional Design |  |
| ART 502 | Beginning Three-Dimensional Design |  |
| ART 700 | Introduction to Sculpture |  |
| ART 701 | Sculpture I |  |
| ART 702 | Sculpture II | 3 |
| ART 703 | Sculpture III. |  |
| 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 | units |
| PLAN C | CSU GE Breadth Certification Plan. | units |
| PLAN D | IGETC | 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 111 | History of Contemporary Art. |  |
|  | OR |  |
| MULTIMD 110 | Visual Communication. | ... 3 |
| ART 603 | Typography I |  |
| ART 604 | Graphic Design I | 3 |
| ART 605 | Graphic Design II. | 3 |
| ART 606 | Graphic Design III. | 3 |
| ART 650 | Graphic Design for the World Wide Web | 3 |
| MULTIMD 340 | Vector Graphics. | 3 |
| MULTIMD 200 | Digital Imaging. | 3 |
| MULTIMD 210 | Digital Editing. | 3 |
| MAJOR - ELECTIVE COURSES |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| Select a minimum of 1 course ( 3 semester units) from the following . . . . . . . . . . . . . 3 |  |  |
| ART 101 | Art History. . | 3 |
| ART 102 | Survey of Art History II | 3 |
| ART 201 | Drawing I | 3 |
| ART 204 | Life Drawing . | 3 |
| ART 501 | Beginning Two-Dimensional Design | 3 |
| ART 620 | Illustration I. | 3 |
| ART 621 | Illustration II | 3 |
| ART 622 | Illustration for the Graphic Designer | 3 |
| ART 651 | Animation for the Web I. . | . 3 |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 603 | Typography I. |  |
| ART 604 | Graphic Design I | 3 |
| ART 605 | Graphic Design II. | 3 |
| ART 606 | Graphic Design III. | 3 |
| MULTIMD 110 | Visual Communication. | 3 |
| MULTIMD 200 | Digital Imaging | 3 |
| MULTIMD 210 | Digital Editing. | 3 |
| MULTIMD 340 | Vector Graphics. |  |
| CERTIFICATE - TOTAL | NITS | . 24 |

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 604 | Graphic Design I |  |
| ART 605 | Graphic Design II. |  |
| ART 650 | Graphic Design for the World Wide Web |  |
| ART 651 | Animation for the Web. | 3 |
| MULTIMD 110 | Visual Communication. |  |
| MULTIMD 200 | Digital Imaging. | 3 |
| MULTIMD 210 | Digital Editing. | 3 |
| MULTIMD 340 | Vector Graphics. | . 3 |

## Business Administration

## ACCOUNTING

## Associate of Arts Degree

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

## PROGRAM INFORMATION

This program is designed to prepare a student for entry into the business community as an accounting clerk or a middle-management trainee. It will provide the educational background for preparing the student to fulfill the needs of business in maintaining records, financial controls, and preparing informational reports for management decision-making processes and for governmental requirements. Typical Positions: bookkeeper, accounting clerk, assistant auditor, financial analyst, and proprietor.

## TRANSFER STUDENTS

Completing the Associate Degree does not necessarily meet the university-admission requirements for transfer. An Associate Degree is not a requirement for transfer to either the CSU or UC campuses. Private and out-of-state colleges and universities have unique transfer requirements. However, if you would like to transfer to a university and earn an associate degree, early educational planning can make this goal achievable. You should meet with a counselor early in your studies to develop an Educational Plan that fulfills both transfer requirements and associate degree requirements.

See page 47 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 indi vidual tax return.
- Describe the major characteristics of organization's payroll system.

MAJOR - REQUIRED COURSES

| SUBJECT \& N 0. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| ACCTG 2 | Introductory Accounting II . | 5 |
| ACCTG 15 | Tax Accounting I | 3 |
| ACCTG 17 | Payroll Accounting. | 2 |
| BUS 1 | Introduction to Business. |  |
| BUS 5 | Business Law I . | . 3 |
| CAOT 32 | Business Communications . | 3 |
| CAOT 78 | Microcomputer Accounting Applications for the Electronic Office |  |
| FINANCE 1 | Principles of Finance. | 3 |
| MGMT 13 | Small Business Management I . . | 3 |

## MAJOR - ELECTIVE COURSES

SUBJECT \& NO. COURSE UNITS
Select a minimum of 15 semester units from the following. . . . . . . . . . . . . . . . . . . . . . 15
${ }^{1}$ BUS 10 Fundamentals of Tax Return Preparation. .3
FINANCE 2 Investments ..... 3
FINANCE 8 Personal Finance .....  .3
INTBUS 1 International Trade ..... 3
MARKET 1 Principles of Selling ..... 3
MARKET 21 Principles of Marketing ..... 3
MGMT 2 Organization and Management Theory .....  .3
MGMT 33 Personnel Management .....
SUPV 1 Elements of Supervision ..... 3
MAJOR - TOTAL UNITS. ..... 48
GENERAL EDUCATION - REQUIRED COURSESStudents must complete one of the following General Education Plans:PLAN A NOT AVAILABLE WITH THIS MAJORPLAN B Pierce Career and Technical GE plan ............... 18 unitsPLAN C CSU GE Breadth Certification Plan................. 39 units
PLAN D IGETC 34-39 units
${ }^{1}$ Volunteer Income Tax Assistance course.
BUSINESS ADMINISTRATION

## Associate of 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.

To complete the degree, students must fulfill the following A ssociate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| ACCTG 2 | Introductory Accounting II |  |
| ECON 1 | Principles of Economics I |  |
| ECON 2 | Principles of Economics II |  |
| BUS 5 | Business Law |  |
| Choose one course from the following: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4-5 |  |  |
| MATH 227 | Statistics |  |
| MATH 238 | Calculus for Business and Social Sciences I |  |
| Choose two courses from the following: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6 |  |  |
| CAOT 82 | Microcomputer Software Survey in the Office |  |
| CO SCI 501 | Introduction to Computers and Their Uses. |  |
| CAOT 32 | Business Communications |  |
| MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 29 |  |  |

Note: CSUN requires both Math 227 and Math 238 for their Business Administration major. If both courses are not completed at Pierce, the remaining course(s) will have to be completed after transfer to CSUN.

Note: CSUN requires CAOT 32 and CAOT 82 or CO SCI 501. If these courses are not completed at Pierce, the remaining course(s) will have to be completed after transfer to CSUN.

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

## TAX PREPARATION

## Certificate of Achievement

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& N 0. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| ACCTG 2 | Introductory Accounting II. | . 5 |
| ACCTG 15 | Tax Accounting I |  |
|  | OR |  |
| ${ }^{1}$ BUS 10 | Fundamentals of Tax Return Preparation. | $\ldots 3$ |
| BUS 1 | Introduction to Business. . . . . . . . . . . . . | $\ldots 3$ |
| CERTIFICATE - TOTAL UNITS |  |  |
| ${ }^{1}$ Volunteer I | 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 47 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

| SUBJECT \& NO. | COURSE |
| :--- | :--- |
| ACCTG 1 | Introductory Accounting I $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |

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
SUBJECT \& NO. COURSE UNITS

Select a minimum of 15 semester units from the following. ............................ 15
ACCTG 2 Introductory Accounting II.................................... 5

FINANCE 2 Investments ......................................................... 3
FINANCE 8 Personal Finance................................................. 3
GEOG/GIS 25 Introduction to Geographic Information Systems and
Laboratory...................................................... 4
INTBUS 1 International Trade. ................................................. 3
MARKET 31 Retail Merchandising.......................................... 3
MGMT 31 Human Relations for Employees .............................. 3
MGMT 33 Personnel Management........................................... 3

REALES 1 Real Estate Principles........................................... 3
SUPV 1 Elements of Supervision $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$
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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BUS 1 | Introduction to Business. |  |
| GEOG 2 | Cultural Elements of Geography | 3 |
| INTBUS 1 | Introduction to International Trade. . | 3 |
| INTBUS 6 | International Marketing |  |
| INTBUS 18 | Basics of Exporting. | 1 |
| INTBUS 19 | Basics of Importing ${ }^{\prime}$ |  |
| INTBUS 22 | International Management. | 3 |
| MARKET 21 | Principles of Marketing. |  |
| CERTIFICATE - TO |  | . 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.
Seepage 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| BUS 1 | Introduction to Business. |  |
| BUS 5 | Business Law I |  |
| CAOT 32 | Business Communications |  |
| 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:
SUBJECT \& NO. COURSE UNITS

Select a minimum of 12 units from the following courses. . . . . . . . . . . . . . . . . . . . . . 12
ACCTG 2 Introductory Accounting II................................... 5

FINANCE 1 Principles of Finance ............................................ 3
FINANCE 2 Investments ........................................................ 3
FINANCE 8 Personal Finance..................................................... 3
INTBUS 1 International Trade. .................................................. 3
INTBUS 6 International Marketing ........................................ 3
INTBUS 22 International Management....................................... 3
MARKET 1 Principles of Selling ............................................ . 3
MGMT 13 Small Business Management I................................ 3
PUB REL 1 Public Relations ................................................. 3
SUPV 1 Elements of Supervision ......................................... 3
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 (WAFC)

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| CAOT 31 | Business English |  |
| CAOT 85 | Microcomputer Office Applications Spreadsheet |  |
| MARKET 21 | Principles of Marketing. |  |
| MARKET 31 | Retail Merchandising. |  |
| MATH 115 | Elementary Algebra . | 5 |
| MGMT 2 | Organization and Management Theory |  |
| MGMT 31 | Human Relations for Employees . | . 3 |
| MGMT 33 | Personnel Management. |  |
| COMM 101 | Public Speaking............................. |  |

## 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 47 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

| SUBJECT \& No. | COURSE 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 |  |
| SUBJECT \& NO. | COURSE UNITS |
| Select a minimum of 15 semester units from the following. .................... 15 |  |
| GEOG/GIS 25 | Introduction to Geographic Information Systems and Laboratory. |
| INTBUS 1 | International Trade. .................................. 3 |
| INTBUS 6 | International Marketing ............................... 3 |
| MARKET 31 | Retail Merchandising. .............................. 3 |
| MGMT 2 | Organization and Management Theory ............... 3 |
| MGMT 31 | Human Relations for Employees ....................... 3 |
| SUPV 1 | Elements of Supervision ............................ 3 |
| MAJOR - TOTAL UN |  |
| GENERAL EDUCATION - REQUIRED COURSES |  |
| Students must complete one of the following General Education Plans: |  |
| PLAN A | NOT AVAILABLE WITH THIS MAJOR |
| PLANB | 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BUS 1 | Introduction to Business. |  |
| MARKET 1 | Principles of Selling | . 3 |
| MARKET 11 | Fundamentals of Advertising. | 3 |
| MARKET 21 | Principles of Marketing. | . 3 |
| INTBUS 6 | International Marketing | 3 |
|  | OR |  |
| PUB REL 1 | Public Relations | . 3 |

## 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://piercecollege.edu/departments/child_development

## EARLY CHILDHOOD EDUCATION

## Associate of Science Degree for Transfer (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

Early Childhood Education focuses on the teaching and care of young children by providing the theoretical background of child development and developmentally appropriate practices of education of young
children. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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

| SUBJECT \& NO. | COURSE | UN |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Developmen |  |
| CH DEV 2 | Early Childhood: Principles and Practi |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 10 | Health, Safety and Nutrition |  |
| CH DEV 11 | Child, Family and Community. |  |
| CH DEV 22 | Practicum in Child Development I |  |
| CH DEV 34 | Observing and Recording Children's Behav |  |
| CH DEV 42 | Teaching in a Diverse Society |  |
| MAJOR - TOTAL | S. |  |
| 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. | units |
| PLAN D | IGE | unit |

## CHILD DEVELOPMENT

## Associate of Arts Degree

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

## 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.

Seepage 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth \& Development. . |  |
| CH DEV 2 | Early Childhood Principles \& Practices |  |
| CH DEV 3 | Creative Experiences I . |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 10 | Child Health |  |
| CH DEV 11 | Home, School, \& Community Relations. | . 3 |
| *CH DEV 22 | Practicum in Child Development I . . |  |
| CH DEV 34 | Observation and Assessment of Children . | . 3 |
| CH DEV 42 | The Child in a Multicultural Society. |  |
| CH DEV 65 | Adult Supervision. |  |

## MAJOR - ELECTIVE COURSES

Select a minimum of two courses ( 6 semester units) from the following:. . . . . . . . . . . . . 6
CH DEV 9 (3 units), 27 (3 units), 30 (3 units), 31 (3 units), 33 (3 units), 38 (3
units), 44 ( 3 units), 45 (3 units), 46 ( 3 units)
MAJOR - TOTAL UNITS.

## 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 NOT ADVISABLE WITH THIS MAJOR
PLAN D NOT ADVISABLE WITH THIS MAJOR
*These courses have a prerequisite

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& N0. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 2 | Early Childhood Principles and Practices. | 3 |
| CH DEV 3 | Creative Experiences for Children I. |  |
|  | OR |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 10 | Child Health |  |
| CH DEV 11 | Home, School and Community Relations. |  |
| *CH DEV 22 | Practicum in Child Development I . . |  |
| CH DEV 34 | Observing and Recording Children's Behavior. |  |
| CH DEV 42 | The Child in a Multi-Cultural Society . |  |
| *ENGLISH 28 | Intermediate Reading \& Composition |  |

Select a minimum of one course ( 3 semester units) from the following:
CH DEV 9 (3 units), 27 (3 units), 30 ( 3 units), 31 (3 units), 33 ( 3 units), 38 (3 units), 44 ( 3 units), 45 ( 3 units), 46 ( 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 2 | Early Childhood Principles and Practices. |  |
| CH DEV 3 | Creative Experiences for Children I. |  |
|  | OR |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 10 | Child Health |  |
| CH DEV 11 | Home, School and Community Relations |  |
| *CH DEV 22 | Practicum in Child Development |  |
| CH DEV 34 | Observing and Recording Children's Behavior. |  |
| Select a minimum of one course ( 3 semester units) from the following: |  |  |
| CH DEV 9 ( 3 units), 27 ( 3 units), 30 ( 3 units), 31 ( 3 units), 33 ( 3 units), 38 (3 units), 44 ( 3 units), 45 (3 units), 46 ( 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 2 | Early Childhood Principles and Practices. |  |
| CH DEV 11 | Home, School and Community Relations |  |
| Select a minimum of one course (3 semester units) from the following:. . . . . . . . . . . . . 3 |  |  |
| CH DEV 3 | Creative Experiences for Children I. . |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CERTIFICATE - TOTAL UNITS |  |  |

## PRESCHOOL DIRECTOR

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& N 0. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 3 | Creative Experiences for Children |  |
|  | OR |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 11 | Home, School and Community Relations |  |
| CH DEV 38 | Administration of Early Childhood Progr |  |
| Select a minimum of one course (3 semester units) from the following:. . . . . . . . . . . . . 3 |  |  |
| CH DEV 2 | Early Childhood Principles and Practic |  |
| CH DEV 10 | Child Health |  |
| CH DEV 42 | The Child in a Multi-Cultural Society | 3 |
| 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 3 | Creative Experiences for Children I. . |  |
|  | OR |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 11 | Home, School and Community Relations.... | 3 |
| CH DEV 30 | Infant Studies I |  |
|  | OR |  |
| CH DEV 31 | Infant Toddler Studies II |  |
| Select a minimum of one course ( 3 semester units) from the following:. . . . . . . . . . . . 3 |  |  |
| CH DEV 2 | Early Childhood Principles and Practices. |  |
| CH DEV 10 | Child Health . |  |
| CH DEV 42 | The Child in a Multi-Cultural Society ....... | . 3 |

## SCHOOL AGE CHILD CARE TEACHER

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CH DEV 1 | Child Growth and Development |  |
| CH DEV 3 | Creative Experiences for Children I. |  |
|  | OR |  |
| CH DEV 7 | Introduction to Curriculum in Early Childhood Education |  |
| CH DEV 11 | Home, School and Community Relations... |  |
| CH DEV 46 | School Age Programs I |  |
|  | OR |  |
| CH DEV 47 | School Age Programs II |  |
| Select a minimum of one course (3 semester units) from the following:. . . . . . . . . . . . . 3 |  |  |
| CH DEV 2 | Early Childhood Principles and Practices. |  |
| CH DEV 10 | Child Health . |  |
| CH DEV 42 | The Child in a Multi-Cultural Society . . | . 3 |
| CERTIFICATE - TOTAL UNITS |  |  |

## Computer Applications and Office Technologies

## 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, or 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 47 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 busi-ness-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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| BUS 1 | Introduction to Business. |  |
| ${ }^{1} \mathrm{CAOT} 2$ | Computer Keyboarding and | I... 3 |
| CAOT 31 | Business English | . 3 |

MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BUS 5 | Business Law I . . |  |
| CAOT 39 | Word Processing: Keyboarding and Operations |  |

CAOT 78 Microcomputer Accounting Applications for the Electronic Office (QuickBooks) ............................ 3
CAOT 85 Microcomputer Office Applications: Spreadsheet
$\qquad$
CAOT 92 Computer Windows Applications.......................... 2
CAOT 97 Internet for Business .............................................. 3
ECON 2 Principles of Economics II................................... 3
MGMT 2 Organization and Management Theory ................... 3
CAPSTONE COURSES


[^3]
## 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.

## 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 busi-ness-related soft ware 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| BUS 1 | Introduction to Business. |  |
| ${ }^{1}$ CAOT 2 | Computer Keyboarding and | I... 3 |
| CAOT 31 | Business English |  |

MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BUS 5 | Business Law I . |  |
| CAOT 39 | Word Processing: Keyboarding and Operations (Microsoft Word) |  |
| CAOT 78 | Microcomputer Accounting Applications for the Electronic Office (QuickBooks) . . . . . . . . . . . . . |  |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (Microsoft Excel). |  |
| CAOT 92 | Computer Windows Applications.. |  |
| CAOT 97 | Internet for Business |  |
| ECON 2 | Principles of Economics II . | 3 |
| MGMT 2 | Organization and Management Theory | . 3 |

## CAPSTONE COURSES



$$
\text { (Microsoft PowerPoint)...................................... . . . } 3
$$

CERTIFICATE - TOTAL UNITS .....  48-49${ }^{1}$ See Course Description for course prerequisites and corequisites. Studentswho have not acquired the necessary skills should enroll in CAOT 1.

## 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, or 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 47 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 busi-ness-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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ${ }^{1} \mathrm{CAOT} 2$ | Computer Keyboarding and Document Applications II. . |
| CAOT 31 | Business English |
| CAOT 34 | Business Terminology . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |
| CAOT 82 | Microcomputer Software Survey in the Office (Microsoft Office: Windows, Word, Excel, PowerPoint, and Access). 3 |

## MAJOR - REQUIRED COURSES

| SUBJECT \& N0. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| CAOT 39 | Word Processing: Keyboarding and Operations (Microsoft Word) |  |
| CAOT 67 | Microsoft Outlook for the Office. | 2 |
| CAOT 78 | Microcomputer Accounting Applications for the Electronic Office (QuickBooks) . . . . . . . . . . . . . . |  |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (Microsoft Excel). |  |
| CAOT 92 | Computer Windows Applications. . |  |
| CAOT 97 | Internet for Business |  |

## CAPSTONE COURSES


${ }^{\text {I See Course Description for course prerequisites and corequisites. Students }}$ who have not acquired the necessary skills should enroll in CAOT 1.

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## 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 busi-ness-related soft ware 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ${ }^{1}$ CAOT 2 | Computer Keyboarding and Document Applications II. . . 3 |
| CAOT 31 | Business English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAOT 34 | Business Terminology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |
| CAOT 82 | Microcomputer Software Survey in the Office (Microsoft Office: Windows, Word, Excel, PowerPoint, and Access). 3 |

MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I |  |
| CAOT 39 | Word Processing: Keyboarding and Operations (Microsoft Word) |  |
| CAOT 67 | Microsoft Outlook for the Office. |  |
| CAOT 78 | Microcomputer Accounting Applications for the Electronic Office (QuickBooks) ................. |  |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (Microsoft Excel) |  |
| CAOT 92 | Computer Windows Applications. . |  |
| CAOT 97 | Internet for Business | . 3 |

CAPSTONE COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 32 | Business Communications. |  |
| CAOT 79 | Advanced Word Processing Applications (Microsoft Word) |  |
| CAOT 86 | Microcomputer Office Applications: Database (Microsoft Access). |  |


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| CAOT 88 | Microcomputer Office Applications: Desktop Publishing (Adobe InDesign) |
| :---: | :---: |
| CAOT 96 | Adobe Creative Suite for the Office and the Web ........ 3 |
| CAOT 108 | Presentation Design for the Office <br> (Microsoft PowerPoint) $\qquad$ |

## OR

CAOT 110 Microcomputer Office Applications: Presentation Design (Microsoft PowerPoint).................................... 3
CAOT 109 Web Multimedia for the Office (Adobe: Dreamweaver and
CAOT 113 Introduction to Adobe Photoshop for the Office .......... 3
CAOT 125 Microsoft Office Project........................................ 2
CAOT 132 Introduction to Student ePortfolios ......................... 2
CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 47
${ }^{1}$ See Course Description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

## 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, or 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 47 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 busi-ness-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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ${ }^{1}$ CAOT 2 | Computer Keyboarding and Document Appli | $\ldots 3$ |
| CAOT 31 | Business English |  |
| CAOT 34 | Business Terminology |  |
| CAOT 82 | Microcomputer Software Survey for the Office (MS Office) |  |

MAJOR - REQUIRED COURSES

| SUBJECT \& N0. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I. |  |
| BUS 5 | Business Law I |  |
| CAOT 39 | Word Processing: Keyboarding and Operations (MS Word) |  |
| CAOT 66 | Voice-Recognition Software for Computer Input . |  |
| CAOT 67 | Microsoft Outlook for the Office. |  |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (MS Excel). |  |
| CAOT 92 | Computer Windows Applications (Windows) |  |
| CAOT 97 | Internet for Business |  |

CAPSTONE COURSES
SUBJECT \& NO. COURSE UNITS
CAOT 23F Legal Procedures IF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2

CAOT 23G Legal Procedures IG.............................................. 3
CAOT 32 Business Communications....................................... 3

CAOT 79 Word Processing Applications (MS Word) .................. 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.

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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 busi-ness-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.

CERTIFICATE - REQUIRED COURSES


CAPSTONE COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 23F | Legal Procedures IF . |  |
| CAOT 23 G | Legal Procedures IG. | 3 |
| CAOT 32 | Business Communica |  |

CERTIFICATE - TOTAL UNITS . ........................................................ 17
${ }^{1}$ See course description for course prerequisites and corequisites. Students who have not acquired the necessary skills should enroll in CAOT 1.

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& N 0. | COURSE | UNITS |
| :---: | :---: | :---: |
| ACCTG 1 | Introductory Accounting I |  |
| CAOT 78 | Microcomputer Accounting Applications for the Office (QuickBooks) | onic $\ldots 3$ |
| CAOT 82 | Microcomputer Software Survey in the Office (Microsoft Office) | $. .3$ |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (Microsoft Excel) |  |
|  | OR |  |
| CAOT 87 | Excel Concepts for Business Applications (Microsoft Excel) |  |
| CAOT 92 | Computer Windows Applications. |  |
|  | OR |  |
| CAOT 32 | Business Communications. | . 3 |
| CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15-17 |  |  |
| * For an Associate in Arts degree or a two-year certificate in Accounting, see Business Administration: Accounting. |  |  |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ${ }^{1}$ CAOT 2 | Computer Keyboarding and Document Applications II ... 3 |
| CAOT 31 | Business English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAOT 34 | Business Terminology .................................... 2 |
| CAOT 82 | Microcomputer Software Survey in the Office (Microsoft Office: Windows, Word, Excel, PowerPoint, and Access) |
|  | OR |
| CAOT 100 | Windows-Based Computer Applications (Windows, <br> Microsoft Word, Microsoft Excel, and Internet) . . . . . . . . . 3 |

CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 39 | Word Processing: Keyboarding and Operations (Microsoft Word) |  |

CAOT 67 Microsoft Outlook for the Office............................. 2
CAOT 85 Microcomputer Office Applications: Spreadsheet
$\qquad$
${ }^{2}$ CAOT 92 Computer Windows Applications........................... 2

CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24
${ }^{1}$ 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.

## OFFICE ADMINISTRATION: 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ${ }^{1}$ CAOT 2 | Computer Keyboarding and Document Applications II ... 3 |
| CAOT 31 | Business English |
| CAOT 34 | Business Terminology . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |
| CAOT 82 | Microcomputer Software Survey in the Office (Microsoft Office: Windows, Word, Excel, PowerPoint, and Access). 3 OR |
| CAOT 100 | Windows-Based Computer Applications (Windows, Microsoft Word, Microsoft Excel, and Internet) . . . . . . . . . 3 |

## CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 39 | Word Processing: Keyboarding and Operations (Microsoft Word) |  |
| CAOT 67 | Microsoft Outlook for the O |  |
| CAOT 85 | Microcomputer Office Applications: Spreadsheet (Microsoft Excel). |  |
| CAOT 92 | Computer Windows Application |  |
| CAOT 97 | Internet for Business |  |
| Select 12 semester units from the following:. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 |  |  |
| CAOT 66 | Voice-Recognition Software for Computer Inp |  |
| CAOT 79 | Advanced Word Processing Applications (Microsoft Word) |  |
| CAOT 86 | Microcomputer Office Applications: Database (Microsoft Access). |  |
| CAOT 88 | Microcomputer Office Applications: Desktop (Adobe InDesign) | $\ldots 3$ |
| CAOT 96 | Adobe Creative Suite Survey for the Office and (Adobe: InDesign, Photoshop, and Illustrato |  |
| CAOT 108 | Presentation Design for the Office (Microsoft PowerPoint)......... |  |
|  | OR |  |
| CAOT 110 | Microcomputer Office Applications: Presentat | . 3 |
| CAOT 109 | Web Multimedia for the Office (Adobe Dream Flash) $\qquad$ | $\begin{aligned} & \text { nd } \\ & \ldots 3 \end{aligned}$ |
| CAOT 113 | Introduction to Adobe Photoshop for the Offic |  |
| CAOT 114 | Adobe Acrobat for the Office and the Web |  |
| ${ }^{1}$ CAOT 120 | Adobe Illustrator for the Office and the Web |  |
| CAOT 125 | Microsoft Office Project |  |
| CAOT 132 | Introduction to Student ePortfolios |  |
| CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 36 |  |  |
| ${ }^{1}$ 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. |  |  |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :--- | :--- | :--- |
| CAOT 82 | Microcomputer Software Survey for the Office |  |

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

CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 39 | Word Processing: Keyboarding and Operations (MS Word) |  |
| CAOT 92 | Computer Windows Applications (Windows) |  |
| CAOT 97 | Internet for Business |  |
| CAPSTONE COURSES |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| CAOT 79 | Word Processing Applications (MS Word) ... |  |
| CAOT 109 | Web Multimedia for the Office (Adobe CS Drea and Flash) | ver <br> .... 3 |
| CAOT 113 | Introduction to Adobe Photoshop CS for the Off | . 3 |

## DESKTOP PUBLISHING

## Certificate of Achievement

## PROGRAM INFORMATION

Provides students with the knowledge and skills to create profes-sional-looking documents for business, government organizations, and educational institutions using high-end desktop publishing and imaging software.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ART 604 | Graphic Design I |  |
| CAOT 39 | Word Processing: Keyboarding and Operations (MS Word) |  |
|  | OR |  |
| CAOT 96 | Adobe Creative Suite CS Survey for the Office and the Web |  |

## CAPSTONE COURSES

SUBJECT \& NO. COURSE UNITS
Select at least 11 units from the following courses:
CAOT $79 \quad$ Word Processing Applications. . . . . . . . . . . . . . . . . . . . . . . . 3

CAOT 88 Microcomputer Office Applications: Desktop Publishing. . 3
CAOT 108 Presentation Design for the Office............................ 2
CAOT 113 Introduction to Adobe Photoshop CS for the Office ...... 3
CAOT 114 Adobe Acrobat CS for the Office and the Web ............ 2
CAOT 120 Adobe Illustrator CS for the Office and the Web........... 3
CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 17

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
bttp://www.piercecollege.edu/departments/cate.asp

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate basic competence in the use of state-of-the-art busi-ness-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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| CAOT 2 | Computer Keyboarding and Document Applications II ... 3 |
| CAOT 31 | Business English . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAOT 39 | Word Processing: Keyboarding and Operations <br> (MS Word) ................................................... . 3 |

## CAPSTONE COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 23F | Legal Procedures IF |  |
| CAOT 23 G | Legal Procedures IG. |  |
| CAOT 32 | Business Communications. |  |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate advanced competence in the use of state-of-the-art business-related soft ware 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



## CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CAOT 39 | Word Processing: Keyboarding and Operations (MS Word) |  |

## CAPSTONE COURSES

SUBJECT \& NO. COURSE UNITS
CAOT 79 Word Processing Applications (MS Word) ................. . 3

CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 17
${ }^{1}$ See Course Description

## OFFICE CLERICAL

## Certificate of Achievement

## PROGRAM INFORMATION

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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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 busi-ness-related soft ware 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


## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
bttp://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ${ }^{1} \mathrm{CAOT} 2$ | Computer Keyboarding and Document Applications II . . 3 |
| CAOT 31 | Business English |
| CAOT 34 | Business Terminology |

## CAPSTONE COURSES

SUBJECT \& NO. COURSE UNITS
CAOT 32 Business Communications...................................... 3
CAOT 128 Communication Skills for the Business Professional. . . . . . 3
CAOT 39 Word Processing: Keyboarding and Operations............ 3

CERTIFICATE - TOTAL UNITS . .......................................................... 14
${ }^{1}$ See Course Description

## WEB SITE CONSTRUCTION AND MAINTENANCE

## Certificate of Achievement

## PROGRAM INFORMATION

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. Gainful employment

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| ART 604 | Graphic Design I |
| ${ }^{1}$ CAOT 108 | Presentation Design for the Office (MS Powerpoint)........ 3 OR |
| CAOT 110 | Microcomputer Office Applications: Presentation Design (MS Powerpoint)............................................ 3 |
| CAOT 113 | Introduction to Adobe Photoshop CS5 for the Office.... . 3 |

CAPSTONE COURSES

| SUBJECT \& NO. | COURSE |
| :--- | :--- |
| CAOT 109 | Web Multimedia for the Office (Adobe Dreamweaver and |

${ }^{1}$ CAOT 114 Adobe Acrobat CS for the Office and the Web ............ 2
${ }^{2}$ CAOT 120 Adobe Illustrator CS for the Office and the Web........... 3
CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16-17
${ }^{1}$ Offered Spring semester only.

## 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 47 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 47 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

| SUBJECT \& No. | COURSE UNIT |
| :---: | :---: |
| CO SCI 501 | Introduction to Computers \& Their Uses ............... 3 |
| CO SCI 533 | Databases Using Access and SQL |
| CO SCI 541 | Advanced Database Programming Using C\# |
| CO SCI 547 | Digital Image Processing and Programming For the Web .. 3 |
| CO SCI 548 | Web Development Using Flash and ActionScipt ......... 3 |
| CO SCI 550 | Web Development Using Dreamweaver and CSS ........ 3 |
| COSCI 560 | Business Systems Design Using Oracle Developer and SQL Server................................................... . . 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. $\qquad$ |
| CO SCi 508 | Introduction to Programming Using Visual Basic ......... 3 OR |
| CO SCI 575 | Programming Fundamentals for Computer Science ...... 3 |
| CO SCI 587 | Introduction to Computer Networks . . . . . . . . . . . . . . . 3 |
| Math Elective | 125 or higher.................................. 3 -5 |

## Technical Electives:

Select a minimum of 15 units from one of the following sequences that will not duplicate
the required courses listed above:
.. 15
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), 559 ( 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), 558 ( 3 units)

SEQUENCE 3 - INFORMATION SYSTEMS - ACCT 1 ( 5 units), ACCTG 2 (5 units), BUS 5 ( 3 units), BUS 21 ( 3 units), CAOT 32 ( 3 units), ECON 1 ( 3 units) and ECON 2 (3 units)
MAJOR - TOTAL UNITS.

## 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

| SUBJECT \& No. | COURSE UNITS |
| :---: | :---: |
| CO SCI 501 | Introduction to Computers and Their Uses.............. 3 |
| ${ }^{1} \mathrm{CO}$ SCI 533 | Databases Using Access and SQL |
| ${ }^{1} \mathrm{CO} \mathrm{SCI} 541$ | Advanced Database Programming Using C\# ............ 3 |
| ${ }^{1} \mathrm{CO}$ SCI 552 | Programming in Java ................................... 3 <br> or |
| ${ }^{1} \mathrm{CO} \mathrm{SCI} 572$ | Introduction to Personal Computer Hardware and Operating Systems. |
| CO SCI 550 | OR <br> Introduction to Web Development Using Dreamweaver and CSS. |
| CO SCI 560 | Business Systems Design Using Oracle Developer and SQL Server . $\qquad$ |
| $\overline{\text { CO SCI } 575}$ | Programming Fundamentals for Computer Science ....... 3 OR |
| CO SCI 508 | Introduction to Programming Using Visual Basic ........ 3 |
| Choose a one course from the following:. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3-5 |  |
| ACCTG 1 | Introductory Accounting I............................. 5 |
| BUS 5 | Business Law ........................................ 3 |
| CAOT 32 | Business Communications........................... 3 |

${ }^{1}$ 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 47 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 $\mathrm{C}, \mathrm{C}++$, 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

SUBJECT \& NO. COURSE 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 $540 \quad$ 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

## COMPUTER AND NETWORK TECHNOLOGY

## 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. Verification is required upon request.

## 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 47 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 troubleshooting strategies for desktops, servers, and network infrastructure.
- Implement, configure, and maintain routers and routing protocols and integrate LAN and WAN technologies successfully.


## MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| CO SCI 501 | Introduction to Computers and Their Uses. |  |
| ${ }^{1} \mathrm{CO}$ SCI 514 | Supporting Windows Desktops |  |
| CO SCI 533 | Databases Using Access and SQL |  |
| ${ }^{1} \mathrm{CO}$ SCI 534 | Operating Systems |  |
| ${ }^{1} \mathrm{CO}$ SCI 535 | Supporting Windows Servers | 3 |
| ${ }^{1} \mathrm{CO} \mathrm{SCI} 537$ | LAN \& VLAN Switching |  |
| CO SCI 538 | Implementing Wide Area Networking. | 3 |
| CO SCI 550 | Introduction to Web Development Using Dreamweaver and CSS. |  |
| CO SCI 572 | Introduction to Personal Computer <br> Hardware and Operating Systems .... |  |


| CO SCI 575 | Programming Fundamentals for Computer Science ........ 3 OR |
| :---: | :---: |
| CO SCI 508 | Introduction to Programming Using Visual Basic . . . . . . . 3 |
| ${ }^{1} \mathrm{CO}$ SCI 578 | Routing and Routing Protocols |
| ${ }^{1} \mathrm{CO}$ SCI 581 | Personal C |
| ${ }^{1} \mathrm{CO}$ SCI 587 | Introduction to Computer Networks |
| ${ }^{1}$ See Course Description for prerequisites. |  |
| Technical Electiv |  |
| Select a minimum of 3 units from any of the courses listed below: ................. 3 |  |
| 1) PROGRAMMING: CO SCI 541 (3 units), 560 (3 units) |  |
| 2) WEB DEVELOPMENT: CO SCI 553 (3 units), 554 (3 units), 547 ( 3 units), 548 (3 units), 555 (3 units), 556 (3 units), 558 (3 units) |  |
| $\begin{aligned} & \text { 3) ELECTRONICS: ELECTRN 4A (3 units), } 4 \mathrm{~B} \text { (1 unit), 6A (3 units), 6B (1 } \\ & \text { unit), 8A (3 units), } 8 \mathrm{~B}(1 \text { unit), } 44 \text { ( } 3 \text { units), } 45 \text { ( } 1 \text { unit), } 72 \mathrm{~A} \text { (3 units), 72B (1 } \\ & \text { unit), } 74 \mathrm{~A} \text { (3 units), } 74 \mathrm{~B} \text { ( } 1 \text { unit). } \end{aligned}$ |  |
| 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 |
| PLANB | Pierce Career and Technical GE plan ............. 18 units |
| PLAN C | CSU GE Breadth Certification Plan............... 39 units |
| LAN D | GE |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| COSCI 501 | Introduction to Computers and Their Uses. |  |
| CO SCI 572 | Introduction to Personal Computer Hardware and Operation Systems. |  |
| ${ }^{1} \mathrm{CO}$ SCI 581 | Personal Computer Upgrade and Repair |  |
| ${ }^{1} \mathrm{CO}$ SCI 587 | Introduction to Computer Networks... |  |

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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ${ }^{1} \mathrm{CO}$ SCI 514 | Supporting Windows Desktops . |  |
| ${ }^{1} \mathrm{CO}$ SCI 534 | Operating Systems |  |
| ${ }^{1} \mathrm{CO}$ SCI 535 | Supporting Windows Servers | 3 |
| ${ }^{1} \mathrm{CO}$ SCI 587 | Introduction to Computer Networks | ... 3 |
| CERTIFICATE - TOTAL UNITS |  |  |
| ${ }^{1}$ See Catalog | description for prerequisites. |  |

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE |
| :--- | :--- |
| CO SCI 547 | Digital Image Processing and Programming for the Web...3 |
| CO SCI 548 | Web Development Using Flash and ActionScript ........3 |
| CO SCI 550 | Introduction to Web Development Using Dreamweaver |

CO SCI 553 Webpage Development.................................... 3
CERTIFICATE - TOTAL UNITS ..... 12
WEBSITE 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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


## 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 47 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 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
SUBJECT \& NO. COURSE ..... UNITS
CRIMINAL JUSTICE CORE -
Choose a minimum of 18 semester units from the following: ..... 18
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
RECOMMENDED BREADTH ELECTIVE

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| GIS 25 | Geographic Information Systems and Laboratory | . 4 |
|  | OR |  |
| GEOG 25 | Geographic Information Systems and Laboratory | . 4 |

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:. . . . . . . . 18
ADM JUS 1 Introduction to the 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 67 Community Relations and Diversity ..... 3
ADM JUS 75 Introduction to Corrections ..... 3
ADM JUS 160 Police Organization and Administration ..... 3
RECOMMENDED BREADTH ELECTIVE

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| GIS 25 | Geographic Information Systems and Laboratory . | . 4 |
|  | OR |  |
| GEOG 25 | Geographic Information Systems and Laboratory . | . 4 |

CSULA MAJOR - TOTAL UNITS. ..... 18
GENERAL EDUCATION - REOUIRED COURSESStudents must complete one of the following General Education Plans:PLAN A General Studies general education plan ............ 30 unitsPLAN B NOT AVAILABLE WITH THIS MAJOR
PLAN C CSU GE Breadth Certification Plan................. 39 unitsFor specific transfer institution requirements and questions please seeProf. Kathy Oborn, Faculty Advisor obornkm@piercecollege.edu.
Electronics
ELECTRONICS AND ELECTRIC TECHNOLOGY: 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 47 of this catalog for more information on transfer requirements and resources.

## 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.


## MAJOR - REQUIRED COURSES

SUBJECT \& NO. COURSE UNITS
ELECTRN 4A Fundamentals of Electronics IA .............................. 3

ELECTRN 4B Fundamentals of Electronics lB............................... . . 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 lB ................................................. 1
ELECTRN 74A Microprocessors ..................................................... 3
ELECTRN 74B Microprocessors Laboratory .................................... 1
MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 38
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:
http://info.piercecollege.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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
http://www.piercecollege.edu/departments/cate.asp
CERTIFICATE PROGRAM CORE REQUIREMENTS

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| ELECTRN 4A | Fundamentals of Electronics IA |  |
| ELECTRN 4B | Fundamentals of Electronics IB. |  |
| ELECTRN 6A | Fundamentals of Electronics IIA |  |
| ELECTRN 6B | Fundamentals of Electronics IIB. |  |
| ELECTRN 8A | Electron Devices A. | 3 |
| ELECTRN 8B | Electron Devices B . |  |
| ELECTRN 28 | Electronic and Electro-mechanical Drafting | 2 |
| CERTIFICATE SPECIALIZATION OPTIONS: |  |  |
| Electronics: DIGITAL |  |  |
| SUBJECT \& N 0. | COURSE | UNITS |
| ELECTRN 72A | Digital Circuits IA. |  |
| ELECTRN 72B | Digital Circuits 1B |  |
| ELECTRN 74A | Microprocessors |  |
| 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.


## Electronics: COMMUNICATIONS

| SUBJECT \& No. | COURSE | UNITS |
| :---: | :---: | :---: |
| ELECTRN 44 | Communications Electronics |  |
| ELECTRN 45 | Communications Electronics Laboratory |  |
| ELECTRN 60 | Microwave Fundamentals. | 3 |
| ELECTRN 61 | Microwave Fundamentals Laboratory. |  |
| CERTIFICATE - TOTAL UNITS |  | . 22 |
| PROGRAM LEARNING OUTCOMES |  |  |
| Upon complet | f 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.

Electronics: ANALOG
SUBJECT \& NO. COURSE UNITS
ELECTRN 26 Linear Circuits ................................................... 3
ELECTRN 48A Integrated Circuits............................................... . . 3
ELECTRN48B Integrated Circuits Laboratory ................................. 1
ELECTRN 63 Circuit Analysis Laboratory................................... . 1
CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 22

## 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.


## Engineering Graphics \& Design Technology

## ENGINEERING GRAPHICS \& DESIGN TECHNOLOGY

## Associate of Science Degree

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

Prerequisite: MATH 110 or appropriate skill level demonstrated through the Mathematics placement process. Verification required upon request.
Faculty Advisor: E. Cheung

## PROGRAM INFORMATION

In collaboration with industry, the college faculty have developed the program shown below which leads to an Associate of Science degree in Engineering Graphics and Design Technology. This associate degree program provides students with competency skills in computer-aided design (CAD) software and knowledge of design and manufacturing processes and drafting standards. Students will achieve a strong skill set to obtain a position as a mechanical drafter or designer in the manufacturing and product development fields.

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

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Create, modify, and analyze 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.
- Apply skills and knowledge in one or more of the following fields to engineering design: GIS, Architecture, Welding, and/or Electronics.


## MAJOR - REQUIRED COURSES



## ENGINEERING GRAPHICS \& DESIGN TECHNOLOGY

## Certificate of Achievement .

Prerequisite: MATH 110 or appropriate skill level demonstrated through the Mathematics placement process. Verification required upon request.

Faculty Advisor: E. Cheung

## PROGRAM INFORMATION

In collaboration with industry, the college faculty have developed the program shown below which leads to a Certificate in Engineering Graphics \& Design Technology. This certificate program is intended for students who are looking to develop marketable skills in com-puter-aided design (CAD) software and drafting standards with the completion of 20 semester units. Students may choose to continue their education to pursue an A.S. degree in Engineering Graphics \& Design Technology.

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Create, modify, and analyze 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.


## CERTIFICATE - REQUIRED COURSES

SUBJECT \& NO. COURSE UNITS

IND TEK 105 Industrial Print Reading with GD\&T....................... 3
EGD TEK 101 Engineering Graphics ............................................ 3
EGD TEK 111 2D Computer-Aided Drafting ................................ 2
EGD TEK 210 3D Computer-Aided Desgin....................................... 3
EGD TEK 310 Engineering Design ............................................. 3
IND TEK 130 Technology of Metal Machining Process I.................. . 3
CAOT 32 Business Communications......................................... 3
CERTIFICATE - TOTAL UNITS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20

## Environmental Science \& 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.

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

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BIOLOGY 6 | General Biology I |  |
| BIOLOGY 7 | General Biology II |  |
| CHEM 101 | General Chemistry I |  |
| CHEM 102 | General Chemistry II. |  |
| CO SCI 501 | Introduction to Computers and Their Uses. . OR | $. .3$ |
| CAOT 100 | Windows Based Computer Applications..... | . 3 |
| ENV SCI 1 | The Human Environment |  |
| ENV SCI 2 | The Human Environment: Biological Processes. |  |
| ENV SCI 31 | Energy and Power. . |  |
| GEOL 1 \& | Physical Geology. |  |
| GEOL 6 | Physical Geology Laboratory. |  |
|  | OR |  |
| GEOL 4 | Physical Geology \& Laboratory . . . . . . . . . . . . | .. 5 |
| MATH 227 | Statistics |  |
| MATH 260 | Pre-calculus |  |

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 Career and Technical GE Plan ........................ 18 units
PLAN C CSU GE Breadth Certification Plan................. 39 units
PLAN D IGETC.............................................. 34-39 units

## 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.
Seepage 47 of this catalog for more information on transfer requirements and resources.

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate oral proficiency in the French language (at the appropriate level as measured by the ACTFL rubric).
- Demonstrate proficiency in the grammar (structure, tense, mood and syntax) of the French language.
- Demonstrate Intermediate High to Advanced Low proficiency in writing and reading comprehension in the French language.
- Exhibit basic knowledge of the social, political, cultural and economic conditions in the countries in which the French language is spoken.

MAJOR - REQUIRED COURSES
SUBJECT \& NO. COURSE UNTS

Select a minimum of three courses ( 15 semester units) from the following: . . . . . . . . . 15
FRENCH 1 Elementary French I......................................... . 5
FRENCH 2 Elementary French II............................................ 5
FRENCH 3 Intermediate French I ............................................ 5
FRENCH 4 Intermediate French II ............................................. 5
FRENCH 5 Advanced French I.............................................. . 5
FRENCH 6 Advanced French II .............................................. 5
Complete the following required courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
FRENCH 8 Conversational French ............................................... 2
FRENCH 10 French Civilization............................................... 3
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.
MAJOR - TOTAL UNITS .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

## General Education Breadth Requirement

## CSU GE BREADTH CERTIFICATION

## 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 "Plan C - Pierce College CSU General Education Certified Plan 2014-2015" on page 66.


## 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 "Plan D - Pierce College Intersegmental General Education Transfer Curriculum (IGETC) 2014-2015" on page 67.

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 47 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 completed from within the chosen Area of Emphasis. Each course used toward the unit requirement must be completed with a "C" or better or a " P " if the course is taken on a "pass-no pass" basis.
ANTHRO 102 ( 3 units), 105 ( 3 units), 109 ( 3 units), 121 ( 3 units), 161 ( 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), 301 ( 3 units), 302 ( 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); CH DEV: 9 ( 3 units); CINEMA: 3 ( 3 units), 5 ( 3 units), 104 ( 3 units), 107 ( 3 units); COUNSEL: 20 ( 3 units), 40 ( 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), 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); MUSIC: 111 ( 3 units), 112 ( 3 units), 121 ( 3 units), 122 ( 3 units), 226 ( 2 units), 251 ( 1 unit), 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 ( 1 unit), 561 (. 5 units), 571 (. 5 units), 601 (2 units), 611 ( 2 units), 621 ( 2 units), 651 ( 2 units), 705 ( 1 unit), 721 ( 1 unit), 741 ( 1 unit), 755 ( 1 unit); 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); 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 ( 5 units), 36 ( 5 units), 37 ( 5 units), 48 ( 3 units), 49 ( 3 units), 65 ( 3 units), 101 ( 1 unit); THEATER: 100 (3 units), 110 ( 3 units), 125 ( 3 units).

ARTS AND HUMANITIES EMPHASIS UNIT TOTAL. $\qquad$ 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.
ANML SCI: 511 (3 units); ANATOMY: 1 ( 4 units); ANTHRO: 101 (3 units), 109 (3 units), 111 (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), $11 \mathrm{ABC}(3$ units), $12 \mathrm{ABC}(3$ units), 110 ( 4 units), 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), 17 ( 5 units), 19 ( 2 units), 23 ( 3 units), 33 ( 3 units), 38 ( 3 units); GEOG OR GIS: 25 ( 4 units), 36 ( 3 units), 37 ( 1 unit); 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 ( 5 units), 228B (5 units), 235 ( 5 units), 238 ( 5 units), 240 ( 3 units), 245 ( 3 units), 260 ( 5 units), 261 ( 5 units), 262 ( 5 units), 263 ( 5 units), 270 ( 3 units), 275 ( 3 units); METEOR: 3 ( 3 units), 4 (2 units), 5 ( 3 units); MICRO: 1 ( 5 units), 20 ( 4 units); OCEANO: 1 ( 3 units), 2 (3 units), 10 ( 2 units); PHYSICAL SCIENCE: 4 ( 4 units), 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 $\qquad$ 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), 105 ( 3 units), 106 ( 4 units), 109 ( 3 units), 111 ( 2 units), 121 (3 units), 132 ( 3 units), 141 ( 3 units), 161 ( 3 units); ART: 101 ( 3 units), 102 ( 3 units), 103 ( 3 units), 105 ( 3 units), 109 ( 3 units), 111 ( 3 units), 161 ( 3 units), 162 ( 3 units), 163 (3 units); BUS: 5 ( 3 units); CAOT: 32 (3 units), 82 ( 3 units); CHICANO: 2 ( 3 units), 80 (3 units); CH DEV: 1 (3 units); COMM: 101 (3 units), 102 ( 3 units), 104 ( 3 units), 121 ( 3 units), 122 ( 3 units), 151 ( 3 units); COUNSEL: 20 ( 3 units), 40 ( 3 units); 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); GEOG OR GIS: 25 ( 4 units), 33 ( 3 units), 38 ( 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); 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); 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), 42 ( 3 units), 43 ( 3 units); PSYCH: 1 ( 3 units), 2 ( 3 units), 3 ( 3 units), 6 ( 3 units), 11 ( 3 units), 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), 42 ( 2 units) 86 ( 3 units), 87 ( 3 units); SPANISH: 10 ( 3 units), 16 (3 units); STATISTICS 1 ( 3 units), 7 ( 4 units).
SOCIAL AND BEHAVIORAL SCIENCE EMPHASIS 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

## 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 Advisors: T. Fortune and M. Van Dyke

## 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 47 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

| SUBJECT \& NO. | COURSE 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. |
| AST 5 | Standard Transmissions, Clutches, Drive Lines and Differentials $\qquad$ |
| AST 6 | Automatic Transmission Electronic Diagnostics and Repair $\qquad$ |
| AST 7 | Air Conditioning . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| AST 8 | Shop Operations and Management I. .................... 4 |
| AST 9 | Shop Operations and Management II. ................... 4 |
| AST 20 | Advanced Engine Diagnostics and Performance .......... 4 |

Select a minimum of 3 semester units from the following: .....  3
AST 23 Enhanced Clean Air Car. ..... 4
AST 25 Fundamentals of Auto Mechanics
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
MAJOR - TOTAL UNITS. ..... 46
GENERAL EDUCATION - REQUIRED COURSESStudents must complete one of the following General Education Plans:PLAN A NOT AVAILABLE WITH THIS MAJORPLAN B Pierce Career and Technical GE plan ................ 18 unitsPLAN C CSU GE Breadth Certification Plan................ 39 unitsPLAN D IGETC ................................................ 34-39 units
AUTOMOTIVE SERVICE TECHNOLOGY
Certificate of AchievementFor students who wish to complete a minimum of classes in one year toprepare for employment. A minimum of 44 units is required.
Faculty Advisors: T. Fortune and M. Van Dyke
PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will:

- Basic knowledge and skills for maintenance and repair of brakesand 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

| SUBJECT \& NO. | COURSE | UNITS |
| :--- | :--- | :--- |
| AST 1 | Automotive Engines. $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |

ASI 2 Suspension, Brakes and Power Systems . . . . . . . . . . . . . . . . . . 5
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 8 Shop Operations and Management I .....
AST 9 Shop Operations and Management II. .....  . 4
Advanced Engine Diagnostics and Performance ... ..... 4
Select a minimum of 3 semester units from the following: ..... 3
AST 23 Enhanced Clean Air Car. ..... 4
AST 25 Fundamentals of Auto Mechanics ..... 4
AST 41 Precision Lower-End Engine Blueprinting and Assembly . . 3AST 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 ..... 46
AUTOMOTIVE LIGHT SERVICE TECHNICIAN

## Certificate of Achievement

Faculty Advisors: T. Fortune and M. Van Dyke

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Maintain, diagnose, and repair basic automotive systems.


## CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| AST 2 | Suspension, Brakes and Power Systems . . . . |  |
| AST 4 | Starting and Charging Systems/Automotive Electrical Circuits. |  |
| AST 7 | Air Conditioning |  |

CERTIFICATE - TOTAL UNITS ..... 13
AUTOMOTIVE EMISSION SPECIALIST

## Certificate of Achievement

Faculty Advisors: T. Fortune and M. Van Dyke

## PROGRAM INFORMATION

This certificate program prepares the student to become a California Smog Check Technician.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| AST 3 | Engine Diagnosis and Tune-Up . |  |
| AST 4 | Starting and Charging Systems/Automotive Electrical Circuits. |  |
| AST 20 | Automotive Electronic Computer Control Systems . | . 4 |
| AST 23 | Enhanced Area Clean Air Car Course . . . . . . . . . . . | . 3 |

## AUTOMOTIVE POWERTRAIN SPECIALIST

## Certificate of Achievement

Faculty Advisors: T. Fortune and M. Van Dyke

## PROGRAM INFORMATION

This certificate program prepares the student to become an Automotive Heavy Line Technician.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at: http://www.piercecollege.edu/departments/cate.asp

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Maintain, diagnose and repair automotive drive line systems.


## CERTIFICATE - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| AST 1 | Automotive Engines. . | 5 |
| AST 5 | Standard Transmissions, Clutches, Drive Lines, and Differentials | 3 |
| AST 6 | Automatic Transmissions . . . . . . . . . . . . . . . . . . | . 5 |

## AUTOMOTIVE PERFORMANCE APPLICATIONS

## Certificate of Achievement

Faculty Advisors: T. Fortune and M. Van Dyke

## 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.

## GAINFUL EMPLOYMENT

To find information about the careers for which this certificate prepares you, the costs associated with the program, median debt accumulated by students completing the program, and time to completion, please visit the Gainful Employment Disclosure website at:
bttp://www.piercecollege.edu/departments/cate.asp

## 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

| SUBJECT \& NO. | COURSE 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 |

## NUMERICAL CONTROL PROGRAMMING

## Associate of Science Degree

Faculty Advisor: R. Smetzer

## 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.

## 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 47 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

SUBJECT \& NO. COURSE 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| IND TEK 105 | Industrial Print Reading |  |
| IND TEK 130 | Technology of Metal Machining Processes I . |  |
| IND TEK 140 | Fundamentals of CNC Technology |  |
| IND TEK 230 | Technology of Metal Machining Processes II |  |
| IND TEK 244 | CNC Programming and Machine Operation - Lathe. |  |
| IND TEK 248 | CNC Programming and Machine Operation - Mill |  |
| IND TEK 330 | Technology of Metal Machining Processes III |  |
| IND TEK 332 | Projects Laboratory in Metal Machining Processes . | . 3 |
| IND TEK 346 | CAM Programming using Surf CAM. |  |
| IND TEK 444 | CNC Lathe Projects |  |
| IND TEK 448 | CNC Mill Projects. |  |
| MATH 125 | Intermediate Algebra or higher. | 3-5 |

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

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate oral proficiency in the Italian language (at appropriate level as measured by the ACTFL rubric).
- Demonstrate proficiency in the grammar (structure, tense, mood and syntax) of the Italian language.
- Demonstrate Intermediate High to Advanced Low proficiency in writing and reading comprehension in the Italian language.
- Exhibit basic knowledge of the social, political, cultural and economic conditions in the countries in which the Italian language is spoken.


## MAJOR - REQUIRED COURSES

SUBJECT \& NO. COURSE

UNITS
Select a minimum of three courses from the following:. . . . . . . . . . . . . . . . . . . . . . . . . . 15
ITALIAN 1 Elementary Italian I ...................................................... 5
ITALIAN 2 Elementary Italian II ................................................ 5
ITALIAN 3 Intermediate Italian I........................................... 5
ITALIAN 4 Intermediate Italian II............................................ 5
ITALIAN 5 Advanced Italian I .................................................. 5
ITALIAN 6 Advanced Italian II. ............................................... 5
Complete the following required courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ITALIAN 8 Conversational Italian............................................ 2
ITALIAN 10 Italian Conversation and Culture............................ 3
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; 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

## Associate of Arts for Transfer (AA-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:

Students pursuing the Associate in Arts in Journalism for Transfer Degree (AA-T in Journalism) will engage in the study of journalism. In addition they will improve their critical thinking, communication skills and writing skills. The goal of this degree is to provide students a basic understanding of the field of Journalism and a strong academic foundation in the social sciences from which to engage in upper division coursework in Journalism at a California State University campus.

The Associate in Arts in Journalism for Transfer Degree (AA-T in Journalism) is intended for students who plan to transfer and complete a bachelor's degree in Journalism, or a similar major such as Communications/Media Arts and Marketing at a CSU campus. Students completing the AA-T degree in Journalism are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements as this AA-T in Journalism may not be the best option for students intending to transfer to a particular CSU campus or to a college or university that is not part of the CSU system. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system. Student journalists are encouraged to participate in campus media and internships as productivity is key to success in this rapidly evolving profession.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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.

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| JOURNAL 100 | Social Values in Mass Communication . . . . . . . . . . . . . . 3 |
| JOURNAL 101 | Collecting and Writing News . . . . . . . . . . . . . . . . . . . . . . 3 |
| JOURNAL 217 \& | Publication Laboratory . .............................. 2 |
| JOURNAL 219 | Techniques for Staff Editors. . . . . . . . . . . . . . . . . . . . 1 |
|  | OR |
| JOURNAL 220 | Magazine Production |
|  | OR |
| BRDCSTG 10 | Radio Programming and Production.................. 3 |
| List A: Select one course (3 units) from the following. If course(s) below was taken for the required core, it may not be used to meet this area: . $\qquad$ |  |
| MULTIMD 801 | Multimedia Storytelling ............................. 3 |
| JOURNAL 202 | Advanced Newswriting............................... 3 |
| PUB REL 1 | Principles of Public Relations .......................... 3 |
| PHOTO 20 | Beginning Photojournalism............................ 4 |
| JOURNAL 251 | Visual Communication in Mass Media. ................. 3 |
| JOURNAL 218 | Practical Editing................................... 3 |
| List B: Select two courses ( 6 units) from the following:. . . . . . . . . . . . . . . . . . . . . . 6 |  |
| PHOTO 101 | Beginning Digital Photography ........................ 3 |
| MATH 227 | Statistics ................................................... 4 |
| STAT 1 | Elementary Statistics I for the Social Sciences............ 3 |
| POLSCI 1 | The Government of the United States.................. 3 |
| POLSCI 2 | Modern World Governments |
| ENGLISH 103 | Composition and Critical Thinking ................... 3 |
| COMM 104 | Argumentation and Debate .......................... 3 |
| MAJOR - TOTAL UNIT | 18-20 |
| 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 |
| PLAND | IGETC ................................... 34-39 unit |

## 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 47 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.

MAJOR - REQUIRED COURSES

| SUBJJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| BRDCSTG 1 | Fundamentals of Radio and Television Broadcasting ..... 3 |
| JOURNAL 219 | Techniques for Staff Editors. . . . . . . . . . . . . . . . . . . . . 1 |
|  | OR |
| LIB SCI 102 | Internet Research Methods . . . . . . . . . . . . . . . . . . . . . . 1 |
| JOURNAL 100 | Social Values in Mass Communications . . . . . . . . . . . . . . 3 |
| JOURNAL 101 | Collecting and Writing News ......................... 3 |
| JOURNAL 108 | Article Writing |
|  | OR |
| JOURNAL 220 | Magazine Editing.................................. 3 |
| JOURNAL 202 | Advanced Newswriting. . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| JOURNAL 218 | Practical Editing |
| PHOTO 101 | Beginning Digital Photography ...................... 3 |
| PHOTO 20 | Beginning Photojournalism.......................... 4 |
|  | OR |
| MULTIMD 801 | Multimedia Storytelling. |



## 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 SPANISH 37).
2. Successful completion of at least 6 units from designated courses in the area of Social Sciences.
3. Successful completion of at least 6 units from designated courses in the area of Humanities.
4. Successful completion of at least 6 units from designated courses in the area of General Education.
5. 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 47 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.

| SUBJECT \& NO. | COURSE |  |
| :---: | :---: | :---: |
| Spanish Language Proficiency - <br> A minimum of five semester units selected from the following: .......................... . 5 |  |  |
| SPANISH 4 | Interm OR |  |
| SPANISH 37 | Advance | .. 5 |
| SPANISH 5 | Advance |  |
| SPANISH 6 | Advance |  |
| Social Sciences - <br> A minimum of six semester units selected from the following: . $\qquad$ |  |  |
| HISTORY 5 | History OR |  |
| HISTORY 6 | History | ... 3 |
| SPANISH 10 | Latin-A |  |
| Humanities - <br> A minimum of six semester units selected from the following: |  |  |
| SPANISH 12 | Contem |  |
| SPANISH 15 | Great B |  |
| SPANISH 16 | Mexican |  |
| SPANISH 25 | Spanish |  |
| SPANISH 26 | Underst |  |
| SPANISH 65 | Mexican |  |
| RECOMMENDED BREADTH ELECTIVES |  |  |
| SUBJECT \& NO. | COURSE | UNITS |
| A minimum of 3 semester units selected from the following: . . . . . . . . . . . . . . . . . 3 |  |  |
| ANTHRO 102 | Human |  |
| GEOG 2 | Cultural |  |
| GEOG 7 | World R |  |
| SPANISH 9 | Hispani |  |
| SPANISH 27 | Cultural | $\ldots 3$ |
| MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20 |  |  |
| GENERAL EDUCATION - REQUIRED COURSES |  |  |
| Students must complete one of the following General Education Plans: |  |  |
| PLAN A | General | 0 units |
| PLAN B | NOT A |  |
| PLAN C | CSU G | 9 units |
| PLAND | IGETC | 9 units |

## Mathematics

## Associate of Arts Degree

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

## 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 47 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

SUBJECT \& NO. COURSE UNITS

A minimum of six semester units selected from the following: . . . . . . . . . . . . . . . . . . . 6

MATH 270 Linear Algebra.......................................................... 3
MATH 275 Ordinary Differential Equations................................ 3
A minimum of 12 semester units selected from the following: . . . . . . . . . . . . . . . . . . . . 12
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

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 of 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 $b t t p: / / w w w . s b 1440$. 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.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| MATH 261 | Calculus I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 |
| MATH 262 | Calculus II |
| MATH 263 | Calculus III |
| MATH 270 | Linear Algebra. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| One course from the following: |  |
| MATH 275 | Differential Equations. . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| PHYSICS 101 | Physics for Engineers and Scientists I . . . . . . . . . . . . . . . . 5 |
| CO SCI 539 | Programming in C |
| CO SCI 575 | Programming Fundamentals for Computer Science ....... 3 |
| MAJOR - TOTAL U | 1-23 |
| REQUIRED GENERAL EDUCATION COURSES |  |
| Students must complete one of the following General Education Plans: |  |
| PLANA | NOT AVAILABLE WITH THIS MAJOR |
| PLAN B | NOT AVAILABLE WITH THIS MAJOR |
| PLAN C | CSU GE Breadth Certification Plan ............... 39 units |
| PLAN D |  |

## 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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| MUSIC 201 | Harmony I |  |
| MUSIC 217-1 | Musicianship I |  |
| MUSIC 321 | Elementary Piano |  |
| MUSIC 121 | Music History and Literature I |  |
|  | OR |  |
| MUSIC 122 | Music History and Literature II . | . 3 |
| MUSIC 161 | Introduction to Electronic Music |  |
| MUSIC 181 | Applied Music I |  |
| MUSIC 182 | Applied Music II. | 0.5 |
| MUSIC 183 | Applied Music III | 0.5 |
| MUSIC 202 | Harmony II |  |
| MUSIC 203 | Harmony II |  |
| MUSIC 217-2 | Musicianship II |  |
| MUSIC 217-3 | Musicianship III . |  |
| MUSIC 250 | Music Performance Workshop |  |
| Performance Organization: Select a minimum of one course from the following: |  |  |
| MUSIC 501 (1 unit), 531 (1 units), 721 (1 unit), 741 (1 unit), 745 (1 units) |  |  |
| MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23.5 |  |  |

## 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

## Associate of Science 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 of Science Degree. The Nursing Program is accredited by the California Board of Registered Nursing (see page 6 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 ${ }^{*}$ | 5 semester units | Chemistry 51 | 5 |
| Anatomy | 4 semester units with lab | Anatomy 1 | 4 |
| Physiology | 4 semester units with lab | AND | Physiology 1 |

MAJOR PREP UNIT TOTAL . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26-27

* 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 \& SELECTION PROCEDURE

Please consult the department website for application instructions and earliest filing period at www.piercecollege.edu/departments/nursing.

## MAJOR - REQUIRED COURSES

SUBJECT \& NO. COURSE UNITS

NURSING 400 Adult Health Care I...................................... 5
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. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 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
*Nursing students who follow Plan B are exempt from AREA E1

## ADDITIONAL GRADUATION REQUIREMENTS

1. 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.
2. 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: COMM 101, 102, 104, 121. Must be completed with a grade of "C" or higher.

## NURSING DEPARTMENT POLICIES

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

## Associate of Arts Degree

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 47 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| BRDCSTG 1 | Fundamentals of Radio and Television Broadcasting |  |
| JOURNAL 100 | Social Values in Mass Communications |  |
| JOURNAL 101 | Collecting and Writing News |  |
| JOURNAL 202 | Advanced Newswriting. |  |
| PHOTO 101 | Beginning Digital Photography |  |
| PHOTO 102 | Advanced Digital Photography. |  |
| PHOTO 20 | Beginning Photojournalism |  |
| PHOTO 21 | News Photography. |  |
| PHOTO 49 | Advanced Photographic Digital Imaging |  |
|  | OR |  |
| MULTIMD 801 | Multimedia Storytelling |  |
|  | OR |  |
| BRDCSTG 10 | Radio Programming and Production. |  |
| MAJOR - ELECTIVE COURSES |  |  |
| SUBJECT \& N 0 . | COURSE | UNITS |
| Select a minimum of 9 semester units from the following: . . . . . . . . . . . . . . . . . . . 9 |  |  |
| ART 500 | Introduction to Design . |  |
| ART 502 | Beginning Three-Dimensional Design |  |
| CINEMA 3 | History of Motion Pictures and Television |  |
| CINEMA 104 | History of Documentary Films. |  |
| CINEMA 107 | Understanding Motion Pictures |  |
| CO SCI 501 | Introduction to Computers and Their Uses |  |
| ENGLISH 101 | College Reading and Composition I. |  |
| JOURNAL 217 | Publication Laboratory |  |
| JOURNAL 218 | Practical Editing |  |
| JOURNAL 220 | Magazine Editing |  |
| PHOTO 16 | Commercial Photography . |  |
| PUB REL 1 | Principles of Public Relations |  |
|  | OR |  |
| MGMT 6 | Public Relations . | . 3 |
| MAJOR - TOTAL UNI | S. | 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 | units |
| PLAN C | CSU GE Breadth Certification Plan............. | units |
| PLAN D | IGETC . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 34 | units |

## Political Science

## Associate of Arts Degree for Transfer (AA-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

The goal of the Political Science Program at pierce College is to prepare students to develop a fundamental understanding of the systematic study of theories, institutions, and processes related to the distribution of power and its use in the maintenance of order and promotion of equality and justice. The core courses in the Political Science major will introduce students to the fields in the discipline: Political Theory which includes the study of major philosophic works related to power and politics, American Government, the study of institutions and linkage organizations that characterize government in the United States, Comparative Politics which studies the political systems of other countries and exposure to the comparative method, and International Relations which analyzes phenomena related to the interaction between sovereign states and other actors in the international system.
The Associate in Arts in Political Science for Transfer degree (AA-T in Political Science) prepares students to continue their education at a California State University campus leading to a baccalaureate degree. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system.

To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## 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.
- Research and Information Literacy: The student will demonstrate proficiency in modes of political inquiry, 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 decision-making in our political system.
- 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.


## MAJOR REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| POL SCI 1 | The Government of the United States. |  |
| POL SCI 2 | Modern World Governments |  |
| POL SCI 5 | The History of Western Political Thought |  |
| POL SCI 7 | Contemporary World Affairs |  |
| STAT 1 | Statistics I for the Scocial Sciences . . |  |

MAJOR ELECTIVE COURSES:
SUBJECT \& NO. COURSE UNITS

Select a minimum of one course ( 3 semester units) from the following:. . . . . . . . . . . . . 3
ADM JUS 1 Introduction to Administration of Justice . . . . . . . . . . . . . . . 3
ANRHO 102 Human Ways of Life: Cultural Anthropology ............. 3
ECON 10 Economic History of the United States . . . . . . . . . . . . . . . . . 3
HISOTRY 11 Political and Social History of the United States I.......... 3
HISTORY 12 Political and Social History of the United States II........ 3
POL SCI 14 Government and Politics in the Middle East. . . . . . . . . . . . . 3
POL SCI 19 Women in Politics ................................................ 3
PSYCH 1 General Psychology I........................................... 3
SOC 1 Introduction to Sociology ..................................... 3
MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18
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


## 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 47 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

|  | OURSE | NITS |
| :---: | :---: | :---: |
| ENG GEN 101 |  |  |
| 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 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

## Public Relations

## Associate of Arts Degree

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

Public relations courses are taken by those planning careers in public relations, marketing, journalism and business. Because of its emphasis on clear and creative writing, the field of public relations is also popular among advertising students. Students will learn how to recognize news, conduct interviews, develop relationships with the media and to organize and execute campaigns. The use of photography, multimedia, graphics and marketing is also explored in this multidisciplinary certificate/degree. Special emphasis is placed on meeting deadlines and accuracy.

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

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Analyze the effectiveness of persuasive communication in terms of various mass media.
- Apply public relations communication theory in order to create essential public relations tools including news releases and strategic public relations plan for a client.
- Formulate a publicity campaign using effective communication strategies.


## MAJOR - REQUIRED COURSES

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| JOURNAL 100 | Social Values in Mass Communication . |  |
| JOURNAL 101 | Collecting and Writing News |  |
| JOURNAL 202 | Advanced Newswriting. |  |
| PHOTO 101 | Beginning Photography |  |
| PHOTO 20 | Beginning Photojournalism. |  |
| MULTIMD 801 | Multimedia Storytelling |  |
| PUB REL 1 | Principles of Public Relations |  |
| PUB REL 2 | Public Relations Techniques. | 3 |
| MARKET 1 | Principles of Selling . or |  |
| MARKET 21 | Principles of Marketing. |  |

## MAJOR - ELECTIVE COURSES

SUBJECT \& NO. COURSE ..... UNITS
Select a minimum of 6 semester units from the following: .....  .6
BROADCAST 10 Radio Programming and Production. .....  3
JOURNAL 108 Article Writing .....
JOURNAL 185 Directed Study - Journalism. .....  . 1
JOURNAL 217 Publication Laboratory ..... 2
JOURNAL 219 Techniques for Staff Editors. .....  .1
JOURNAL 220 Magazine Editing .....  .3
JOURNAL 251 Visual Communication in Mass Media. .....  .3
MULTIMD 802 Introduction to Podcast ..... 3
PHOTO 49 Advanced Photographic Digital Imaging. ..... 6
PHOTO 102 Advanced Photography .....  .3
CAOT 82 Microcomputer Software ..... 3
MAJOR - TOTAL UNITS ..... 37
GENERAL EDUCATION - REQUIRED COURSES
Students must complete one of the following General Education Plans:
PLAN A NOT AVAILABLE WITH THIS MAJOR
PLAN B Pierce Career and Technical GE plan ................ 18 units
PLANC CSU GE Breadth Certification Plan ..... 39 units

# Sign Language 

See American Sign Language

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

## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate intermediate-level oral proficiency in the Spanish language as defined by the ACTFL guidelines.
- Demonstrate intermediate-level proficiency in the grammar structure, tense, mood and syntax.
- Demonstrate intermediate-level proficiency in writing and reading comprehension in the Spanish language.
- Demonstrate general knowledge of the social, political, cultural and economic conditions in the countries in which Spanish is spoken.

MAJOR - REQUIRED COURSES
SUBJECT \& NO. COURSE UNITS

Language Requirement:
Select a minimum of 10 semester units (two courses) from the following:. . . . . . . . . . . . 10
SPANISH 4 Intermediate Spanish II $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$.

| SPANISH 37 | Advanced Composition and Conversation For Spanish Speakers |
| :---: | :---: |
| SPANISH 5 | Advanced Spanish I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 |
| SPANISH 6 | Advanced Spanish II ...................................... . . 5 |

## Culture Requirement:

Select a minimum of 6 semester units (two courses) from the following:. . . . . . . . . . . . . 6
SPANISH 9 Hispanic Civilization...................................... 3
SPANISH 10 Latin-American Civilization ................................... 3
SPANISH 11 Great Books of Spanish Literature............................ 3
SPANISH 12 Contemporary Mexican Literature ......................... 3
SPANISH 15 Great Books of Latin America. ................................. 3
SPANISH 16 Mexican Civilization............................................. 3
SPANISH 25 Spanish American Short Story in Translation.............. 3
SPANISH 26 Understanding Latin America Through Film .............. 3
SPANISH 27 Cultural Awareness through Advanced Conversation ..... 3
SPANISH 65 Mexican Literature and Culture............................... 3

## MAJOR - ELECTIVE COURSES

SUBJECT \& NO. COURSE UNITS
Select a minimum of 3 units (one course) from the following:. ........................ 3
ANTHRO 102 Human Ways of Life: Cultural Anthropology .............. 3
ANTHRO 161 Introduction to Linguistics ................................... 3
HISTORY 5 History of the Americas I..................................... 3
HISTORY 6 History of the Americas II ..................................... 3
MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 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 un |

## SPANISH

## Associate of Arts Degree for Transfer (AA-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 $h t t p: / / w w w . s b 1440.0 r g /$

## PROGRAM INFORMATION

The goal of the Associate in Arts in Spanish for Transfer Degree (AA-T in Spanish) is to develop competence in the ability to understand, speak, read, and write Spanish, and to provide an understanding and appreciation of the Spanish language and the cultures of the Span-ish-speaking world, including the US Latino experience. The Associate in Arts in Spanish for Transfer Degree (AA-T in Spanish) prepares students to continue their education at a California State University campus leading to a baccalaureate degree. Students who complete this degree may enter with junior status to the California State University system, and will be given priority admission to the CSU system.
To complete the degree, students must fulfill the following Associate Degree for Transfer requirements (pursuant to SB1440):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to a California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0."
- A grade of "C" or better (or "P" if the course is taken on a pass/ no-pass basis) in all courses required for the major or area of emphasis.


## PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will:

- Demonstrate intermediate-level oral proficiency in the Spanish language as defined by the ACTFL guidelines.
- Demonstrate intermediate-level proficiency in the grammar structure, tense, mood and syntax.
- Demonstrate intermediate-level proficiency in writing and reading comprehension in the Spanish language.
- Demonstrate general knowledge of the social, political, cultural and economic conditions in the countries in which Spanish is spoken.


MAJOR - REQUIRED COURSES


MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23-25
(*) Students who speak Spanish at home but have not been schooled in Spanish, should begin the A.A.-T with Spanish 35 and complete the core with Spanish 36 and Spanish 37.
(**) If a student places out of any of the required core course(s) and is not awarded units for that course, the student will need to take additional units to compensate for the course/units required to reach at least 18 total units in the major. Suggested substitutions can be taken from the list of elective courses or from the following list:

## RECOMMEDED SUBSTITUTION COURSES**



## Theater Arts

## THEATER

## 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 47 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 as 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| THEATER 100 | Introduction to the Theater. |  |
| THEATER 240 | Voice and Articulation for the Theater |  |
| THEATER 270 | Beginning Acting |  |
| THEATER 232 | Play Production. |  |
|  | OR |  |
| THEATER 250 | Children's Theater Production |  |
|  | OR |  |
| THEATER 292 | Rehearsals and Performances. . | . 2 |
| THEATER 271 | Intermediate Acting. | . 3 |
| ${ }^{2}$ THEATER 342 | Technical Stage Production | . 2 |
|  | OR |  |
| THEATER 411 | Costuming for the Theater. |  |

MAJOR - TOTAL UNITS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16-17
${ }^{2}$ 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

## 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 47 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

| SUBJECT \& NO. | COURSE UNITS |
| :---: | :---: |
| THEATER 100 | Introducti |
| THEATER 270 | Beginning Acting |
| THEATER 300 | Introduction to Stage Craft |
| THEATER 315 | Introduction to Theatrical Scenic Design................ 3 |
| THEATER 411 | Costuming for the Theate |
| THEATER 450 | Beginning Stage Make-up |
| MAJOR - TOTAL U |  |
| 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 |
| PLANC | CSU GE Breadth Certification Plan.............. 39 units |
| PLAND | IGETC .................................... . 34-39 |

## THEATER: TECHNICAL

## 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 47 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



## TECHNICAL THEATER

## Certificate of Achievement

## PROGRAM INFORMATION

This is a two year program in Technical Theater that provides indepth 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

| SUBJECT \& NO. | COURSE | UNITS |
| :---: | :---: | :---: |
| THEATER 300 | Introduction to Stagecraft |  |
| THEATER 310 | Introduction to Theatrical Lighting. |  |
| THEATER 315 | Introduction to Theatrical Scenic Design. |  |
| THEATER 320 | Computer-aided Drafting and Design for Theater. | . 3 |
| THEATER 340 | Theater Management-On and Off Stage. |  |
|  | OR |  |
| THEATER 411 | Costuming for Theater |  |
|  | OR |  |
| THEATER 450 | Theatrical Stage Makeup. . . . . . . . . . . . . . . . . . . | . 3 |
| THEATER 342 | Technical Stage Production.. | . 2 |
| CERTIFICATE - TOTA | UNITS |  |

## Course Descriptions

## How to Read the Course Descriptions



## Key To Transfer Credit Codes

## UC

This course is acceptable for credit at all University of California campuses.

## $\dagger$ †C

The granting of transfer credit by a UC campus for directed study, fieldwork, or variable topics 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 California State University campuses.

## 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.

## TBA

PLEASE NOTE: Some or all of the class hours for courses may be offered using the "To Be Arranged" (TBA) course schedule option. Please refer to the Schedule of Classes printed each term for a current listing of sections of courses with specific TBA weekly or daily class hour requirements that may apply.

## 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 bours.
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.

## Accounting - Computerized

See course listings under Computer Applications and Office Technologies.

## Addiction Studies

## 1 Understanding Addiction and Counseling (3) CSU

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 Physiology and Pharmacology of Psychoactive Drugs (3) CSU

Lecture 3 hours.
Students will study the pharmacology and physiology of alcohol and other drugs along with 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 are explored in addition to the psychophysical, cultural, and social implications of substance use.

## 4 Addiction Counselor Training (3) CSU

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) CSU

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) CSU

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 Practicum (3)

Lecture 3 hours.
Prerequisites: Addiction Studies 1 or 2 and Addiction Studies 4 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 54 semester hours during the semester.

## 10 Addiction And The Family (3) CSU

## 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 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) CSU

 Lecture 3 hours.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) 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 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. (CSU GE Area D)

## 16 Continuing Recovery: Strategies And Basic Skills (3) CSU

Lecture 3 hours.
Students examine applied methodology and counseling skills with respect to chemical dependency and other addictive disorders. Students may engage in 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) 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 engage in a comparative analysis of women and addiction, their issues and related challenges for treatment and recovery. Alcohol, other drugs, eating disorders, nicotine abuse, and addictive relationships are examined.

## 18 Addiction And Eating Disorders (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 learn about eating disorders and addiction and how to work effectively in the profession of addiction treatment, with an emphasis on understanding 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.

## 20 Domestic Violence Counselor Training (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.
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.

23 Batterers' Intervention Facilitator Training (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.

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 Counseling Addiction and Co-occurring Disorders/Clinical Supervision (3) CSU

Lecture 3 hours.
Advisory: Prior completion of AS 9-Field Work Practicum, and AS 16Continuing Recovery: Strategies and Basic Skills.
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 is an advanced course designed to provide clinical supervision for the advanced fieldwork course, AS 91 - Advanced Field Work Practicum, 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.

## 91 Advanced Field Work Practicum (3)

Lecture 3 hours.
Prerequisite: Addiction Studies 9 with a grade of "C" or better
This is a supervised practicum course that includes an advanced internship served at an addiction treatment and recovery facility to acquire 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). Internship hours must be completed during the semester of enrollment.

## Administration of Justice (Criminal Justice)

## 1 Introduction to Administration of Justice (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Students are introduced to the 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.
(CSU GE Area D • IGETC Area 4)

## 2 Concepts of Criminal Law (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Students are introduced to the historical development, philosophy, and basic legal concepts of criminal law. Constitutional provisions, legal research, legal analysis, and the functioning of criminal law as a social force are examined. In addition, stu-
dents evaluate 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.
(CSU GE Area D • IGETC Area 4)

## 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.

May be offered as an honors section.
Students review the role and responsibilities of the American court system and its purpose; examine the philosophy, history, structure, operation, concepts and services related to the judiciary; study case law methodology and case research and their impact on society; and, examine the legal process from pre-arrest through trial, sentencing options and correctional procedures.

## (CSU GE Area D • IGETC Area 4)

## 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.

May be offered as an honors section.
Students examine the complex and dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics may include the consensus and conflicting values in culture, religion, ethnicity, and law.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D)


160 Police Organization and Administration (3) CSU Lecture 3 hours.

Students examine 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.

This course is an 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. (CSU GE Area D)

## 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 <br> 285 Directed Study - Administration of Justice (2) CSU <br> 385 Directed Study - Administration of Justice (3) CSU <br> 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.

## 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

## American Sign Language

## 1 American Sign Language I (4) UC:CSU

## Lecture 4 hours.

Normally offered in the Fall semester only.
In This course students develop basic grammar and lexical proficiency in
American Sign Language. Emphasis is placed on comprehension skills. 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. This course also incorporates vital aspects of the Deaf culture and community.
(CSU GE Area C2)

## 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.
Normally offered in the Spring semester only.
In This course students complete the study of elementary vocabulary and grammar begun in ASL 1. Emphasis is placed on the development of inflectional and non-manual behavior patterns. Students continue to examine the selected aspects of Deaf culture and community within receptive and expressive conversations. An overview of topics include: grammatical features, such as, syntax, pronominaliza-
tion, 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.
(CSU GE Area C2 • IGETC Area 6A)

## 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.
Advisory: Previous completion or concurrent enrollment in American Sign
Language 30.
Normally offered in the Fall semester only.
In This course students continue the development of proficiency in American Sign Language grammar with special emphasis on idiomatic constructions. Conversational techniques with a focus on expressive skills is further developed. Students continue to expand the study of Deaf cultural issues.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 4 American Sign Language IV (4) UC:CSU

Lecture 4 hours.
Prerequisite: American Sign Language 3 with a grade of "C" or better.
Advisory: Previous completion or concurrent enrollment in American Sign Language 31.
Normally offered in the Spring semester only.
In This course students focus on advanced vocabulary and grammar and further develop and refine skills and fluency through spontaneously generated conversations that accentuate various aspects of Deaf culture and community.
(CSU GE Area C2 • IGETC Area 3B +6 A)

## 5 Introduction to Interpreting (3) CSU

Lecture 3 hours.
Prerequisite: American Sign Language 3 with a grade of "C" or better.
Advisory: 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. Advisory: Suggested concurrent enrollment in American Sign Language 10. Normally offered in the Fall semester only.
In This course students develop beginning-level interpreting and transliterating skills from English to American Sign Language.

## 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. Advisory: Suggested concurrent enrollment in American Sign Language 6 Normally offered in the Fall semester only.
In this course, students develop beginning-level proficiency in the techniques and principles of Sign-to-English interpreting/transliterating, 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. Advisory: Suggested concurrent enrollment in American Sign Language 3. Normally offered in the Fall semester only.
In this course, students study the application of pantomime, visualization, facial expression and body language to the use of ASL. Techniques used in ASL sto-ry-telling and poetry are practiced.

## 22 Professional Issues and Practice I (2) CSU

Lecture 2 hours.
Prerequisite: American Sign Language 4 and 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 educational interpreting settings (K - post secondary levels) requiring specialized language and/or techniques. Continued development of vocabulary appropriate for a variety of settings, analysis of the RID-NAD Code of Professional Conduct, and development of professional decision-making and problem-solving skills.

## 23 Professional Issues and Practice II (2) CSU

Lecture 2 hours.
Prerequisite: American Sign Language 4 and 5 with a grade of " $C$ " or better, or equivalent.
Advisory: Concurrent enrollment in American Sign Language 6 and 10.
Normally offered in the Spring semester only.
This course expands on the theoretical and practical issues related to various community interpreting settings (medical, mental health, religious, etc.) requiring specialized language and/or techniques. The course focuses on 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.

## 25 Conversational American Sign Language (2) CSU

## 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.
Advisory: Concurrent enrollment in Amiercan Sign Language 3. 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. O/P MEDI-CAL B.]

## 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.
This course is designed to explore the historical, linguistic, social and ideological constructs of American d/Deaf people and their communities. Discussion and topics will provide the student with an awareness of trends within the American Deaf Culture and the issues of being a d/Deaf individual in a hearing world.

## 55 Interpreting (4) CSU

Lecture 4 hours.
Prerequisite: American Sign Language 6 and 10 with a grade of "C" or better, or equivalent. And English 101.
Advisory: Concurrent enrollment in American Sign Language 23 and 65. Normally offered in the Spring semester only.
Development of interpreting (spoken English to American Sign Language (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. And English 101.
Advisory: Concurrent enrollment in American Sign Language 23 and 55. Normally offered in the Spring semester only.
Development of beginning level simultaneous transliterating skills (spoken English to signed English and signed English to spoken English).

185 Directed Study - American Sign Language (1)
285 Directed Study - American Sign Language (2)
385 Directed Study - American Sign Language (3)
Conference 1 hour per unit.
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.
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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)
*UC Credit Limit: Anatomy 1 and Physiology 1 combined: maximum credit, 8 units.

## Animal Science

Agriculture - General $\qquad$ 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 (1)

Lecture 1 hour.
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)

Laboratory 3 hours.
Advisory: Animal Science 180.
Students participate in supervised job experience related to their occupational goals.

## 181B Field Work (2)

Laboratory 6 hours.
Advisory: Animal Science 180.
Students participate in supervised job experience related to their occupational goals.

## 181C Field Work (3)

Laboratory 9 hours.
Advisory: Animal Science 180.
Students participate in supervised job experience related to their occupational goals.

## 181D Field Work (4)

Laboratory 12 hours.
Advisory: Animal Science 180.
Students participate in supervised job experience related to their occupational goals.

## 302 Veterinary Receptionist Training Program (2)

## 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) (NDA)

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) (NDA)

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.
This class directs student exploration of veterinary medicine as a career choice, including education, job tasks, and employment options. Other key topics include an orientation into Pierce College veterinary science programs and an introduction to medical terminology.

## 402 Topics in Veterinary Science (2) CSU

Lecture 2 hours.
Prerequisite: Animal Science 401 with a grade of " $C$ " or better. Normally offered in the Fall semester only

Using an interactive discussion format, non-technical topics such as grief counseling, laws and ethics, practice management, and the human - animal bond are explored. Students also continue learning medical terminology from AS 401.

## 410 Animal Nursing I (2) CSU

Lecture 2 bours.
Prerequisite: Completion of Animal Science 511 \& 512 with a grade of "C" or better.
Approval to enter the Registered Veterinary Technology Program.
Students will study 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.
Prerequisite: Animal Science 511 \& 512.
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.
Students will study on three main areas of study: nursing care for emergency and critical patients, pharmacology and an introduction to the nursing care of birds and reptiles.

## 413 Animal Nursing II Laboratory (1) CSU

Laboratory 2 hours.
Prerequisite: Animal Science 411.
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: Animal Science 511 and 512.
Offered Fall semesters only.
Approval to enter the Registered Veterinary Technology Program.
Students are introduced to the 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

Laboratory 2 hours.
Prerequisite: Animal Science 511 and 512.
Corequisite: Animal Science 420.
Offered Fall semesters only.
Students prepare 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 with a grade of "C" or better.
Corequisite: Animal Science 423.
Offered Spring semesters only.
Students continue to acquire knowledge of anesthesia and surgical procedures with emphasis on small animals.

## 423 Clinical Procedures in Animal Care II Laboratory (1) CSU

Laboratory 2 hours.
Prerequisite: Animal Science 421, 511, and 512.
Corequisite: Animal Science 422.
Offered Spring semesters only.
Students gain practical experience in anesthesia, surgical preparation and assisting through participation with on-site surgical procedures on dogs and cats. Students are assigned to perform 18 hours of animal care.

## 430 Veterinary Clinical Pathology (2) CSU

Lecture 2 hours.
Prerequisite: Animal Science 512.
Corequisite: Animal Science 431.
Offered Fall semesters only.
Approval to enter Registered Veterinary Technology Program.
In this course, students are introduced to modern and practical methods in veterinary clinical laboratory analysis. Blood, urine, feces and skin scrapings tests with emphasis on small animal species are examined.

## 431 Veterinary Clinical Pathology Laboratory (1) CSU

Laboratory 2 hours.
Corequisite: Animal Science 430.
Offered Fall semesters only.
Approval to enter the Registered Veterinary Technology Program.
Students engage in practical experience in performing various clinical analysis examinations and procedures.

## 435 Veterinary Radiography (2) CSU

## Lecture 2 hours.

Approval to enter the Registered Veterinary Technology Program.
Offered Fall semesters only.
Students learn and understand 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.
Approval to enter the Registered Veterinary Technology Program.
Offered Fall semesters only.
Veterinary technology students acquire hands-on practice in safely taking diagnostic quality x -rays of animals.

## 441 Large Animal Nursing Laboratory (2) CSU

Laboratory 4 hours.
Approval to enter the Registered Veterinary Technology Program.
Students engage in hands-on practical experience in performing procedures and husbandry practices common to large and laboratory animal species. Extensive practice in handling and restraint is provided.

## 460 First Aid for Companion Animals (2)

Lecture 2 hours.
This course presents an overview of first aid situations and their treatments in dogs and cats, relative to animal facility employees and/or pet owners.

470 Laboratory Animal Care (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Approval to enter the Registered Veterinary Technology Program.
Students participate in 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

Lecture 3 hours.
Prerequisite: Animal Science 420 and/or Animal Science 421; and Animal Science 430 and/or Animal Science 431 with a grade of "C"or better. Approval to enter the Registered Veterinary Technology Program.
This course integrates extensive class work and outside clinical work in a veterinary setting. It also provides the student with a comprehensive review for the California State Board Exam and the Veterinary Technician National Exam.
During the clinical component of the class students will participate in a variety of clinical experiences encompassing multiple aspects of veterinary technology. Successful completion of This course requires a minimum of 163.5 hours working at a veterinary clinic. The lecture component of This course requires 3 hours per week of class time. Class time is devoted to board exam review, and case studies and impromptu discussions.

## 481 Clinical Experience for Animal Technicians II (3)

Lecture 3 hours.
Prerequisite: Animal Science 420 and/or Animal Science 421; and Animal Science 435 and/or Animal Science 436 with a grade of "C"or better. Approval to enter the Registered Veterinary Technology Program.
This course builds upon and expands the skills developed in AS 480. Students will integrate acquired classroom knowledge with clinical experiences. This courses requires a minimum of 120 hours working in an animal hospital.

## 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) UC: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.
Prerequisite: Animal Science 501.
In This course Students learn practical aspects of urban animal health and related care of farm livestock. Preventative health programs and nursing techniques for back-yard producers are examined. Students gain "hands-on" experience in performing husbandry practices common to each species using Pierce College farm animals.

## 508 Exotic Animal Health Care and Wellness (2)

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.
Advisory: Animal Science 511, 512, and 501.
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. This course includes comparative anatomy and physiology as well as a basic study of the facts and principles of animal life.
(CSU GE Area B2)

## 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.
(CSU GE Area B3)

## 515 Applied Animal Reproduction (2)

Lecture 2 hours.
Corequisite: Animal Science 516
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

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 (3)

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.

## 521 Beef Production Laboratory (1)

Laboratory 2 hours.
Corequisite: Animal Science 520
Advisory: Completion of Animal Science 501
Students learn the practical application of the beef management industry. Farm management decisions and operational procedures are examined. Students apply their skills with the Pierce College herd.

## 530 Poultry Production (2) UC:CSU

Lecture 2 hours.
Corequisite: Animal Science 531
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) UC:CSU

Laboratory 4 hours.
Corequisite: Animal Science 530
Advisory: Completion of Animal Science 501
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) UC:CSU

Lecture 3 hours.
Advisory: Completion of Animal Science 501
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 (1) UC:CSU

Laboratory 2 hours.
Prerequisite: Completion of Animal Science 501. Corequisite: Animal Science 535.
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)

Laboratory 4 hours.
Advisory: Completion of Animal Science 501
This course covers the practical applications of livestock management. Students will receive hands-on applications and experiences with on the job farm management, decisions, operation, and procedures of the college livestock. Livestock options include one or more of the following: beef, sheep, swine, goat, and poultry animals.

## 577 Horse Judging (2)

Lecture 1 hour. Laboratory 2 hours.
Advisory: Animal Science 601
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

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: Completion of Animal Science 501
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.

## 596A Agricultural Enterprise Projects (1)

## Laboratory 3 hours.

Prerequisite: Animal Science 501 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.

## 596B Agricultural Enterprise Projects (2)

Laboratory 6 hours.
Prerequisite: Animal Science 501 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.

## 596C Agricultural Enterprise Projects (3)

Laboratory 9 hours.
Prerequisite: Animal Science 501 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.

## 596D Agricultural Enterprise Projects (4)

## Laboratory 12 hours.

Prerequisite: Animal Science 501 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.
Advisory: Completion of Animal Science 501
This course examines the history of the horse, including anatomy, conformation, predisposing factors to unsoundness, selecting, housing and use.

## 602 Horse Husbandry (3) UC:CSU

## Lecture 3 hours.

Prerequisite: Animal Science 601
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.
Prerequisite: Animal Science 601
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.

## 616 Horse Show Activities (2)

Lecture 1 hours. Laboratory 2 hours.
Prerequisite: Animal Science 621 and 631.
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

Laboratory 2 hours.
Prerequisite: Animal Science 620 with a grade of "C" or better or concurrent 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) <br> Laboratory 2 hours. <br> Prerequisite: Animal Science 621.

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)

Laboratory 2 hours.
Prerequisite: Animal Science 622.
An advanced but still fundamental class in Western and English riding designed to teach horseback riding to students with varying degrees of experience.

## 630 Beginning Equine Training (2)

Lecture 1 hour. Laboratory 2 bours.
Prerequisite: Animal Science 621 a with grade 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 Animal Science 630. Emphasis will be placed on horse and rider as a team.

## 640 Horse Show Organization and Management (2)

Lecture 1 hour. Laboratory 2 hours.
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.

## 645E Equine Issues (1)

Laboratory 3 hours.
Emphasis on Equine Equitation: An activity class which provides advanced or specific new skills related to horse riding, performance, or competitive sport.

## 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 <br> 285 Directed Study - Animal Science (2) CSU <br> 385 Directed Study - Animal Science (3) CSU <br> Conference 1 bour 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.
(CSU GE Area B2 • IGETC Area 5B)

## 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.
(CSU GE Area D • IGETC Area 4)

## 105 Prehistoric Peoples (3) UC:CSU

## Lecture 3 hours.

Students examine human cultural development from the appearance of anatomically modern humans to the spread of urbanization. Students trace this process by analyzing prehistoric cultures in Europe, the Americas, the South Pacific, Africa, and Asia. Central themes include the origins of agriculture, the development of written language, and the rise of cities.

## (CSU GE Area D • IGETC Area 4)

## 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 classi-
fying 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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area B3 • IGETC Area 5C)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area D • IGETC Area 4)

## 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. (CSU GE Area D)

## 161 Introduction to Language and Linguistics (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
In This course Students learn the great variety of ways humans communicate, both verbally and non-verbally. 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 are analyzed.
(CSU GE Area C2 or D•IGETC Area 3B or 4)

## 185 Directed Study - Anthropology (1) CSU <br> 285 Directed Study - Anthropology (2) CSU <br> 385 Directed Study - Anthropology (3) CSU <br> 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

## 110 Introduction to Architecture (1) UC:CSU

Lecture 1 hour.
UC Credit Limit: Maximum one unit.
This is an introductory course exploring the fields of Architecture and Construction Technology. Students will gain an understanding of the opportunities in these fields as well as paths to careers and to higher education. Professional practices and sustainable methods will be introduced, as well as architectural theories and landmark buildings.

## 111 Methods of Construction (2) CSU

Lecture 2 hours.
Prerequisite: Enrollment in architecture or construction.
Students examine the characteristics of building construction methods within the overall context sustainable architectural design. The fundamental building methods shall be explored in depth. Their physical properties, historical context, and application within an architectural design shall be studied.

## 121 Freehand Drawing I (2) UC:CSU

Lecture 1 hour. Laboratory 3 hours.
Students will study freehand drawing through an architectural lens, using various media. We will develop the skills of looking and of drawing, practicing perspective, scale, tonal value and shade and shadow. Students will develop their visual communication skills.

## 151 Materials of Construction (3) CSU

Lecture 3 hours.
Prerequisite: Architecture 111 with grades of " $C$ " or better.
Studies the nature and characteristics of materials, along with their appropriate uses for given construction purposes.

## 152 Equipment of Buildings (3) CSU

Lecture 3 hours.
Advisory: Architecture 172 and 111 with grades of "C" or better.
Using sustainable tools and strategies, This course applies the basic principles of building systems; design, selection and operation of equipment in buildings. Building systems integrate architectural design with water distribution, water recycling and harnessing, air circulation, natural air flow, air heating and cooling, natural light, and acoustics. Passive and solar strategies are integrated into equipment as well as new technologies.

## 162 Computer-Aided Design and Drafting (3) CSU

Lecture 2 hours. Laboratory 4 hours.
Prerequisite: Architecture 172 or 110 with grades of " $C$ " or better.
Learn and apply 2 and 3-D CAD and Building Information Modeling (BIM) architectural software. This course develops 2 and 3-D architectural drawing techniques as well as more advanced 3-D commands and 3-D modeling methods by completing a series of architectural exercises. The latest versions of popular soft-
ware are utilized. Important for students interested in the fields of architecture, interior design, and construction. 3-D modeling programs such as Revit are introduced.

## 172 Architectural Drawing I (3) CSU

Lecture 2 hours. Laboratory 4 hours.
First level architectural technical drawing methodology. Students will develop working drawings for a simple light framed residence. Study of construction methods, materials and building ordinances. Examine the integration and implementation of sustainable practices in design and construction technologies. Includes graphic representation of site, foundation, floor and roof plans, schedules cross sections, details, interior and exterior elevations. . Conceptual and analytical skills are developed.

## 173 Architectural Drawing II (3) CSU

Lecture 2 hours. Laboratory 4 hours.
Prerequisite: Architecture 172 with a grade of "C" or better.
This is the second level architectural technical drawing class. Students will develop working drawings for a multi-story structure, addressing a range of complex contextual and environmental issues. We will study construction methods, materials and building ordinances. We will also examine the integration and implementation of sustainable practices in design, construction technologies and energy-using systems. We will cover graphic representation of a site, foundation, floor and roof plans, schedules cross sections, details, interior and exterior elevations.

## 201 Architectural Design I (3) UC:CSU

Lecture 1 hour. Laboratory 5 hours.
Prerequisite: Architecture 172 and Environmental Design 102 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 bours.
Prerequisite: 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.
In this class students develop skills using various techniques of architectural rendering and experiment with a variety of media with a primary focus on hand techniques. Freehand drawing, drafting and some computer drawing may be used.

## 271 Architectural Drawing III (3) CSU

Lecture 1 hour. Laboratory 5 hours.
Prerequisite: Architecture 173 or Industrial Technology 110 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 271 with a grade of "C" or better.
Fourth level architectural technical drawing methodology. Using computer aided design software such as AutoCAD, Students will design a multi-story structure which will address a range of complex contextual and environmental issues, including sustainable design principles and code compliance design. 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 architectural drawing techniques as well as 3-D computer modeling methods are refined. Students will create a portfolio of their work.

## 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
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.

## Art

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| :---: | :---: | :---: |
| can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Art department, families have been created as follows: |  |  |
|  |  |  |
| ART FAMILY NAMES AND COURSE NUMBERS |  |  |
|  |  |  |
| Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 501, 502, 03 |  |  |
| Drawing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 201, 202, 20 |  |  |
| Life Drawing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 204, ART 305, 206, 308,207Oil Painting . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART $700,701, ~ 402, ~$ART 301, 302 |  |  |
|  |  |  |
|  |  |  |
| Water Color \& Acrylic. <br> ART 301, 302 |  |  |

Title V changes effective Fall 2013 substantially restrict how many times students an take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple
 Kinesiology, Music, and Theater are all affected. For courses in the Art department, families have been created as follows:

## ART FAMILY NAMES AND COURSE NUMBERS

## 92 Introduction to Museum Studies (3) CSU

## Lecture 3 hours.

This course will provide a broad introduction to the field of museum work. Topics included will be the history and philosophy of museums; the social, economic, and political trends that shape museums; the staffing, management, and financing of museums; and the multiple functions of museums, such as the collection and care of objects, exhibition design and interpretation, education programs, research activities, library collections, and public relations. Students will personally engage with museum professionals, including: department directors, curators, conservators, collection managers, educators, and exhibit designers. The course will draw students from all nine colleges.

## 101 Survey of Art History I (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
In this course, students survey architecture, sculpture, and painting from the prehistoric, ancient, classical and medieval periods of Western Europe.
(CSU GE Area C1 • IGETC Area 3A)

## 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 political, 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.
(CSU GE Area C1 • IGETC Area 3A)

## 103 Art Appreciation I (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
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.
(CSU GE Area C1 • IGETC Area 3A)

## 105 History of Asian Art (3) UC:CSU

Lecture 3 hours.
This course Surveys the painting, sculpture and architecture of India, China, and Japan.
(CSU GE Area C1 • IGETC Area 3A)

## 107 Mexican Art-Modern (3) UC:CSU

## Lecture 3 hours.

This course Surveys the rich cultural production of Mexico, beginning with the Mesoamerican period but focusing primarily on the 19th - 21 st centuries. It will examine the social, economic, political and religious context of the production and use of the works of art considered. The course will look at work in a variety of media, including painting, 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.
(CSU GE Area C1 • IGETC Area 3A)

## 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.
(CSU GE Area C1 • IGETC Area 3A)

## 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.

This course covers the history of architecture from prehistory to the Middle Ages. Stress will be on the development of typology, as well as on the influences from social, cultural, religious, political and economic conditions that influenced changes in form and style. Museum and on site visits may be included as part of the curriculum.
(CSU GE Area C1 • IGETC Area 3A)

## 138 Architectural History II: Late Middle Ages to Modern (3) UC:CSU Lecture 3 hours.

This course covers the history of architecture from the late middle ages to the modern period. Focus will be on changing typology, technological advancements, new building materials, literary and intellectual movements, and on the socio-political and religious influences on the look of buildings. Museum and site visits may be included as part of the curriculum.
(CSU GE Area C1 • IGETC Area 3A)

## 139 Architectural History III: Modern Architecture (3) UC:CSU Lecture 3 hours.

The course will cover modern architecture from around 1850 to the present, examining the changing range of typology and construction, the influence of the theoretical schools, literary movements, and socio-political influences on the look of buildings. Museum and on-site visits may be part of the curriculum.
(CSU GE Area C1 • IGETC Area 3A)

## 201 Drawing I (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Students apply elements and principles of design to the practice of drawing, employing a wide range of subject matter, drawing techniques and media. They apply critical analysis, art fundamentals, and strengthen their understanding of visual perception, and the cultural history of drawing.
(CSU GE Area C1)

## 202 Drawing II (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 201 with a grade of "C" or better.
Students explore artistic concepts, styles and creative expression related to intermediate drawing, focusing on complex subject matter and concepts using a variety of drawing media, techniques and methodologies. Students further develop technical and observational skills introduced in Drawing I, while arriving at personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. Extends the theory of color and use of various materials in three-dimensional compositions

## 203 Drawing III (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 202 with a grade of " $C$ " or better.
Students extend their experiences of basic drawing with special emphasis in various color media. Stresses individual artistic development. Students create an advanced portfolio of drawings utilizing techniques and media which emphasize 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.
Advisory: Art 501
Introduction to rendering the human figure through gesture, contour, and value.
A variety of materials and techniques will utilized in describing the human form.

## 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

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 205 with a grade of "C" or better.
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 with an emphasis on narrative content.

## 209 Perspective Drawing I (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
The development of 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 bours. Laboratory 2 hours.
Designed to offer students a variety of Watercolor Painting techniques as applied to Still-Life, Landscape, Abstract and the Human Figure. Traditional and Contemporary approach will be explored.

## 302 Watercolor Painting II (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 301 with a grade of " $C$ " or better.
This course is a continuation of Watercolor Painting I and deals with more advanced water color techniques. Emphasis is placed on composition through perceptual and conceptual approaches. The student will experiment with the use of multiple image in subject matter. Both landscape and still subjects will be explored as well as more advanced and personal areas of investigation that the student will bring to the course

## 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.
Composition and color exploration in the service of communicating individual ideas are emphasized.

## 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) UC: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.
This is a fundamental course in the elements and principles of two-dimensional design. The class contains exercises in the use of line, texture, shape, color, composition and the relationship between perception and visual communication.

## (CSU GE Area C1 • IGETC Area 3A)

## 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. (CSU GE Area C1 • IGETC Area 3A)

## 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
Students analyze form, texture, and color applied to creative projects. Drawing and design elements are applied primarily to two-dimensional design projects. Color theory and its practical application are emphasized. Students are introduced to three-dimensional design and the development of a portfolio.

## 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.

## 603 Typography I (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
This course provides an introduction to basic composition and principles of typography. The course includes a survey of type from its origins to current uses for print, web, video, animation and mobile. Using hand skills and the computer, projects focus on typographic design, resonance and composition. Students develop skills regarding visually interesting letter forms and their uses in typographic design with a focus on appropriate solutions, visual interest and craftsmanship.

## 604 Graphic Design I (3) CSU

Lecture 2 hours. Laboratory 2 hours. Advisory: Completion of Art 501

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.
A continuation of the principles of Art 604. Projects in advertising, publication design, packaging and corporate identity. Continuation of graphics on the Mac/ PC.

## 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.

## 615 Graphic Communications II (4)

Lecture 2 hours. Laboratory 4 hours.
Students examine the theories, concepts, principles and procedures used in the field of graphic design. Students begin to apply their knowledge to hands-on projects that involve designing for print, web, video, animation, video games and mobile devices.

## 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.

## 617 Graphic Communications IV (4)

Lecture 2 hours. Laboratory 4 hours.

## Prerequisite: Art 616 with a grade of " $C$ " or better.

In this advanced course, Students examine the theories, concepts, principles and procedures used in the field of graphic design. Students apply their advanced knowledge to hands-on projects that involve designing for print, web, video, animation, video games and mobile devices.

## 620 Illustration I (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 201, Art 501
Advisory: Art 204, Art 300
Applies basic drawing techniques and design principles to problems in advertising, story telling 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.
Advisory: Art 204, Art 300
Continues Art 620 with additional emphasis on the use of paint and color pencils 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.
Advisory: Art 202, Art 204, Art 300
Extends basic principles and practices of advertising illustration to problems in graphic design and layout. Projects include the coordination of illustration with photography, design 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.
Advisory: Art 201, Art 501
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.

## 651 Animation for the Web I (3) CSU

Lecture 2 hours. Laboratory 2 hours.
In this introductory course in animation for the web students apply the principles of design, motion graphics, and software to produce animated artwork for webbased advertisements, videos, cartoons, games, information and more.

## 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.
(CSU GE Area C1)

## 701 Sculpture I (3) UC:CSU

Lecture 1 hour. Laboratory 5 hours.
Prerequisite: Art 700 with a grade of "C" or better
In this course, students design and execute a sculptural form. Students focus on select technical modalities from modeling, casting carving and fabricating. Historical and cultural antecedents are analyzed with emphasis on developing sculptural awareness.

## 702 Sculpture II (3) UC:CSU

Lecture 1 hour. Laboratory 5 hours. Prerequisite: Art 701 with "C" or better.

Students apply materials, techniques and concepts associated with the practice of sculpture. Fabrication techniques are a core component of This course with assignments providing opportunities for students to solve sculptural problems using various methods and materials in a focused and individualized manner. Critiques serve to enhance this focus and provide students with the necessary vocabulary to discuss their work in a coherent manner.

## 703 Sculpture III (3) UC:CSU

Lecture 1 hour. Laboratory 5 hours.
Prerequisite: Art 702 with "C" or better.
A continuation of Art 702, advanced students are directed to specialize in one sculptural modality in depth.

## 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) 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

Conference 1 hour per unit.
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.

## Astronomy

## 1 Elementary Astronomy (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
This course provides a survey of the material contents and workings of our universe. An emphasis is placed on the physical principles essential to a fundamental understanding of astronomy. Discussions include the development of science, the search for the understanding of the solar system, a modern understanding of the solar system and systems around other stars, the tools of the astronomer, the workings of stars and stellar evolution, the workings and evolution of galaxies and their environment, cosmology, and the environmental requirements for extraterrestrial life.

## (CSU GE Area B1 • IGETC Area 5A)

## 2 Elementary Astronomy Laboratory (1) UC:CSU

Laboratory and discussion, 3 hours.
Prerequisite: Astronomy 1.
Corequisite: Astronomy 1.
This course provides laboratory instruction in support of Astronomy 1. The material in Students will study on the analysis tools and procedures used by professional astronomers to understand nature from atoms to the furthest reaches of the visible Universe. It also includes application of both simple algebra and simple graphical methods to get a quantitative understanding of physical processes. This course is designed to demonstrate the wide variety of methods physical scientists have to understand the world around them.
(CSU GE Area B3 • IGETC Area 5C)

## 3 Introductory Astronomy (4) UC:CSU

Lecture 3 hours. Laboratory 3 hours.
This course combines lecture and laboratory content of Astronomy 1 and Astronomy 2. For further information see course descriptions of Astronomy l and Astronomy 2.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

185 Directed Study - Astronomy (1) CSU
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 <br> Lecture 3 hours. Laboratory 5 hours.

Students examine the automotive engine, including cooling and lubrication systems. Students overhaul engines in the laboratory, including boring, pin-fitting, measuring, valve seat replacement, valve grinding and other engine rebuilding procedures.

2 Suspension Brakes and Power Systems (5) CSU
Lecture 3 hours. Laboratory 5 hours.
Students are introduced 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) CSU

Lecture 3 hours. Laboratory 5 hours.
Students learn about the theory and maintenance of engines including engine diagnosis and engine performance tune-ups. This course 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) CSU <br> Lecture 3 hours. Laboratory 5 bours. <br> Students learn about the theory and maintenance of charging and starting systems. This course provides a working understanding of the electrical systems used on automotive machinery. Laboratory work includes repair work on starters, alternators and troubleshooting components of the electrical system. Includes practice with the latest diagnostic equipment.

5 Standard Transmissions, Clutches, Drive Lines and Differentials (3) CSU Lecture 2 hours. Laboratory 2 bours.
Students in the course examine manual shift transmissions/Transaxles of various types and sizes used in FWD, RWD, 4WD and AWD automotive applications. Students will discuss 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 Transmissions (5)

Lecture 3 hours. Laboratory 5 hours.
Students learn about 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.
Prerequisite: Automotive Service Technology 1 and 2 and 3.
Advisory: Automotive Service Technology 4, 5, 6, 7.
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.

## Prerequisite: Automotive Service Technology 8

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)

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 2 hours. Laboratory 4 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)

## Lecture 1 hour.

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.
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.
Students acquire 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.
In this course, students gain increased laboratory experience in the diagnosis and repair of automotive electrical circuits.

## 36 Automotive Service Technology Projects Laboratory: Standard Transmissions, Clutches, Drive Lines : Differentials / Air Conditioning (1) Laboratory 3 hours.

Students acquire increased laboratory experience in the diagnosis and repair of standard transmissions, clutches, drive lines and differentials and air conditioning.

## 38 Automotive Service Technology Projects Laboratory: Shop Operations (2) <br> 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 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 straightline 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)

## 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 HybridElectric 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)
285 Directed Study - Automotive Service Technology (2)
385 Directed Study - Automotive Service Technology (3)
Conference 1 unit per hour.
This course allows students to pursue directed study in Automobile Technology on a contract basis under the direction of a supervising instructor.

## 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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

## 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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

## 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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

## 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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

## 11A Natural History II (1) **UC:CSU

Lecture 0.5 hour. Laboratory 1 hour.
This course in community ecology examines the Macrocystis (kelp) forest communities of Santa Catalina Island. Studies include the principles of community ecology and community analysis, the biology of kelp, and the identification and biology of the algal, invertebrate and fish assemblage that form the communities. An emphasis is placed on understanding the role that biological interactions play in determining the community structure and organization.
(CSU GE Area B3 • IGETC Area 5C • Upon completion of Biology 11 A, B, \& C.)

## 11B Natural History II (1) **UC:CSU

Lecture 0.5 hour. Laboratory 1 hour.
This course in marine biology examines the rocky intertidal zone communities of the Punta Banda region of Baja California, Mexico. 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 communities. An emphasis is placed on the morphological, physiological and behavioral adaptations of rocky intertidal organisms and on understanding the role that biological interactions play in determining the community structure and organization. The effects of the development of the coastal environment on the marine environment are also explored.
(CSU GE Area B3 • IGETC Area 5C • Upon completion of Biology 11 A, B, \& C.)

## 11C Natural History II (1) **UC:CSU

Lecture 0.5 hour. Laboratory 1 hour.
This course in marine biology examines the wetlands communities of the Estero de Punta Banda region of Baja California, Mexico. Studies include the principles of community ecology and community analysis, and the identification and biology of the algal, invertebrate, fish and bird assemblage that form the communities. An emphasis is placed on the morphological and physiological adaptations of wetlands plants and invertebrates, the feeding and behavioral adaptations of wetlands birds, and on understanding the role that biological interactions play in determining the community structure and organization. The effects of human activity on changes in the wetlands communities of Baja California with respect to economic and political forcing functions, along with cultural concomitants are examined.
(CSU GE Area B3 • IGETC Area 5C • Upon completion of Biology 11 A, B, \& C.)

## 12A Natural History and Field Biology (1) CSU

## Lecture 1 hour.

In This course students will study the interrelationship of climate, animals, plants, and humans in the environment. The course will include an in-depth ecological and systematic survey of a few selected ecosystems.
(CSU GE Area B2 + B3 • Upon completion of Biology 12 A, B, \& C.)

## 12B Natural History and Field Biology (1) CSU

## Lecture 1 hour

In This course students will study the interrelationship of climate, animals, plants, and humans in the environment. The course will include an in-depth ecological and systematic survey of a few selected ecosystems.
(CSU GE Area B2 + B3 • Upon completion of Biology 12 A, B, \& C.)

## 12C Natural History and Field Biology (1) CSU

Laboratory 2 hours.
In This course students will study the interrelationship of climate, animals, plants, and humans in the environment. The course will include an in-depth ecological and systematic survey of a few selected ecosystems.
(CSU GE Area B2 + B3 • Upon completion of Biology 12 A, B, \& C.)

110 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, whereby Students examine 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.
(CSU GE Area B2 + B3 • IGETC Area 5B +5 C)

## 121 Lectures in Marine Biology (3) UC:CSU

Lecture 3 hours.
Formerly Oceanography 12. Credit not given for both courses.
May be offered as an honors section.
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.
(CSU GE Area B2 • IGETC Area 5B)

## 122 Marine Biology Laboratory (2) UC:CSU

Laboratory 4 hours.
Prerequisite or Corequisite: Biology 121 (formerly Oceanography 12) with a grade of "C" or better
Formerly Oceanography 14. Credit not given for both courses.
May be offered as an honors section.
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 field 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.
(CSU GE Area B3 • IGETC Area 5C)

## 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.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)
185 Directed Study - Biology (1) CSU
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.
**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 101
This course includes providing an 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.

## (CSU GE Area D • IGETC Area 4)

10 Radio Programming and Production (3) CSU
Lecture 2 hours. Laboratory 3 hours.
Introduction, by means of working on a campus radio station, to all aspects of radio station programming and production. 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

Laboratory 3 hours.
Prerequisite: Broadcasting 10.
This course will provide 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.

## Prerequisite: Broadcasting 10.

Advisory: Multimedia 114.
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.
Prerequisite: Broadcasting 10.
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) CSU

Lecture 2 hours. Laboratory 2 hours
Advisory: Cinema 101.
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. Students will develop an audio portfolio specific to post-production.

## 185 Directed Study- Broadcasting (1) CSU

285 Directed Study- Broadcasting (2) CSU
385 Directed Study- Broadcasting (3) CSU
Conference 1 unit per hour.
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)

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.

## 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) CSU

Lecture 3 hours. Laboratory 2 hours.
Same as Environmental Science 34. Credit not given for both courses.
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 4 hours. Laboratory 3 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 general chemistry with an 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.
(CSU GE Area B1 + B3)

## 60 Introduction to General Chemistry (5) $\Delta \mathrm{UC}: \mathrm{CSU}$

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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## CHEMISTRY 101 PREPAREDNESS

Chemistry 101 is a challenging class that assumes some prior chemistry knowledge and laboratory experience in order to be successful. If a student doesn't have such experience it is strongly recommended that they pass Chemistry 60 before attempting Chemistry 101.
Should a student want to challenge this recommendation they would need to completely fill out a Prerequisite Challenge Form. The form can be obtained at http://www.piercecollege.edu/offices/assessment_center/media/pdf/prerequisite.pdf and should be submitted to the Assessment Center, located in the Student Services Building. Upon receiving the form, the Chemistry Department Chair will make an evaluation and contact the student by email. A readiness test may be administered to determine the student's preparedness for Chemistry 101. The student should plan to submit the Prerequisite Challenge Form at least a month prior to the date they wish to register for the class.

## 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 Preparedness Test.
2. Mathematics 125 with a grade of " $C$ " or better, or equivalent skill level demonstrated through the mathematics placement process.
This course 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; oxidation-reduction; phase changes; an introduction to Molecular Orbital Theory.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 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.
This course is 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)
185 Directed Study - Chemistry (1) CSU
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.

## Chicano Studies

## 2 The Mexican-American in Contemporary Society (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 185 Directed Study - Chicano Studies (1) CSU <br> 285 Directed Study - Chicano Studies (2) CSU <br> 385 Directed Study - Chicano Studies (3) CSU <br> Conference 1 unit per hour.

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.
Required for all Child Development majors and certificates. May be offered as an honors section.
Students are introduced to the theory of human development focusing on growth from conception through adolescence. The course content focuses on the physical, cognitive, and social-emotional domains, and ways in which biological and diverse environments influence growth. Students identify typical and atypical development and apply strategies to promote healthy child development in their personal and professional lives.
(CSU GE Area D • IGETC Area 4)

## 2 Early Childhood: Principles and Practices (3) CSU

Lecture 3 hours.
Required for all Child Development majors.
Prerequisite: English 28 with a grade of "C" or better.
Students examine Early Childhood Programs including philosophies and components of a quality program. Developmentally appropriate practices are 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.
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.
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) CSU

Lecture 3 hours.
Students explore the knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age 6 . A teacher's role in supporting development and engagement for all young children is examined. Strategies for developmentally-appropriate practice based on observation and assessments across the curriculum, including 1)academic content areas, 2) play, art, and creativity, and 3) development of social-emotional, communication, and cognitive skills are evaluated.

## 9 Advanced Curriculum: Art In Early Childhood (3) CSU Lecture 3 hours.

This course is an advanced exploration of visual art and creative curriculum in early childhood. Students are introduced to contemporary philosophies of art education and basic art concepts as they relate to early childhood education (birth -8 years old). This course will emphasize the development of basic artistic and pedagogical skills, techniques, and strategies for working with young children to develop aesthetic perception and to promote creative expression. Further, This course provides a study of the importance of integrating art into the educational experience and examines the impact on overall child development for both typically and atypically developing children.

## 10 Health, Safety and Nutrition (3) CSU

## Lecture 3 hours.

Students engage in an in-depth examination of the laws, regulations, standards, policies and procedures and early childhood curriculum related to children's mental and physical health, safety, and nutrition. The key components that ensure physical health, mental health, and safety for both children and staff are identified as well as the importance of collaboration with families, community and health professionals. Strategies for integrating these concepts into everyday planning and program development for all children in accordance with cultural and linguistic needs are emphasized. Students earn First Aid and CPR certification.

## 11 Child, Family and Community (3) CSU

Lecture 3 hours.

## Required for all Child Development majors.

Students will study on the processes and outcomes 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. This course will examine child behavior and development along with understanding cultural and developmental diversity in society and their impact on teaching, parenting, and family relations.

## 22 Practicum In Child Development I (4) CSU

Lecture 2 hours. Laboratory 6 hours.
Prerequisites: Child Development 1, 2, 3, and 4, or 7; health exam, TB test and consent of instructor.

## Advisory: English 28 with a grade of "C" or better.

Students are assigned to an approved Child Development program to demonstrate developmentally appropriate early childhood teaching competencies under guided supervision. Students utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning, assessment and knowledge of curriculum content areas is emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning.

## 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. Coursework includes documentation of learning through observation, guidance toward self regulation, family communications and community resources. Current research within the context of home language, culture and traditions.

## 33 Introduction to the Reggio Emilia Approach (3) CSU

## Lecture 3 hours.

The Reggio Emilia Preschool and Infant/Toddler schools are recognized as outstanding early childhood programs. This course will focus on the history and curriculum of the Reggio Emilia philosophy. Primary focus is on the planning, development and implementation of emergent curriculum and the processes for authentic assessment and documentation.

## 34 Observing and Recording Children's Behavior (3) CSU

Lecture 3 hours
Students analyze the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored.

## 38 Administration and Supervision of Early Childhood Programs I (3) CSU Lecture 3 hours.

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 Teaching 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.

Students examine school age care programs designed for those planning to work in before and after school programs. The developmental issues of school age children, program models, creation of environments, and designing appropriate and effective experiences and curriculum are emphasized.

## 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 1800 s to present. Students will analyze representative films and television programs as to formats, aesthetics, societal impact, and evolution as entertainment media.
(CSU GE Area C1 • IGETC Area 3A)

5 Introduction to Screenwriting (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Completion of Cinema 107.
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.

This course provides 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.
(CSU GE Area C1 • IGETC Area 3A)

## 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.
Students examine a survey of motion pictures as a communication medium via screenings and lectures. Assigned readings analyze classic and contemporary films, American and foreign-made films, and theatrical and non-theatrical releases.
(CSU GE Area C1 • IGETC Area 3A)
108 Beginning Digital Film/Video Production Workshop (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Cinema 107 or concurrent enrollment.
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.
Prerequisite: Multimedia 108.
This course provides a 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.

## 113 History of Animation (3) UC:CSU

(Pending State approval)
Lecture 3 hours.
This course provides an historical overview of the art and craft of animation from the silent era to present day, with an emphasis on classics, ground breaking, and Hollywood films and television shows, including different techniques: hand drawn, stop motion, and computer-generated animation.
(CSU GE Area C1 • IGETC Area 3A)

## 119 Advanced Documentary Production (6) CSU

Lecture 3 hours. Laboratory 6 hours.
Advisory: Cinema 109.
This course explores long-form documentary concept development, pre-production, production and post-production. Students will learn how to research and pitch a story, elements of storytelling, story structure, character development, styles, etc. In addition, students will explore an array of different types of documentary genres. Students will produce at least one long-form documentary for this class from concept development to final piece.

121 Research and Interviewing Techniques for Documentary (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Cinema 104.
Students gain the foundation for conducting research and interviews for documentary productions. Students explore the pre-production process that includes developing in-depth research proposals and treatments, scouting locations, conducting interviews and finding strong characters, access issues, budget and marketing considerations, storyboards, pitch, music considerations and more. Students also learn how to use databases, journals, the Web, social networks, experts and other sources as part of this class. This course is based around the development of professional documentary project proposals for television, internet, pre-production and film.

185 Directed Study - Cinema (1) CSU
285 Directed Study - Cinema (2) CSU
385 Directed Study - Cinema (3) CSU
Conference 1 unit per hour.
This course allows the student to pursue Directed Study in Cinema on a contract basis under the direction of a supervising instructor.

## Communication Studies

## 76 English Speech as a Second Language (3)

## Lecture 3 hours.

In this English speech improvement class, students practice accent reduction, pronunciation, intonation, idiomatic expressions, phrasing, grammar and vocabulary. Speaking assignments prepared by students are included. Learning to speak with Standard American English pronunciation more effectively in a variety of different environments is emphasized.

## 101 Public Speaking (3) UC:CSU

Lecture 3 hours.
Advisory: Eligibility for English 28.
In this introductory course, students analyze the theory of speech communication, apply critical thinking and research skills in the preparation of various speech types, and exercise organizational and time management skills in the delivery of structured oral presentations adapted to different audiences and occasions.

## (CSU GE Area A1 • IGETC Area 1C)

## 104 Argumentation and Debate (3) UC:CSU

## Lecture 3 hours.

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. Recommended Preparation: Eligibility for English 28.
(CSU GE Area A1 or A3 • IGETC Area 1C)
121 Interpersonal Communication (3) UC:CSU
Lecture 3 hours.
Advisory: Eligibility for English 28.
Students analyze the theory, scope, and purpose of human communication in interpersonal environments, apply the theory in specific activities, and assess their success in interpersonal effectiveness.
(CSU GE Area A1 or D • IGETC Area 1C or 4)

## 122 Intercultural Communication (3) UC:CSU

Lecture 3 hours.
Advisory: Eligibility for English 28.
Students analyze communication in the context of intercultural interactions, compare and contrast verbal and non-verbal communication across cultures, and increase their intercultural competence
(CSU GE Area D • IGETC Area 4)

## 151 Small Group Communication (3) UC:CSU

## Lecture 3 hours.

Recommended Preparation: Eligibility for English 28. Students analyze the purposes, principles and types of group processes and the development of individual skills in leadership and problem solving achieved by responsible group participation.

## Computer Applications and Office Technologies

## 1 Computer Keyboarding and Document Applications I (3) CSU

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.

Students develop fundamental skills in the operation of a computer keyboard to attain a minimum typing speed of 30 gross words a minute with a maximum of three errors. Students also develop skills in the operation of the numeric keyboard and learn to prepare business documents such as memos, business letters, and short reports.

## 2 Computer Keyboarding and Document Applications II (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: CAOT 1 or 9 with a grade of "C" or better OR the ability to key 30 words a minute for three minutes with three or fewer errors.
Through the practice of drills and exercises, students continue to improve keyboarding techniques, speed, and accuracy; and, develop basic keyboarding speed and accuracy from 30 words per minute for 3 minutes to 40 words per minute for 5 minutes with no more than one error per minute. Students are introduced to the basic functions of the current version of Microsoft Word as well as to the creation of the following types of basic business documents: e-mail/memos, letters, reports, and tables.

## 23 Legal Office Procedures I (5)

## Lecture 5 hours.

Advisory: Ability to key 40 words a minute and use Microsoft Word. Note: Course may be presented in modules CAOT $23 F$ and CAOT $23 G$.
Students explore an overview of the law office focusing on the professional and ethical responsibilities of the legal office assistant. Preparation of legal correspondence is introduced. Federal and state court structure, court document filings, and litigation procedures are examined. Vocabulary and document preparation in family law; wills, trust agreements, and probate; business law; real estate law; and criminal law are emphasized. Legal research including online tools is introduced.

## 31 Business English (3) CSU

Lecture 3 hours.
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.
Students apply the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. Planning, organizing, composing, and revising business documents using word processing software for written documents and presentation-graphics software to create and deliver professional-level oral reports are emphasized. This course is designed for students who already have college-level writing skills and the ability to type is recommended.

## 34 Business Terminology (2)

## Lecture 2 hours.

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)

Lecture 2 hours. Laboratory 3 hours.
Basic computer knowledge and ability to keyboard.
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 (current version) as students create, format, and edit business documents.

## 55 Career Skills for the Workplace (3)

## Lecture 3 hours.

Basic English skills, which include reading and speaking.
Students focus on the important skills needed to survive in today's work force, such as telephone techniques, customer service, records management, and job search techniques. Proper attitude, appropriate dress, and business etiquette are stressed.

## 63 Computer Applications and Office Technologies Laboratory II (1) Laboratory 2 hours.

Students develop competency in the intermediate-level subject areas taught in the Computer Applications and Office Technologies Department. This course is designed as an aid to students who need additional time and practice to increase their knowledge and skills in any intermediate-level computer applications and office technologies course. Students have an opportunity to achieve goals set forth in student learning outcomes with the assistance of CAOT instructors and tutors.

## 64 Computer Applications and Office Technologies Laboratory (1) CSU

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.

## 65 Computer Applications and Office Technologies Laboratory III (1) Laboratory 2 hours.

Students develop competency in the advanced-level subject areas taught in the Computer Applications and Office Technologies Department. This course is designed as an aid to students who need additional time and practice to increase their knowledge and skills in any advanced-level computer applications and office technologies course. An opportunity to achieve goals set forth in the student learning outcomes with the assistance of CAOT instructors and tutors is provided.

## 66 Voice-Recognition Software for Computer Input (1)

Laboratory 2 hours.
Basic computer knowledge.
Uses voice-recognition software (Dragon NaturallySpeaking or Microsoft Voice 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)
Laboratory 2 hours.
Basic computer knowledge and ability to keyboard.
Covers the use of Microsoft Outlook 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

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: CAOT 31 and 34 with a grade of "C" or better, or equivalent. Advisory: Basic computer knowledge and ability to keyboard.
Note: Uses Dragon NaturallySpeaking Preferred.
Uses voice-recognition software-Dragon NaturallySpeaking or Vista Speech
Recognition -in place of the computer keyboard to create documents. Covers dictation procedures and voice commands to input text, access program features, and activate keyboard commands. Uses voice dictation to create e-mail messages, memorandums, letters, and other business documents. Reviews punctuation, capitalization, number-usage, and word-usage principles in the context of creating business documents by voice.

## 77 Microcomputer Accounting for the Electronic Office (3)

Lecture 3 hours.
Advisory: Basic knowledge of Excel desirable.
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

Lecture 2 hours. Laboratory 3 hours.
Advisory: Basic computer knowledge, ability to keyboard, and knowledge of introductory accounting principles.
Note: Uses QuickBooks.
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 microcomputer software package.

## 79 Word Processing Applications (3)

Lecture 2 hours. Laboratory 3 hours.
Offered in the Spring semester only.
Introduces advanced techniques using Microsoft Word for Windows (current version). 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 formatting, layout, and design.

82 Microcomputer Software Survey in the Office (3) CSU
Lecture 2 hours. Laboratory 3 hours. Ability to keyboard.
Students examine information systems and their role in business. Information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components are evaluated. Students apply these concepts and methods through hands-on projects developing com-puter-based solutions to business problems.

## 85 Microcomputer Office Applications: Spreadsheet (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Basic computer knowledge and ability to keyboard.
Designed for learning spreadsheet applications using a Windows-based computer and Microsoft Excel (current version). 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

Lecture 2 hours. Laboratory 3 hours.
Basic computer knowledge and ability to keyboard.
Provides instruction in office database applications using a relational database program, Access (current version). 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)

## 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 (current version) 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

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: Ability to keyboard and general computer knowledge. Note: Uses Adobe InDesign software.
Provides instruction and hands-on training in desktop publishing using Adobe InDesign 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

## Lecture 1 hour. Laboratory 2 hours.

Note: Uses Windows software.
Basic computer knowledge and ability to keyboard.
Provides an in-depth study of the Windows operating system. Emphasizes the Windows environment, the Windows desktop, folder and file management, personal information management and communication. Covers 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)

Lecture 2 hours. Laboratory 3 hours.
Note: Uses Adobe Creative Suite
Basic computer knowledge and ability to keyboard.
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)

Lecture 2 hours. Laboratory 3 hours.
Basic computer knowledge and ability to keyboard.
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)

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.
Ability to keyboard.
Students will engage in a hands-on introduction to software applications in a Windows environment for the computer novice. Hardware basics, operating systems, basic Windows operations, applications software, document creation with word processing (Microsoft Word), spreadsheet applications (Microsoft Excel), and basic Internet applications are studied.

## 108 Presentation Design for the Office (2) CSU

Lecture 1 hour. Laboratory 2 hours. Advisory: Basic keyboarding skill and knowledge of Microsoft Word.
Provides an overview of presentation design principles. Uses PowerPoint software to create presentations incorporating PowerPoint 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
Lecture 2 hours. Laboratory 3 hours.
Basic keyboarding skill and knowledge of Microsoft Word.
Provides hands-on implementation skill using multimedia Web tools to create and maintain Web sites. Students will develop multipage Web sites for the hightech office environment that incorporate links, graphics, animation, and multimedia capabilities using Adobe Dreamweaver and Flash.

## 110 Microcomputer Office Applications: Presentation Design (3) CSU

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 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

Lecture 2 hour. Laboratory 3 hours.
Basic computer knowledge and ability to keyboard Note: Uses Adobe Photoshop.
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)

Lecture 1 hour. Laboratory 2 hours.
Ability to keyboard and knowledge of Microsoft Word.
Uses Adobe Acrobat to create, review, and modify PDFs (Portable Document Files) from Microsoft Office files, including Word and PowerPoint, as well as from Web pages. Emphasizes use of PDFs on the Web for various purposes, including creating multimedia presentations, adding interactive features, creating electronic forms, and adding electronic security to documents.

## 120 Adobe Illustrator for the Office and the Web (3)

Lecture 2 hours. Laboratory 3 hours.
Ability to keyboard and a working knowledge of any other Adobe program or experience with Microsoft Office programs.

Uses Adobe Illustrator 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

Lecture 1 hour. Laboratory 2 hours.
Ability to keyboard and to use Microsoft Word and Microsoft Excel.
Uses Microsoft Office Project (latest version) 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 Project, as well as the Internet.

## 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.

## 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 specific for success in the workplace. Covers business English fundamentals, basic business writing principles, and oral communication strategies for the office. Emphasizes the application of communication principles and skills in the work environment.

## 132 Introduction to Student ePortfolios (2)

Lecture 1 hour. Laboratory 2 hours.
Ability to keyboard and knowledge of Microsoft Word.
This course is designed to help Students learn 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 0.5 hour. Laboratory 1 hour
This course is intended 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.

## 152 Mobile Apps for Business (3)

Lecture 3 hours.
Students acquire, install, and use existing mobile apps with emphasis on mobile apps for marketing and productivity. The fundamental use of mobile applications for business is emphasized to provide a foundation for building mobile apps in popular platforms. Students learn about general mobility practices, available platforms and devices, market share, and potential for additional mobile business apps.

## Computer Science and Information Technology

## 501 Introduction to Computers and Their Uses (3) UC:CSU <br> 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.

## 508 Introduction to Programming Using Visual Basic (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Introduces programming fundamentals using Visual Basic. Topics include event-driven programming, basic control structures, data types, arrays, file processing, error-handling, procedures, program development life cycle, and basic principles of interface design. Please check the transfer, degree, or certificate requirements. This course applies to some programs in CSIT department, but specifically not to Programming for Computer Science.

## 514 Supporting Windows Desktops (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisites: Computer Science 587 with a grade of "C" or better.
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.
Advisory: Co Sci 539.
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. Corequisite: Computer Science 540 may be taken concurrently.
This course is a continuation of the study of data structures begun in CS 536, Introduction to Data Structures. 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, 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 Servers (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

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.
Prerequisites: Computer Science 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 539 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.
Prerequisites: Computer Science 533 and Computer Science 575 or 508.
Students will study 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 bours. Laboratory 2 hours.
Prerequisites: 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 $\mathrm{C}++$ programs simulating various architectural features studied.

## 547 Digital Image Processing and Programming for the Web (3) CSU

## Lecture 2 hours. Laboratory 2 hours.

This course is an introduction to digital image development, manipulation, management, and optimization for web sites. Topics include image and graphics preparation for inclusion on web pages, resolution optimization for the web, file types, the use of various graphic editing software, importing and exporting files, sizing images for the web, and working with text. Additionally, bulk processing of images for the web using scripting and programming strategies will be addressed. Students will use Photoshop for many tasks.

## 548 Web Development Using Flash and ActionScript (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Students use the current version 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, coding using variables, control structures, events and event handlers. Knowledge of file management in Windows or Mac is required.

## 550 Introduction to Web Development Using Dreamweaver and CSS (3) CSU

 Lecture 2 hours. Laboratory 2 hours.Students will use Dreamweaver, Expressions Studio or similar web authoring software to develop, program and maintain websites. Topics include web authoring software basics; fundamentals of HTML and Cascading Style Sheets(CSS); styling pages with CSS, CSS positioning, creating advanced page layouts with CSS, using CSS to style pages; creating forms, website publishing and maintenance.

## 552 Programming in Java (3) UC:CSU

Lecture 2 bours. Laboratory 2 hours.
Prerequisites: Computer Science 506 and 507 with a grade of "C" or better.
Course introduces principles of object-oriented programming and design using Java. Additional topics include writing applets for World Wide Web pages, building Graphical User Interfaces in Java applets.

553 Web Site Development Using HTML and JavaScript (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Computer Science 550 and 508.
Study of client-side programming, including an introduction to JavaScript and DOM. Topics include working with script elements, outputting to a web document, working with selections and repetition structures, writing functions; accessibility.

## 554 Server-Side Programming for the World Wide Web (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisites: Computer Science 553 with grades of "C" or better.
An advanced web programming course. The student will learn the PHP scripting language, and how to write PHP scripts to access web-based databases. Topics include basic PHP command and control structures, and the various aspects of the PostgreSQL RDBMS. Security, designs, and implementation issues are also discussed.

555 Advanced Website Development Using Javascript and AJAX (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisites: Computer Science 553 with grades of "C" or better. Advisory: Computer Science 508.
Use JavaScript, AJAX and the latest tools to develop and program interactive websites. Topics include: Advance JavaScript to manipulate the DOM, handle events, and provide error checking and debugging; AJAX to provide asynchronous server communication; Security to ensure a safe website, j Query to animate and deliver the "wow factor"; Bootstrap to build "mobile first" responsive and consistent website presentations.

556 Advanced Dreamweaver - Dynamic Website Development (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 550 with a grade of "C" or better.
Students use Advanced Dreamweaver tools and skills to develop dynamic, interactive websites which utilize database information to populate web pages. Students learn to retrieve and pass user input data using form variables, URL variables, cookies, and email forms and dynamically populate web pages. Students learn server-side data validation, how to filter and display data using XML, Spry and AJAX, creating Admin Pages, Authenticating Users and Managing content.

558 Advanced Programming for E-Commerce Website Development (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 556 with a grade of "C" or better.
Students will learn to develop a dynamic, interactive electronic commerce (E-Commerce) website to conduct business over the Internet and World Wide Web using software such as PHP and MySQL. This course introduces electronic commerce including history, E-Commerce concepts and technology, development and integration of PHP and MySQL into an E-Commerce website, online catalog, shopping cart development, payment systems, website security, and Search Engine Optimization. This course also focuses on the development of dynamic, interactive website pages for all aspects of E-Commerce.

## 559 Advanced Programming for Mobile Devices (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 540 or 552 with a grade of "C" or better. Advisory: Computer Science 550.

This course provides students with advanced programming concepts and skills for creating mobile applications for today's most popular platforms. Students will learn to create multi-screen, multi-touch applications; send/receive SMS and emails programmatically from within applications; read and update contacts through public contact API; use media and browser content providers; use sensors and location-based services programmatically; develop services; create a home screen widget. Students will learn about exception handling, will create manageable user preferences and will learn to incorporate security and permissions. Students will learn to sign, publish and distribute developed applications.

560 Business Systems Design Using Oracle Developer and SQL Server (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 <br> 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.
This course includes programming concepts and practical laboratory experience to successfully design, implement, test and debug computer programs using topdown, 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. This course is required for computer science majors and is desirable for students wishing to study programming.

## 578 Routing and Switching Fundamentals (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 587 with a grade of "C" or better.
In this course, Students learn how to perform basic router and switch configuration, and network fundamentals and configure a variety of routing strategies including static routing and dynamic routing with EIGRP and OSPF, IPV4 and IPV6 theory and basic switch configuration including VLANS, DHCP and NAT. This is the second course in the Cisco Academy CCNA preparation program.

## 581 Personal Computer Upgrade and Repair (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 572 with a grade of "C" or better.
The objective of This course is to teach the maintenance and repair of personal computer systems and small office and home networks to the level required of a one-year certificate graduate. Topics will include software and hardware installation, maintenance and repair of disk storage systems, printers, various peripherals and their adapters, motherboards and associated add-in circuits, and network functional blocks. Manuals, diagnostic software and the internet are resources accessed for simulated service calls of increasing complexity.

## 584 Network Security (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Computer Science 537, 538, 578, and 587 with a grade of "C" or better. Or current Cisco CCNA certification.
This course will cover the theory of the primary network security threats and the practical application of tools to mitigate those threats. Threats covered will include reconnaissance, access, and denial of services attacks, along with virus, worm and trojan horse projections. Hardware and software based network protection, including firewalls, access control lists, intrusion detection systems, and cryptography will also be explored along with Virtual Private Networking. This course maps to the Cisco CCNA Security certification.

## 587 Introduction to Computer Networks (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Corequisite: Computer Science 572.
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
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.

## Criminal Justice

See Administration of Justice

## Counseling

## 1 Introduction to College (1) CSU

Lecture 1 hour.
No credit iftaken 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.

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.

## 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.
(CSU GE Area E)

## 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.
(CSU GE Area E)
*UC Credit Limit: 20 and 40 combined. Maximum credit one course.

## Dance Specialties

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Theater Arts \& Dance department, families have been created as follows:

## DANCE FAMILY NAMES AND COURSE NUMBERS:

Ballet Techniques.
DANCETQ 434
Cultural \& World Dance . . . . . . . . . . . . . . .DANCETQ 440, 473; DNCESP 441, 490
Dance Productions. . . . . . . . . . . . . . . . . . . . . .DANCEST 814, 815, 820, 821, 822
Hip Hop Techniques.
. . . . .DNCESP 402
Jazz Techniques
DANCETQ 437, 468
Modern Techniques
. . . DANCETQ 431
Special Projects in Dance . . . . . . . . . . . . DANCEST 185, 262, 285, 452, 801, 802
Tap Dance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 446
Yoga/Stress Management DANCETQ 101, 710

## 402 Afro Hip Hop (1) UC:CSU

Laboratory 2 hours.
Afro Hip Hop as a jazz style of dance will be explored through movement and sound/body rhythms. Hip Hop is 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.
(CSU GE Area E)

## 441 Latin Social and Salsa Dance (1) UC:CSU

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. (CSU GE Area E)

## 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.
(CSU GE Area E)

## 491 Special Topics in Dance I (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 a particular genre are utilized to create an understanding of musical phrasing and rhythms utilized in that particular dance form. This introductory course provides a foundation for further study in a particular dance genre.

492 Special Topics in Dance II (1) CSU
Laboratory 3 hours.
Prerequisite: Dance Specialties 491.
This course offers continued instruction in the historical and cultural origins of folk, ethnic, recreational, or other specialized dance genres. Transitional combinations of steps from the particular genre are utilized to broaden the students understanding of specialized dance techniques, musical phrasing and rhythms utilized in that particular dance form. This low-intermediate course provides a greater foundation for further study in the particular genre of dance.

## Dance Studies

## 262 Special Projects in Dance Theatre (2) CSU

Laboratory 4 hours. Advisory: Current or past enrollment in dance.

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.

## 452 Introduction To Choreography (1) UC:CSU

 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.

## 801 Modern Dance I (3) UC:CSU

## Lecture 2 hours. Laboratory 4 hours.

The course is designed to afford the student to participate in a learning environment that is well planned to train the body 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. (CSU GE Area $\mathrm{C} 1+\mathrm{E}$ )

## 802 Modern Dance II (3) UC:CSU

Lecture 1 hours. Laboratory 5 hours.
This class offers in depth instruction and practice in the fundamentals of modern dance technique. The course also includes theory, historical context, terminology of dance and theater, and instruction in the elements of space, time, and energy. Studies on rhythm, alignment, motivation, dynamics, and design are incorporated. Training the body for performance and lifelong movement skills continues. Trailblazers of modern dance are highlighted.
(CSU GE Area C1 • IGETC Area 3A)

## 805 History and Appreciation of Dance (3) UC:CSU

## 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.

## (CSU GE Area C2 • IGETC Area 3A)

## 814 Dance Production I (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
This course provides instruction and laboratory experience in dance concert production for stage, film and site-specific areas including; publicity, lighting design, audio/visual training, costuming, dance criticism, audition and performance skills. The course involves dance rehearsals as well as production duties for non-dancers. (CSU GE Area C1)

## 815 Dance Production II (2) UC:CSU

## Lecture 1 hour. Laboratory 2 hours.

Prerequisite: Dance Studies 815.
This course provides instruction and laboratory experience in dance concert production for stage, film or site-specific areas including; publicity, marketing, lighting design, audio, costuming, dance criticism, audition techniques and performance skills.
(CSU GE Area E)

## 820 Dance Staging and Production Methods (4) UC:CSU

Lecture 2 hours. Laboratory 4 hours.
This class provides instruction and laboratory experience in increasing the skills involved in dance concert production including; choreography, staging, set design and construction, lighting and sound design, audio/visual training, costume design and construction, and make-up design. Students gain additional experience in publicity and ticket sales, administrative details of pre and post-performance responsibilities. This class affords students the opportunity to perform with the Pierce College Dance Theatre and also to further develop their workshop experience therein. This class is continuation of Dance 814.

## 821 Dance Staging and Production Methods II (4) CSU

Lecture 2 hours. Laboratory 4 hours.
Prerequisite: Dance Studies 820.
Advisory: Dance Studies 262 and 822.
Students gain increased experience in the art of dance production. Intermediate production concepts examined include the following: choreography, staging, set design and construction, lighting and sound design, audio-visual training, costume design and construction, and make-up design. Students participate in publicity, ticket sales and the administrative details of pre and post-performance responsibilities. The class, which is a continuation of Dance 820 , affords students the opportunity to perform with the Pierce College Dance Theater and to further develop their workshop experience.

## 822 Dance Rehearsals and Performances (1) UC:CSU

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 choreographic design, performance dynamics and movement analysis.
(CSU GE Area E)
185 Directed Study - Dance (1) CSU

## 285 Directed Study - Dance (2) CSU

Conference 1 hour per unit.
This course allows students to pursue Directed Study in Dance on a contract basis, under the direction of a supervising instructor.

UC Credit limit for Dance activity courses is 4 units.

## Dance Techniques

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Theater Arts \& Dance department, families have been created as follows:

DANCE FAMILY NAMES AND COURSE NUMBERS:
Ballet Techniques. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 434 Cultural \& World Dance . . . . . . . . . . . . . . .DANCETQ 440, 473; DNCESP 441, 490
Dance Productions. . . . . . . . . . . . . . . . . . . . . . . DANCEST 814, 815, 820, 821, 822
Hip Hop Techniques . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 402
Jazz Techniques . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 437, 468
Modern Techniques . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 431
Special Projects in Dance . . . . . . . . . . . . . DANCEST 185, 262, 285, 452, 801, 802
Tap Dance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 446
Yoga/Stress Management . . . . . . . . . . . . . . . . . . . . . . . . . . . DANCETQ 101, 710

## 101 Dance to Fitness (1) UC:CSU

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).
(CSU GE Area E)

## 431 Modern Dance (1) UC:CSU

## Laboratory 2 hours.

Students learn basic Modern Dance steps and combinations, terminology, music, and appreciation of dance as a performing art.
(CSU GE Area E)
434 Ballet (1) UC:CSU
Laboratory 2 hours.
Students are introduced to ballet through basic steps and combinations, terminology, music, and appreciation of dance as a performing art.
(CSU GE Area E)

## 437 Jazz Dance (1) UC:CSU

## 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.
(CSU GE Area E)

## 440 Social Dance (1) UC:CSU

## 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.
(CSU GE Area E)

## 446 Tap Dance (1) UC:CSU

Laboratory 2 hours.
Students learn basic tap dance steps and combinations, terminology, music, and appreciation of dance as an art form.
(CSU GE Area E)

## 466 Ballet Combinations (1) CSU

(Pending State approval)
Laboratory 2 hours.
Students practice and perform several ballet combinations with an emphasis on traditional technique, intermediate variations, French terminology, music design, and appreciation of dance as a performing art form.
(CSU GE Area E)

## 468 Jazz Dance Combination (1) - RPT 3

Laboratory 2 hours.
Students practice and perform several beginning/intermediate dance combinations with an emphasis on jazz dance technique, stylistic quality, performance dynamics, traditional dance terminology, music theory and appreciation of dance as a performing art.

## 473 Middle Eastern Dance (1) CSU

## 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.

## 535 Dance Team Techniques I (2) UC:CSU - RPT 3

## Laboratory 6 hours.

Students examine techniques, performance qualities, and choreography for the Dance Company/Team. Students are required to perform at selected dance
department events and/or Dance Company conventions and tours as part of course requirements. This course is required for the Pierce College Dance Theater Company/Team members.
(CSU GE Area E)

## 710 Dance and Pilates for Movement Fundamentals (1) UC:CSU <br> 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.
(CSU GE Area E)

UC Credit limit for Dance activity courses is 4 units.

## Desktop Publishing

See course listings under Computer Applications and Office 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 are analyzed. 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. Students review the global economy, 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.
(CSU GE Area D • IGETC Area 4)

## 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. The global economy, 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 are emphasized.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 185 Directed Study - Economics (1) CSU <br> 285 Directed Study - Economics (2) CSU <br> 385 Directed Study - Economics (3) CSU <br> 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.

## Education

## 1 Introduction to Teaching (3) CSU

Lecture 3 hours.
Students examine the field of teaching and learning. Topics discussed include: a basic understanding of a teacher's role and challenges in society; contemporary education issues within historical, social, philosophical, legal, and political contexts; impact of government policies on schools and children; and, various perspectives on curriculum and instruction. The roles and responsibilities of the educator and the educational system in California are examined. Students analyze diverse learning styles and theories, and learn how to create a positive learning environment, manage classrooms effectively, and develop and assess lesson plans. Various careers in the field of education are explored.

## 6 Methods and Materials of Tutoring (1)

Lecture .33 hours. Laboratory 1.32 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.
Students examine the fundamental theories of the American educational institution in its social, political, and economic contexts. Concepts and methods from the fields of sociology, philosophy, and the politics of education are used to analyze the current conditions of American schools. Consideration of contemporary issues, including the roles of the American school in a democratic, multi-cultural society is emphasized. Analysis of the historical, philosophical, and social foundations of education and of school organization are used to evaluate selected proposals and models for reform.

## Electronics

## 4A Fundamentals of Electronics I (3) CSU

## Lecture 3 hours.

Advisory: Concurrent enrollment in Electronics $4 B$ recommended.
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.
Advisory: Concurrent enrollment in Electronics $4 A$ recommended.
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 $4 A$ and $4 B$, and concurrent enrollment in Electronics 6B.

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 $4 A$ and $4 B$, and concurrent enrollment in Electronics 6A.

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 $4 A$ and $4 B, 6 A$ and $6 B$ and concurrent enrollment in Electronics $8 B$.

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 $4 A$ and $4 B, 6 A$ and $6 B$ and concurrent enrollment in Electronics $8 A$.
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 $8 A$ and $8 B$.
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.

Prerequisite: Electronics $6 A, 6 B, 8 A$, and $8 B$.
Advisory: Completion of Electronics $72 A$ and $72 B$ 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.
Corequisite: Electronics 44.
Advisory: Completion of Electronics $8 A$ and $8 B, 72 A$ and $72 B$.
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.
Prerequisite: Completion of Electronics $6 A, 6 B, 8 A$ and $8 B$.
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.
Prerequisite: Electronics 60.
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 $8 A$ and $8 B$.
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)

Lecture 3 hours.
Advisory: Completion of Electronics $6 A$ and $6 B$, and concurrent enrollment in Electronics 72B.

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)

Laboratory 3 hours.
Advisory: Completion of Electronics $6 A$ and $6 B$, and concurrent enrollment in Electronics 72 A .
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 $72 A$ and $72 B$.
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. $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ conversion.

## 74B Digital Circuits II (1) CSU

## Laboratory 3 hours.

Advisory: Completion of Electronics $72 A$ and $72 B$
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)

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.

## 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.
Prerequisite: Physics 101
Corequisite: Mathematics 262
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.

## Engineering Graphics \& Design Technology

## 101 Engineering Graphics (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Mathematics 110.
Formerly Industrial Technology 110 Engineering Graphics.
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.

## 111 2-D Computer-Aided Drafting with AutoCAD (3) UC:CSU

Lecture 1 hour. Laboratory 3 hours.
Prerequisite: Mathematics 110 or equivalent skill level demonstrated through the mathematics placement process.
Advisory: Industrial Technology 110 or Engineering Graphics \& Design Technology 101.
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 EGD TEK 101 or an equivalent Engineering Graphics course, or through relevant industry experience.

131 CAD-Advanced Applications 3-D (1) CSU
Laboratory 3 hours.
Prerequisite: Engineering Graphics \& Design 101.
Corequisite: Engineering Graphics \& Design 111 or 210 or 310.
This laboratory class is designed for students who need additional experience using 2-D and/or 3-D CAD software. Students will explore advanced comput-er-aided design and drafting techniques in various applications related to mechanical design and manufacturing. Students must have some prior experience with CAD software and an understanding of engineering drawings, and may be taking a CAD course concurrently. Specific course content will vary by student.

210 3-D Computer-Aided Design (3) UC:CSU
Lecture 1 hour. Laboratory 5 bours.
Prerequisite: Mathematics 110.
Advisory: Industrial Technology 110 or Engineering Graphics \& Design 101.
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 EGD TEK 101 or an equivalent Engineering Graphics course, or through relevant industry experience.

## 310 Engineering Design (3) UC:CSU <br> Lecture 2 hour. Laboratory 2 bours. <br> Prerequisite: Industrial Technology 210 or Engineering Graphics \& Design 210.

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

## English

## ENGLISH PLACEMENT PROCESS

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.

## 21 English Fundamentals (3) (NDA)

## Lecture 3 hours.

Prerequisite: English 20 or English 87 or Learning Skills 2 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)

## Lecture 3 hours.

Satisfies reading and composition competency requirements for AA degree.
Prerequisite: English 21 with a grade of "C" or better; or appropriate skill level demonstrated through the English placement process.

English 28 introduces the student to the elements of composition and critical reading and is designed to assist the student to make a successful transition to English 101. The course emphasizes grammar, sentence structure, paragraph and essay writing.

## 32 College Literary Magazine Editing (2)

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 print shop experience doing make up 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 $\sigma$ hours.This course requires appropriate skill levels demonstrated through the ESL placement process. This an integrated skills course intended for students whose native language is not English. It 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.
This course requires appropriate skill levels demonstrated through the ESL placement process. This course is 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. It also 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.
This course is specifically for students whose first language is not English. It 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 bours.

Prerequisite: Appropriate skill level demonstrated through the ESL placement process, or English 84 with a grade of "C" or better.
This course is specifically for students whose first language is not English. It continues to work on the fundamentals of English as a second language. It 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.
This course is specifically for students whose first language is not English. It continues to work on the fundamentals of English as a second language. It 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.

This is a reading and writing skills course designed for advanced ESL students. It includes reading and writing for comprehension, and exercises in critical reading and writing.

## 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.
(CSU GE Area A2 • IGETC Area 1A)

## 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.
(CSU GE Area A3 or C2 • IGETC Area 1B)

## 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. Develops critical thinking and writing skills beyond the level achieved in English 101 and emphasizes logical reasoning, analysis, and strategies of argumentation using expository prose as subject matter. Designed to improve critical thinking in written arguments by applying established modes of reasoning, analyzing rhetorical strategies, evaluating logical fallacies, and detecting propaganda techniques.
(CSU GE Area A3 • IGETC Area 1B)

## 127 Creative Writing (3) UC:CSU

## 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.
(CSU GE Area C2)

## 203 World Literature I (3) UC:CSU

## Lecture 3 hours.

Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: English 102 recommended but not required.
This course explores the works of great writers of the world from ancient times through the Renaissance.
(CSU GE Area C2 • IGETC Area 3B)

## 204 World Literature II (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of "C" or better.
Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
This course continues the study of English 205, covering English literature, poetry, and fiction from the 18th century to the 20th century. Major authors and cultural context are discussed. English 205 is not a prerequisite. Required for English majors.
(CSU GE Area C2 • IGETC Area 3B)

## 207 American Literature I (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: English 102 recommended but not required.
Surveys American literature from 1608 to the Civil War, emphasizing major writers and works.
(CSU GE Area C2 • IGETC Area 3B)

## 208 American Literature II (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)

## 210 The 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.
(CSU GE Area C2 • IGETC Area 3B)

## 211 Fiction (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
English 102 recommended but not required.
This course emphasizes selected great novels and short stories from French, German, Russian, English, American, and Spanish literature.
(CSU GE Area C2 • IGETC Area 3B)

## 214 Contemporary Literature (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of "C" or better. Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)

## 215 Shakespeare I (3) UC:CSU

## Lecture 3 hours.

Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)

## 216 Shakespeare II (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better. Advisory: English 102 recommended but not required. May be taken before English 215.
This course introduces the life and works of William Shakespeare, with emphasis on Shakespeare's milieu. It emphasizes detailed study of Shakespeare's later dramatic plays, especially the major tragedies.
(CSU GE Area C2 • IGETC Area 3B)

## 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 The Literature of American Ethnic Groups (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of "C" or better.
Advisory: English 102 recommended but not required.
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.
(CSU GE Area C2 • IGETC Area 3B)

## 239 Women in Literature (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of "C" or better.
Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)

## 240 Literature and the Motion Picture I (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: English 102 recommended but not required.
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.
(CSU GE Area C2 • IGETC Area 3B)

## 250 Mythology and Literature (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
Advisory: English 102 recommended but not required.
This class introduces the mythology of Western and Near-Eastern civilizations, broadened to include such other elements of folk tale as marches, fairy tale, legend, etiological tale, fable, myth, and motif.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)
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.
Advisory: 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.
(CSU GE Area C2 • IGETC Area 3B)
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.

UC Credit Limit: Any or all of these courses combined: maximum credit, 8 units.

## Environmental Design

## 101 Foundations of Design I (3) UC:CSU

Lecture 1 hour. Laboratory 5 hours.
First level architectural design studio. Students develop creative, conceptual and analytical skills by creating two and three dimensional projects. Learn to properly communicate architectural concepts through drawings, renderings, physical models, and computer 3-D modeling. Fundamental architectural formal and spatial design principles, theories, order, methodologies and sustainability are explored and incorporated into student projects. The profession of architecture and the practice of architects are clarified. Critical for students interested in pursuing a higher degree in architecture school or related design field. Recommended for all
art and interior design related fields. Great also as a general education course to develop the creative mind and problem solving skills. Students will also create a portfolio of their work.

102 Foundations of Design II (3) UC:CSU
Lecture 1 hour. 5 hours Laboratory. Prerequisite: Environmental Design 101
Second level architectural design studio. Students continue to develop creative, conceptual and analytical skills by designing more complex projects addressing multiple programmatic requirements, symbolism and contextualism. Drawing, rendering, computer and model making skills are further refined. Students will also create a portfolio of their work.

## Environmental Science

## 1 The Human Environment: Physical Processes (3) UC:CSU

Lecture 3 hours.
This course introduces students to the environmental mechanisms that constitute our planetary life support systems and the social, political and economic factors that are the root of many environmental problems. The fundamental science required to understand how environmental systems work is presented followed by analysis of the basic components of our life support systems and how we impact them. Additional topics will include an examination of the difference between science and technology and the promises and limits of technological solutions to environmental issues.
(CSU GE Area B1 or E • IGETC Area 5A)
2 The Human Environment: Biological Processes (3) **UC:CSU
Lecture 3 hours.
This course introduces students to the biological aspects of our environmental systems. Study will focus on our large-scale systems including populations and ecosystems and small-scale issues such as nutrition and toxicity. A portion of the course will be dedicated to examining the ability of species to adapt: leading to issues such as pesticide and antibiotic resistance. Global population will be examined through the lens of population dynamics. These topics will form a foundation for discussing the dynamic interplay between ecosystems, populations and economics. Upon completion of the course, students will develop an appreciation of the problems facing humans as we attempt to set environmentally meaningful standards for toxins and how important concepts such as nutrition, toxicity, birth defects and cancer rates relate to our environmental life support systems.
(CSU GE Area B2 • IGETC Area 5B)

## 7 Introduction to Environmental Geology (3) UC:CSU

Lecture 3 hours.
Same as Geology 10. Credit not given for both courses.
This course provides a survey of the relationships between humans and the environment, including a review of natural, geological processes and effects. Topics include a discussion of the hazards and risks associated with catastrophic geologic events like earthquakes, floods, landslides and volcanoes. Mineral, energy, soil and water resources will be discussed, the future of these resources discussed and the impacts of their extraction and consumption investigated.
(CSU GE Area B1 • IGETC Area 5A)

## 19 The Human Environment: Biological Processes Laboratory (1)

Laboratory 3 hours.
Prerequisite: Environmental Science 2.
Corequisite: Concurrent enrollment in Environmental Science 2.
Through practical demonstrations of environmental impacts to biological systems, students critically evaluate the impacts and develop potential solutions.
Topics such as: human population and resource consumption, sustainable farming, and extinction are explored.

## 31 Energy and Power (3) UC:CSU

## Lecture 3 hours.

This course provides an overview of energy and power as it pertains to modern societies. Topics include the thermodynamics of energy conversions, modern energy use and the environmental impacts of various energy sources. Embodied energy, energy conservation and life-cycle analysis will be included as This course will encourage students to examine their own energy use in light of sustainability.

## 32 Survey of Environmental Regulations (3) CSU

## 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) CSU

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 interpretation of water quality reports will also be examined.

## 34 EPA Methods for Environmental Analysis (4) CSU

## Lecture 3 hours. Laboratory 2 hours.

Same as Chemistry 34. Credit not given for both courses.
Students learn sample collection and preparation of geological, water and atmospheric sample and analyze environmental samples for specific pollutants utilizing specialized instrumental techniques and 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) <br> Lecture 0.75 hours. Laboratory 0.5 hours.

This course 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 is divided between 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 285 Directed Study - Environmental Science (2) CSU 385 Directed Study - Environmental Science (3) CSU 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.
Students examine the principles of money, credit, banking, and the role of the Federal Reserve System and government policy on the financial environment. Financial instruments, interest rates, capital management, money and capital markets and currency fluctuations and hedging for global business are analyzed including detailed evaluations of the time value of money, and its application to calculations in personal and business finance.

## 2 Investments (3) CSU

## Lecture 3 hours.

Students analyze 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.
Students examine the concepts and tools necessary for the rational allocation of personal resources. 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 are emphasized.

## French

## 1 Elementary French I (5) UC:CSU

Lecture 5 hours.
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

This course introduces the fundamentals of pronunciation and grammar, practical vocabulary and useful phrases. It focuses upon the ability to understand, speak, read, and write in simple French and 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.

## (CSU GE Area C2)

## 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.
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.
This course 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 and 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.

## (CSU GE Area C2 • IGETC Area 6A)

## 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.
Note: Concurrent enrollment in French 8 is strongly recommended for nonnative speakers.
Not offered every semester.
This course completes the study of basic French grammar. There will be continued emphasis upon French pronunciation, practical vocabulary, and useful phrases. This course also stresses the ability to understand, speak, read, and write in intermediate French. It includes more challenging texts and continued improvement in writing and speaking through written and oral dialogues. Further exposure of French culture is used 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.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 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 nonnative speakers.
Not offered every semester.
This course expands the structural concepts acquired in French 1, 2, 3. It develops additional vocabulary to maximize comprehension and expression skills. It also provides depth in the study of France and the Francophone world's culture and literature with wider range of reading material. The course emphasizes oral discussions and presentations as well as written compositions and analysis.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 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 nonnative speakers.
Not offered every semester.
This course expands the structural concepts acquired in French 4. It develops advanced vocabulary to maximize comprehension and expression skills. It also provides greater depth in the study of France and the Francophone world's culture and literature with wider range of readings. The course emphasizes oral discussions and presentations as well as written compositions and analysis on more complex topics.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 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 nonnative speakers.
Not offered every semester.
This course provides a review or advanced structures. Some important texts from the seventeenth century through the present time are analyzed. Special emphasis is placed on oral discussions and presentations as well as written essays and analysis of the literature and culture of France and the Francophone world.
(CSU GE Area C2 • IGETC Area 3B +6 A)

## 8 Conversational French (2) CSU

## 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.
This course continues to stress the fundamentals of French pronunciation. It develops conversational skill and fluency through a review of basic French gram$\operatorname{mar}$ (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
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)

25 Introduction to Geographic Information Systems Laboratory (4) CSU
Lecture 2 hours. Laboratory 4 hours.
Advisory: Computer Science 501.
Same as Geography 25. Credit not given for both courses.
Using Geographic Information Systems (GIS), a computer-based tool that uses spatial (geographic) data, students analyze and solve real-world problems. In this course, student examine the basic principles and techniques of GIS, including: computer representation of geographic data, vector and raster data models, map projections, coordinate systems, spatial analysis, and map design. Students apply the theoretical underpinnings of GIS by practicing those concepts and techniques in the laboratory portion of the course. The GIS software ArcGIS by Esri is used.

## 33 Intermediate GIS Applications: ArcView (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Advisory: Completion of Geog/GIS 25. Same as Geography 33. Credit not given for both courses.
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.
Prerequisites: Geog/GIS 25 with a grade of "C" or better or equivalent. Same as Geography 36. Credit not given for both courses.
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 ArcGIS software.

## 37 Introduction to Global Positioning Systems (GPS) (1) CSU

Lecture 1 hour.
Same as Geography 37. Credit not given for both courses.
In this course, students use a hand-held Global Positioning System (GPS) unit in the field. The terminology, hardware and technology used in GPS are introduced, including the fundamentals of operating a hand-held GPS unit. Students apply 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.
Prerequisites: Geog/GIS 25 with a grade of "C" or better or equivalent. Same as Geography 38. Credit not given for both courses.
Student will 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.

Prerequisite: Geography 38 or GIS 38 with a grade of "C" or better or equivalent.
Same as Geography 40. Credit not given for both courses.
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.
This course is a spatial study of the Earth's dynamic physical systems and processes using an Earth Systems Science approach. Topics include: Earth-sun geometry, weather, climate, water, landforms, soil, and the biosphere. Emphasis is on the interrelationships among environmental and human systems and processes and their resulting patterns and distributions. Tools of geographic inquiry are also briefly covered; they may include: maps, remote sensing, Geographic Information Systems (GIS) and Global Positioning Systems (GPS).

## (CSU GE Area B1 • IGETC Area 5A)

## 2 Cultural Elements of Geography (3) UC:CSU

## Lecture 3 hours.

May be offered as an honors section.
This course is a study of diverse human populations, their cultural origins, diffusion and contemporary spatial expressions. Topics include: demography, languages and religions, urbanization and landscape modification, political units and nationalism, and economic systems and development. Tools of geographic inquiry may include maps, satellite imagery, and geographic information systems.
(CSU GE Area D • IGETC Area 4)


## 3 Introduction to Weather and Climate (3) UC:CSU

Lecture 3 hours.
Same as Meteorology 3. Credit not given for both.
Introduction to the Earth's atmosphere using an Earth Systems Science approach. Topics include atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclones, weather forecasting, climate and climate change. Tools used of inquiry may include weather maps, satellite imagery, and geographic information systems.
(CSU GE Area B1 • IGETC Area 5A)

## 7 World Regional Geography (3) UC:CSU

## Lecture 3 hours.

This course will survey the world's cultural regions and nations as interpreted by geographers, including physical, cultural, and economic features. The course will emphasize spatial and historical influences on population growth, transportation networks, natural environments, and significant features of regions.
(CSU GE Area D • IGETC Area 4)

## 14 Geography of California (3) UC:CSU

## Lecture 3 hours.

This course Surveys the physical and cultural landscapes of California with emphasis on human-environment interaction and the natural, socio-political, economic and demographic forces that have shaped the state. The course deals with the history of the state, settlement and land-use patterns, economic activities, resource use, transportation and trade, as well as California's role in the new global economy. The political, economic, environmental and demographic challenges facing the state are also discussed. Optional field trips will be offered.
(CSU GE Area D • IGETC Area 4)

## 15 Physical Geography Laboratory (2) *UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Prerequisite: Geography 1 with a grade of " $C$ " or better.
Corequisite: Geography 1.
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.
(CSU GE Area B3 • IGETC Area 5C)

## 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 19 Introductory Meteorology Laboratory (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Prerequisite: Geography 3 or Meteorology 3.
Corequisite: Geography 3 or Meteorology 3.
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.
(CSU GE Area B3 • IGETC Area 5C)

## 23 Severe and Hazardous Weather (3) CSU

## Lecture 3 hours.

Same as Meteorology 5. Credit not given for both courses.
Students will learn basic principles about the atmosphere as it relates to severe, hazardous, and unusual weather events. Emphasis is first given to the properties and measurements of severe weather conditions, maps and computer simulations of severe weather events, and basic forces and dynamics of the atmosphere during severe and hazardous weather. Then a series of severe, hazardous, and unusual weather phenomena will be discussed, including thunderstorms, lightning, hailstorms, downbursts, tornadoes, tropical cyclones and hurricanes, floods, drought, and extreme mountain weather. Tools used of inquiry may include weather maps, radar and satellite imagery, and geographic information systems.
(CSU GE Area B1 • IGETC Area 5A)

25 Introduction to Geographic Information Systems and Laboratory (4) CSU
Lecture 2 hours. Laboratory 4 hours.
Same as GIS 25. Credit not given for both courses.
Using GIS (Geographic Information Systems), a computer-based tool that uses spatial (geographic) data, students analyze and solve real-world problems, Students examine the basic principles and techniques of GIS. Computer representation of geographic data, vector and raster data models, map projections, coordinate systems, spatial analysis, and map design are explored. Students practice the theoretical underpinnings of GIS in the laboratory portion of the course. The GIS software ArcGIS by Esri is used.

## 33 Intermediate GIS Applications: ArcView (3)

Lecture 2 hours. Laboratory 2 hours.
Advisory: Geog/GIS 25.
Same as GIS 33. Credit not given for both courses. 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.
Prerequisite: Geog/GIS 25 with a grade of "C" or better or equivalent. Same as GIS 36. Credit not given for both courses.

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 ArcGIS software.

## 37 Introduction to Global Positioning Systems (GPS) (1) CSU

Lecture 1 hour.
Same as GIS 37. Credit not given for both courses.
Students are introduced to the basic use of a hand-held Global Positioning System (GPS) unit in the field, including the terminology, hardware and technology used in GPS. While operating a hand-held GPS unit, Students examine 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.
Prerequisite: Geog/GIS 25 with a grade of "C" or better or equivalent. Same as GIS 38. Credit not given for both courses.
Student will 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
285 Directed Study - Geography (2) CSU
385 Directed Study - Geography (3) CSU
Conference 1 hour per unit.
Allows students to pursue Directed Study in Geography on a contract basis under the direction of a supervising instructor.
*UC Credit Limit: Credit for Geography 1 and 15, or for Geography 17.

## Geology

See also Environmental Science and Oceanography.

## 1 Physical Geology (3) *UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Physical geology is an introduction to the composition and dynamics of the earth from the atomic scale of minerals to the global scale of plate tectonics. Topics include the composition of minerals and rock, volcanism, earth structures, earthquakes, erosion and surface processes, geologic time, geologic hazards, and plate tectonics. Successful completion of physical geology prepares the student to recognize, understand, and appreciate processes which continually change our earth.
(CSU GE Area B1 • IGETC Area 5A)

## 2 Earth History (3) UC:CSU

Lecture 3 hours.
This course is an introduction to the history of Earth from its origin to the present. This course will cover the history of the major systems of Earth: the solid planet, atmosphere, hydrosphere/cryosphere and the biosphere. Emphasis will be placed on the history of the life and landforms of North America. Topics include the tectonic, climatic and biological evolution of the planet; major geochemical reservoirs and fluxes; geological time and stratigraphy; a systematic study of tectonic processes preserved in the rock record and the evolutionary history of life including plants, invertebrates, fish, dinosaurs and mammals. Field trips may be taken.
(CSU GE Area B1 • IGETC Area 5A)
6 Physical Geology Laboratory (2) *UC:CSU
Lecture 1 hour. Laboratory 2 hours.
Corequisite: Geology 1.
This course provides students the laboratory compliment to Geology 001: Physical Geology. Laboratory exercises explore the composition and dynamics of the earth from the atomic scale of minerals to the global scale of plate tectonics. Lab topics include the composition of minerals and rocks, volcanism, earth structures, earthquakes, erosion and surface processes, geologic time, geologic hazards, and plate tectonics. Successful completion of physical geology laboratory prepares the student to recognize, understand, and appreciate processes which continually change our earth.
(CSU GE Area B3 • IGETC Area 5C)

## 7 Earth History Laboratory (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Prerequisite: Geology 2 with a grade of "C" or better.
Corequisite: Geology 2.
This is 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. This course will include methods used to determine events in Earth history and reconstruct past environmental conditions. Field trips will be taken. Strongly recommended for the student who is enrolled in or has completed Geology 2.
(CSU GE Area B3 • IGETC Area 5C)

## 8 Earth Materials: Mineralogy and Crystallography (4) CSU

Lecture 3 hours. Laboratory 3 hours.
Prerequisite: Geology 1 and 6 and Chemistry 60 with a grade of "C" or better.
This course provides students with an introduction to Earth and planetary materials with an emphasis on mineralogy and crystallography. The lecture portion of the course will introduce students to the basic concepts of mineralogy including crystallography, crystal chemistry, mineral identification and classification, genesis of the major rock-forming minerals, paragenesis of ore deposits and plate tectonic associations of minerals. The laboratory portion of the course will introduce students to the identification of common silicate and non-silicate minerals in hand sample and in rocks, principles of optical mineralogy and exercises in phase equilibrium.

## 10 Introduction to Environmental Geology (3) UC:CSU

Lecture 3 hours.
Same as Environmental Science 7. Credit not given for both courses.
This course provides a survey of the relationships between humans and the environment, including a review of natural, geological processes and effects. Topics include a discussion of the hazards and risks associated with catastrophic geologic events like earthquakes, floods, landslides and volcanoes. Mineral, energy, soil and water resources will be discussed, the future of these resources discussed and the impacts of their extraction and consumption investigated. This course is the Same as Environmental Science 007 . Credit not awarded for both courses.

## (CSU GE Area B1 • IGETC Area 5A)

## 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.
(CSU GE Area B1)

## 15 Geological Catastrophes (3) CSU

## Lecture 3 hours.

This course provides a survey of the geological and tectonic forces behind the most common natural disasters on Earth. The course will study how earthquakes, tsunami, volcanoes, mass movements, weather-related phenomena, wildfires and floods are generated, how they affect populations and specific hazard mitigation techniques. Special emphasis will be placed on the disaster risk of the Los Angeles region.

## 22A Geology Field Study - Mojave (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 tec-
tonic, 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.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, \& D.)

## 22B Geology Field Study - Basin and Range (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.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, \& D.)

## 22C Geology Field Study - Yosemite (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.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, \& D.)

## 22D Geology Field Study - Death Valley (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.
(CSU GE Area B3 • Upon completion of Geology 22 A, B, C, \& D.)

## 22E Geology Field Study - Joshua Tree (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.

## 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
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 and 6 combined: maximum 5 units.

## Health

## 2 Health and Fitness (3) *UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Students examine physical, holistic, and psychological wellness, with an emphasis on disease prevention, nutrition, sexuality, reproduction, drugs, alcohol, tobacco, aging, stress management and weight control. Individual improvement using cardiovascular, flexibility, body composition and strengthening activities is emphasized in the physical fitness segment of the course.
(CSU GE Area E)

## 7 Physical Fitness and Nutrition (3) *UC:CSU

## Lecture 3 hours.

This course considers the nature and importance of physical fitness and good nutrition in one's personal and social development. Various types of physical activities are analyzed and evaluated. Appropriate selection of nutritive foods for weight control and ergo-genics are covered. Fad diets and food supplements are analyzed.

## 8 Women's Personal Health (3) *UC:CSU

## Lecture 3 hours.

Women's Personal Health addresses Socio-cultural influences, 7-dimensions of wellness, holistic health options, and factors that contribute to the overall well-being of women's health such as: breast and cervical cancer, cardiovascular disease risk factors, stress management, menopause/PMS, birth control/pregnancy, Sexually Transmitted Diseases and disease prevention.
(CSU GE Area E)
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.
Students examine 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.
(CSU GE Area E)
*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.
Students analyze major elements in Western heritage from the earliest Mesopotamian civilizations through the religious reformations of the sixteenth century. The ideas and institutions central to western civilization are examined through reading and critical discussion, with representative contemporary documents and writings of enduring interest.
(CSU GE Area C2 • IGETC Area 3B)

## 2 Introduction to Western Civilization II (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Students examine the major elements of Western heritage from the Age of Absolutism in the 17th century to the present. Ideas and institutions central to western civilization are analyzed through reading and critical discussion with representative contemporary documents and writings of enduring interest.
(CSU GE Area C2 • IGETC Area 3B)

## 5 History of the Americas I (3) UC:CSU

Lecture 3 hours.
Students survey the political, economic, social, and intellectual history of Latin America from the Age of Exploration and conquest of the indigenous people of the Americas through the colonial period.
(CSU GE Area C2 • IGETC Area 3B)

6 History of the Americas II (3) UC:CSU
Lecture 3 hours.
Students explore the political, economic, social, and intellectual history of Latin America from the Age of Exploration and conquest of the indigenous people of the Americas through the colonial period.
(CSU GE Area C2 • IGETC Area 3B)
11 Political and Social History of the United States I (3) *UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students survey the history of the United States from pre-Columbian times to 1865. Political and social events as well as the development of Americas central institutions are emphasized.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-1)

12 Political and Social History of the United States II (3) **UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students analyze the political, economic, social, and intellectual history of the United States from the Civil War through the Twentieth Century.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-1)

## 13 The United States in the Twentieth Century (3) **UC:CSU

Lecture 3 hours.
Students analyze 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.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-1)

41 The African American in the History of the United States I (3) *UC:CSU Lecture 3 hours.
Students analyze 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.
(CSU GE Area D•IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-1)

42 The African American in the History of the United States II (3) **UC:CSU

## Lecture 3 hours.

This course Surveys the history of African-Americans in the United States and their relationship with major American institutions. Covering the period the that spans from the end of the civil war to the present time, This course emphasizes the role African-Americans played in the social and political development of American civilization.
(CSU GE Area D • IGETC Area $4 \bullet$ Satisfies CSU American Ideals Graduation Requirement US-1)

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 their culture and institutions to 1865, and Surveys the contributions of the Mexican-Americans to the United States, with particular emphasis on the Southwest, and the causes and consequences of the Mexican-American War.
(CSU GE Area C2 or D • IGETC Area 3B or 4 • Satisfies CSU American Ideals Graduation Requirement US-1)

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 1850 s , and analyzes the aftermath of the Mexican-American War, legal and illegal immigration from Mexico, the civil rights movement, and the contributions of the MexicanAmericans to the American experience. Includes a discussion of basic American institutions.
(CSU GE Area C2 or D • IGETC Area 3B or $4 \bullet$ Satisfies CSU American Ideals Graduation Requirement US-1)

## 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.
(CSU GE Area D • IGETC Area $4 \bullet$ Satisfies CSU American Ideals Graduation Requirement US-1)

## 56 American Environmental History (3) UC:CSU

Lecture 3 hours.
The course Surveys the environmental history of the United States from the pre-Columbian era to the present, including an examination of the economic, social and political consequences of environmental degradation and the responses to those disasters by governmental and other bodies.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area C2 or D • IGETC Area 3B)
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.
(CSU GE Area C2 or D • IGETC Area 3B or 4)

185 Directed Study - History (1) CSU
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. ${ }^{* *} U C$ 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

Lecture 3 hours.
May be offered as an honors section.
An interdisciplinary program in the liberal arts, which covers a historical period such as the Renaissance or Ancient Egypt from the perspectives of philosophy, art, music, literature, architecture, science, etc.
(CSU GE Area C1 or C2 • IGETC Area 3B)

## 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.
(CSU GE Area C 1 or $\mathrm{C} 2 \bullet$ IGETC Area 3 B )

## 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 Graphics \& Design Technology - Listed separately
Engineering Design and Technology (includes CAD)
Machine Shop/CNC (includes CAM)
Welding
Industrial Technology classes are affiliated with the Society of Manufacturing Engineers and American Welding Society.

## 30 Workplace Safety (1)

Lecture 1 bour.
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) <br> Lecture 3 hours.

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

## 33 Energy Auditing and Management (3) <br> 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) CSU

## Lecture 3 hours. Laboratory 3 hours.

An introduction to the basics of solar photovoltaic and wind power systems. Examines how these technologies generate electricity, what must be considered in locating these systems, differing component designs, transmission and control of generated electricity, connection to the grid, storage of electrical energy and their application to motors.

185 Directed Study - Industrial Technology (1) CSU
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.

## 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.

## 212 Computer-Aided Design Projects Laboratory (1)

## 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.

## 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 enc program preparation equipment. Students will develop enc 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)

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)

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)

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.

## Industrial Technology (Welding)

## 161 0xy-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.
Prerequisite: Industrial Technology 161.
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.

## 261 Arc Welding I (3)

Lecture 1 hour. Laboratory 5 hours.
Prerequisite: Industrial Technology 161.
Gives the student a basic foundation in the principles and practices associated with shielded metal are 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.
Prerequisite: Industrial Technology 261.
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 bours.
Prerequisite: Industrial Technology 261 and 262.
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. Advisory: Industrial Technology 162, 262, and 361.
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.
Advisory: Industrial Technology 261 and 262.
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.
Advisory: Industrial Technology 261, 262, and 461.
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.

## Insurance

## 101 Principles of Property and Liability Insurance (3)

Lecture 3 hours.
Students examine basic information concerning various aspects of Property and Liability Insurance. The fundamentals of insurance, including types of insurers, institutions that provide insurance, regulations, and measurements of financial performance are introduced in the first segment of the course. Insurance operations, such as marketing, underwriting, and claims are covered in the second segment of the course. Insurance contracts, loss exposure, and risk management are reviewed in the final segment of the course.

## 102 Personal Insurance (3)

Lecture 3 hours.
Students examine basic information regarding personal insurance as it relates to 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. Valuable personal insurance information for anyone who does not possess the knowledge of how to handle his/her personal insurance needs is reviewed.

## 103 Commercial Insurance (3)

## Lecture 3 hours.

Students review basic information regarding the whole area of commercial insurance, such as 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.
Students engage in 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. The practical application of basic international trade topics is emphasized.

## 6 International Marketing I (3) CSU

Lecture 3 hours.
Students analyze the challenges of marketing consumer and industrial products in the global marketplace and the most effective approaches to these challenges. 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 are explored.

## 18 Basics of Exporting (1)

Lecture 1 hour.
Students are introduced to the basic information needed for an understanding of the export process. The most important U.S. Government export regulations are reviewed, which gives the student an overview of export documentation and terminology.

## 19 Basics of Importing (1)

Lecture 1 hour.
Students develop a solid understanding of the import process, including import documentation, and U.S. Government customs regulations. Students are guided through the process of creating a basic import business plan.

## 22 International Management (3)

## Lecture 3 hours.

Students examine international management principles with an overview of global and multinational organizations. This issues of international human resource, operational topics, marketing decisions, strategic planning, and cross-cultural issues are analyzed.

## Italian

## 1 Elementary Italian I (5) UC:CSU

## Lecture 5 hours.

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.
This course introduces the fundamentals of pronunciation and grammar, practical vocabulary and useful phrases. This course emphasizes the ability to understand, speak, read and write in simple Italian. It exposes the student to the culture of Italy. English is used whenever it is necessary to explain difficult grammatical concepts. Otherwise the class is conducted in Italian. It corresponds to the first year of High School Italian.
(CSU GE Area C2)

## 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.
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.
This course 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. The course incorporates reading and writing for comprehension about the culture and customs of Italy. It corresponds to the second year of High School Italian.
(CSU GE Area C2 • IGETC Area 6A)
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.
Note: Concurrent enrollment in Italian 8 is strongly recommended for nonnative speakers.
Normally offered in the Fall semester only.
This course 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. It continues the study of Italian culture, life and civilization and provides special attention to representative Italian literature. The course corresponds to the first three years of High School Italian.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 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 nonnative 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 maximizing 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.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 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 nonnative speakers.
Normally offered in the Spring semester only
This course introduces selected works of Italian literature, interest and historical of impact. It emphasis is on individual study, class discussion and research. The information is shared in the form of reports both oral and written. This course addresses appropriate advanced composition, grammar and style.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 8 Conversational Italian (2) CSU

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.

This course is designed for students who have at least the equivalent of two semesters of college level Italian. The primary aim of the course is to develop the speaking and listening skills through a communicative, collaborative and cultural approach. In order to develop these skills the primary language of instruction in this course is Italian.

## 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
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.

Note: Students with previous knowledge of Japanese should not enroll in Japanese 1 or 2, but in a bigher level Native speakers should enroll in Japanese 3 or 4.

This course stresses the fundamentals of oral comprehension and pronunciation, basic vocabulary, useful phrases and the ability to speak, read and write basic Japanese. It includes basic custom facts, culture and geography.
(CSU GE Area C2)

## 2 Elementary Japanese II (5) UC:CSU

Lecture 5 hours.
Prerequisite: Japanese 1 with a grade of " $C$ " or better.
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.
This course continues the study of fundamentals of oral comprehension, basic vocabulary and the ability to speak, read and write basic Japanese. It includes orientation to customs, culture and geography.
(CSU GE Area C2 • IGETC Area 6A)

## 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.
(CSU GE Area C2 • IGETC Area 3B + 6A)
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.
(CSU GE Area C2 • IGETC Area 6A)

## 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
285 Directed Study - Japanese (2)
385 Directed Study - Japanese (3)
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.
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, the internet, advertising and public relations. Course content discusses relationships, ethics, rights and responsibilities of media in today's society.
(CSU GE Area D • IGETC Area 4)

## 101 Collecting and Writing News (3) CSU

Lecture 3 hours.
Advisory: English 21, 28, or 101. Concurrent enrollment in Journalism 100 for all journalism majors.
Stresses gain 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.
Advisory: English 21, 28, or 101.
This is a course for journalism majors, freelance writers and anyone who wants to learn to write materials for magazines. Emphasis is placed on writing articles, features, editorials, or reviews suitable for publication. Students also receive practice in editing and the use of illustrations.

## 202 Advanced Newswriting (3) CSU

Lecture 3 hours.
Prerequisite: Journalism 101 with a grade of "C" or better.
Advisory: English 21, 28, or 101.
Students practice the principles of journalism through writing specialized types of newspaper and online stories. Mastery of fundamental reporting techniques, interpretative writing skills, editorial writing, and feature writing are emphasized. This course is required for all journalism majors.

## 217 Publication Laboratory (2) CSU

## Laboratory 6 hours.

Prerequisite: Journalism 101 with a grade "C" or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218 or 219 or 220 or Photography 20 or 21 or Broadcasting 10.
Student reporters, editors, photographers and other visual student journalists learn newspaper production techniques through the publication of the campus newspaper and website, as well as other student-produced publications. Reporters will focus on basic reporting and writing for the campus newspaper and website and other student-run publications, while photographers focus on gathering images for publications. Other visual journalists will focus on beginning layout and design or cartooning and illustration.

## 218 Practical Editing (3) CSU

Lecture 1 hour. supervised activity 6 hours.
Prerequisite: Journalism 100 and 202 with grades of " $C$ " or better.
Corequisite: Concurrent enrollment in Journalism 217.
Advisory: Computer Science 501 or Library Science 102. English 21, 28, or 101.
Students learn 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

## Laboratory 3 hours.

Prerequisite: Journalism 100, 101 and 202 with grades of "C" or better.
Corequisite: Concurrent enrollment in Journalism 218 or Photography 21. Advisory: English 21, 28, or 101.
Students analyze editorial problems and write editorials for the College newspaper. Formulation of editorial policy, first-person commentaries, third-person commentaries, editorial cartoons, letters to the editor, corrections/clarifications, encouraging reader participation, ethics, and writing skills are emphasized. This course is designed for College newspaper editors.

## 220 Magazine Production (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: Journalism 101 with a grade of 'C' or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218, or Photography 20 or 21.
Students will learn the theory of writing, editing and producing 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. Students will create print and or online editions of The Bull magazine.

## 223 Magazine Writing (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Students will learn the theory of writing for a magazine. Focus is on research, reporting and writing. Writing and editing of copy, working with editors, photographers or illustrators, preparing articles for production; arranging production schedules; and other aspects of publishing are included.

## 227 Field Work Laboratory (2) CSU

Laboratory 6 hours.
Prerequisite: Journalism 101 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218 or 219 or 220, or Photography 20 or 21, or Broadcasting 10.
Student reporters, editors, photographers and other visual journalists practice and refine intermediate skills in the publication of the campus newspaper, website and other student-run publications. The focus of the course is the preparation of specialized content for print, online and social media. Students will apply newsgathering skills to one or more media platforms.

## 229 Editorial Techniques for Staff Editors (1) CSU

Laboratory 3 hours.
Prerequisite: Journalism 101 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218 or 238 or 248 or 258 or 268, or Photography 21.

## Advisory: English 21, 28, or 101.

This course offers instruction for campus publication editors in editorial writing, photo illustrations and editorial cartoons, as well as analysis of editorial problems. An emphasis is placed on formulating editorial policy for campus publications.

## 238 Editing for Publications (3) CSU

Lecture 1 hour. Laboratory 6 hours.
Prerequisite: Journalism 202 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 217.
Advisory: Computer Science 501 or Library Science 102. English 21, 28, or 101.
This course provides practical instruction and practice in copy editing for print and online publications as required to produce the campus news print and online publications. Print and online editions are evaluated and critiqued in regularly scheduled student staff meetings.

## 239 Opinion Writing Techniques for Staff Editors (1)

Laboratory 3 hours.
Prerequisite: Journalism 101 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218 or 238 or 248 or 258 or 268, or Photography 21.
Advisory: English 21, 28, or 101.
This course offers instruction for campus publication editors in column writing, as well as analysis of editorial problems. An emphasis is placed on formulating editorial policy for campus publications.

## 248 Investigative Journalism (3) CSU

Lecture 1 hour. Laboratory 6 hours.
Prerequisite: Journalism 202 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 217.
Advisory: Computer Science 501 or Library Science 102. English 21, 28, or 101.
This course provides instruction and practice in developing, researching and writing investigative articles for the student print and online campus publications. Print and online editions are evaluated and critiqued in regularly scheduled student staff meetings.

## 249 Management Techniques for Staff Editors (1) CSU

Laboratory 3 hours.
Prerequisite: Journalism 101 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 202 or 218 or 238 or 248 or 258 or 268, or Photography 21.
Advisory: English 21, 28, or 101.
This course offers instruction for campus publication editors in management techniques and editorial problems as well as editorial writing, photo illustrations and editorial cartoons. An emphasis is placed on formulating editorial policy for campus publications.

## 251 Visual Communication in Mass Media (3) *UC:CSU

## Lecture 3 hours.

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.

## (CSU GE Area D • IGETC Area 4)

## 255 Online Journal Production (The Roundup Online) (2) CSU

Lecture 1 hour. Laboratory 2 hours.
Advisory: Journalism 101 and Photography 101.
Students will study 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.

## 258 Blogging and Social Media (3) CSU

Lecture 1 hour. Laboratory 6 hours.
Prerequisite: Journalism 202 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 217.
Advisory: Computer Science 501 or Library Science 102. English 21, 28, or 101.
This course provides practical instruction and practice in developing, producing, writing and marketing blogs as part of the student online campus publications. Online editions are evaluated and critiqued in regularly scheduled student staff meetings.

## 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.

## 268 Computer Assisted Reporting, Editing and Design (3) CSU

Lecture 1 hour. Laboratory 6 hours.
Prerequisite: Journalism 202 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Journalism 217.
Advisory: Computer Science 501 or Library Science 102. English 21, 28, or 101.
This course provides practical instruction and practice in working with content management systems, data collection for storytelling and creating visual elements through data for the student print and online campus publications. Print and online editions are evaluated and critiqued in regularly scheduled student staff meetings.

## 185 Directed Study - Journalism (1) CSU <br> 285 Directed Study - Journalism (2) CSU <br> 385 Directed Study - Journalism (3) CSU <br> Conference 1 hour per unit.

Allows students to pursue Directed Study in Journalism on a contract basis under the direction of a supervising instructor.
*UC Credit Limit: Journalism 100 and 251 combined maximum credit one course.

## Kinesiology

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Kinesiology department, families have been created as follows:

## KINESIOLOGY FAMILY NAMES AND COURSE NUMBERS:

Aerobics, Circuit Training \& Sport Specific Strength Training.

KIN 229, 250, 327, 329, 350
Aquatics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . KIN 201
Court Sports . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . KIN 266, 271, 291
Individual Activities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . KIN 268
Martial Arts/Combatives. . . . . . . . . . . . . . . . . . . . . . KIN 316, 316-2, 316-3, 316-4
Mind/Body Conditioning. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . KIN 251
Team Sports . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . KIN 287, 289
201 Swimming Skills (1) *UC:CSU
Lecture 0.5 hour. Laboratory 1.5 hours.
Students develop and expand fundamental swimming skills. Water orientation, safety, poolside etiquette and components of fitness are reviewed. Students with all levels of swimming ability may participate.
(CSU GE Area E)

## 229 Body Conditioning Skills (1) *UC:CSU

## Laboratory 2 hours.

Students learn the procedures for evaluating fitness levels and become aware of the cognitive, affective, and psycho motor levels involved in learning a variety of exercise programs and techniques designed to improve their physical fitness.
(CSU GE Area E)

## 250 Weight Training Skills (1) *UC:CSU

## Laboratory 2 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.

## (CSU GE Area E)

## 251 Yoga Skills (1) *UC:CSU

## Laboratory 2 hours.

Students learn an ancient form of hatha yoga (the physical movement of yoga) along with breathing and meditation techniques. Brief lectures covering yoga history, diaphragmatic breathing, basic anatomical alignment of yoga poses, body awareness, and stress management are presented. Students practice the 25 basic asanas (yoga poses) with modifications to each asanas, and alignment principles (forward folds, twists, backbends, and standing poses, etc.).

## (CSU GE Area E)

## 266 Badminton Skills (1) *UC:CSU

Laboratory 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.
(CSU GE Area E)

## 268 Golf Skills (1) *UC:CSU

Laboratory 2 hours.
Students start with the basics of the golf grip, stance, swing, posture, and advance to the specifics of course etiquette, course management, driving, putting and chipping. Students with any golf skills, from beginning to advanced, may participate.

## 271 Tennis Skills (1) *UC:CSU

Laboratory 2 hours.
Students understand and practice the fundamentals of tennis through lecture, demonstration, group and individual drills, analysis, singles and doubles situations as well as competitive single and double matches. Nutrition and physical fitness are emphasized. Instruction and practice play is arranged to suit all skill levels. (CSU GE Area E)

## 287 Basketball Skills (1) *UC:CSU

Laboratory 2 hours.
Students practice all levels of the basic basketball skills of passing, dribbling, shooting, and rebounding in the context of individual and team offense and defense, rules, proper etiquette, terminology, and the components of fitness. (CSU GE Area E)

## 289 Soccer Skills (1) *UC:CSU

## Laboratory 2 hours.

Students practice fundamental soccer skills and learn the game rules, proper etiquette, terminology, game strategies, and the selection and care of equipment. Students are introduced to individual and team offense and defense as well as the five components of fitness.
(CSU GE Area E)

## 291 Volleyball Skills (1) *UC:CSU

Laboratory 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.
(CSU GE Area E)

## 316 Karate (1) *UC:CSU

Lecture 0.5 hour. Laboratory 2.5 hours.
Students practice the fundamental aspects of karate including basic kicking, punching, blocking, and grappling techniques. Through active participation, students improve in the basic five components of fitness: cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. (CSU GE Area E)

## 316-2 Karate II (1) CSU

Lecture 0.5 hour. Laboratory 2.5 hours.
Students continue their education in the fundamental aspects of karate including basic kicking, punching, blocking, and grappling techniques. The science behind martial arts such physiology and physics of how and why specific techniques apply in certain situations is emphasized. Through active practice, students improve in the basic five components of fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition.
(CSU GE Area E)

## 316-3 Karate III (1) CSU

Lecture 0.5 hour. Laboratory 2.5 hours.
Through this advanced course, students enhance physical skill and mental focus in the martial arts. Students gain knowledge of functional anatomy as it pertains to martial arts training and they engage in sport specific training.
(CSU GE Area E)

## 316-4 Karate IV (1) CSU

Lecture 0.5 hour. Laboratory 2.5 hours.
Students expand the skills and knowledge gained from the study of Karate in prior courses and engage in advanced martial arts training. Additionally, they enhance their communication skills through apprentice teaching in the martial arts and reinforce their knowledge of the origins of martial arts and the effects globalization has had upon them.
(CSU GE Area E)

## 327 Lifelong Fitness Lab (1) *UC:CSU

Lecture 0.5 hour. Laboratory 2.5 hours.
Through this physical fitness course, students design procedures for evaluating individual fitness levels. A progression of lifelong fitness exercises for all major muscle groups to improve cardiovascular fitness, muscular strength/endurance, flexibility and body composition are examined.

## 329 Body Conditioning (1) *UC:CSU

## Laboratory 3 hours.

Students develop body fitness with an emphasis on aerobics, proper nutrition, weight control, and strength training in accordance with the American College of Sports Medicine Guidelines. Using a variety of exercises and techniques, based on personal needs, students establish programs that achieve these goals.
(CSU GE Area E)

## 350 Weight Training (1) *UC:CSU

Laboratory 3 hours.
Students develop knowledge and understand the value of building muscle strength and endurance. Students are introduced to the five health related components of fitness: body composition, muscle strength, muscle endurance, flexibility, and cardiovascular fitness. Students learn to develop their own physical fitness program at any time in life based upon sound physiological principles. (CSU GE Area E)
*UC Credit Limit: Any or all of these Kinesiology Activity courses combined: maximum credit, 4 units.

## Kinesiology Athletics

## 503 Intercollegiate Athletics - Baseball (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Students perfect the following skills as they relate to intercollegiate athletic competition in baseball: throwing, fielding, hitting, base-running, and game strategies. (CSU GE Area E)

## 504 Intercollegiate Athletics - Basketball (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of Basketball. (CSU GE Area E)

## 508 Intercollegiate Athletics - Football (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of Football. (CSU GE Area E)

## 511 Intercollegiate Athletics - Soccer (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of Soccer. (CSU GE Area E)

## 512 Intercollegiate Athletics - Softball (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of softball. (CSU GE Area E)

513 Intercollegiate Athletics - Swimming and Diving (3) *UC:CSU - RPT 3
Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of Swimming and Diving.
(CSU GE Area E)

## 514 Intercollegiate Athletics - Tennis (3) *UC:CSU - RPT 3

Laboratory 10 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.
(CSU GE Area E)

## 516 Intercollegiate Athletics - Volleyball (3) *UC:CSU - RPT 3

Laboratory 10 hours.
Course offers instructional and competitive experiences in the sport of Volleyball.
(CSU GE Area E)

## 550-1 Intercollegiate Cheer/Yell Leaders/Marching Band (1) *UC:CSU - RPT 3

Laboratory 3 hours.
Students are introduced to the fundamental and advanced principles and theories of drill patterns, yell and cheer leading routines. Demonstration and practice of yell/cheer leading skills are emphasized. 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.
(CSU GE Area E)

## 552 Intercollegiate Sports - Conditioning \& Skills Training (1) *UC:CSU - RPT 3 <br> Laboratory 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. (CSU GE Area E)

553 Intercollegiate Football - Fitness \& Skills Training (1) *UC:CSU - RPT 3 Laboratory 3 hours.
This course is intended for the student athlete and designed to provide focused strength and conditioning exercises, emphasize safety and injury prevention---and present new rules and techniques for the sport.
(CSU GE Area E)

## 556 Intercollegiate Basketball - Fitness \& Skills Training (1) *UC:CSU - RPT 3

 Laboratory 3 hours.This course is intended for the student athlete and designed to provide focused strength and conditioning exercises with an emphasis on safety, injury prevention, and new rules and game plays for basketball.
(CSU GE Area E)

## 558 Intercollegiate Soccer - Fitness \& Skills Training (1) *UC:CSU - RPT 3

 Laboratory 3 hours.This course is designed for the student athlete and intended to provide focused strength and conditioning exercises with an emphasis on safety, injury prevention, and new rules and game plays for soccer.
(CSU GE Area E)

## 560 Intercollegiate Swimming/Diving - Fitness \& Skills Training (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.
(CSU GE Area E)
*UC Credit Limit: Any or all of these Kinesiology Activity courses combined: maximum credit, 4 units.

## Kinesiology Major

## 100 Introduction to Kinesiology (3) UC:CSU <br> Lecture 3 hours.

This course is an introduction to the interdisciplinary approach to the science and study of human movement. This course provides an orientation to various educational pathways, requirements, and career opportunities in Kinesiology in the areas of teaching, coaching, therapeutic exercise, fitness and health, and sport management professions. Basic concepts of the Kinesiology discipline and an overview of the relevance of foundational sub-disciplines will be discussed. Issues, challenges, and current/future trends are also addressed.
(CSU GE Area E)

## 101 First Aid and CPR (3)

(Pending State approval)
Lecture 3 hours.
Students will demonstrate emergency first aid which includes situations where help is delayed, during natural disasters and major catastrophes. Students will demonstrate and explain recommendations by the American Heart Association, National Safety Council, ECSI (Emergency Care Safety Institute) and the American National Red Cross for community members to respond to non-breathing and sudden cardiac emergencies. Students will also, explain techniques for all ages along with emergency action plans, safety, and prevention of disease transmission.

## (CSU GE Area E)

## 117 Personal Trainer Instructor (3) CSU

Lecture 2 hours. Laboratory 2 hours.
This course is designed to give students the knowledge and understanding necessary to prepare for the ACE Personal Trainer Certification Exam and become effective personal trainers. This is a comprehensive course for designing individualized programs based on each client's unique health, fitness, and goals. The information covered by This course will help Students learn how to facilitate rapport, adherence, self-efficacy and behavior change in clients, as well as design programs that help clients to improve posture, movement, flexibility, balance, core function, cardiorespiratory fitness, and muscular endurance and strength.
(CSU GE Area E)

## Law

For additional law courses, see Administration of Justice and Business Administration.

## Learning Foundations

See also Learning Skills

## 43 Reading and Composition for the Learning Disabled Student (3) (NDA)

 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)

Laboratory 2 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)
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)

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.

## Learning Skills

## 1 Reading (3) (NDA)

Lecture 2 hours. Laboratory 2 hours with homework.
Learning Skills 1 is an individualized, self-paced reading remediation for ESL students and/or native speakers. The program ranges from learning to read to improving comprehension and interpretation. Center for Academic Success tutors and computer programs supplement learning.

2 English Fundamentals (3) (NDA)
Lecture 2 hours. Laboratory 2 hours with homework.
Students will be instructed in the proper use of English grammar, including appropriate use of punctuation, sentence structure and correctness, and major parts of speech. Computer Assisted instruction will supplement the lecture portion of the course during the lab component.

## Library Science

## 102 Internet Research Methods (1) CSU

Lecture 1 hour.
Recommended: Computer access, experience using the Internet and word processing programs.
This course covers the process of conducting online research using book catalogs, ebook collections, article databases, and the web. Students will learn how to find applicable resources, evaluate their content and credibility, and utilize sources in an ethical manner.

## Life Science

Life Science courses are listed under the headings of:
Anatomy
Biology
Microbiology
Physiology

## Machine Shop

See course listings under Industrial Technology - Machine Shop/CNC.

## Management

## 2 Organization and Management Theory (3) CSU <br> 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.

## Marketing

## 1 Principles of Selling (3) CSU

Lecture 3 hours.
Students examine the principles used in persuasive communication with a focus on consumer buying behavior, presentations, and closing. The course is designed to help students currently involved in sales as well as those seeking to improve their communication skills. Sales presentations, group exercises and case studies are used.

## 11 Fundamentals of Advertising (3) CSU <br> 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.

## 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)

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 (3) (NDA)

## Lecture 3 hours.

Students review the arithmetic essential in college and business, including: fractions, decimals, percent, and measurement. Problem solving techniques that are useful in practical situations are emphasized.

## 110 Introduction to Algebraic Concepts (5) (NDA) <br> Lecture 5 hours.

Students discuss abstract ideas necessary for understanding algebra and review selected topics in arithmetic relevant to algebra. Fundamental notions of algebra including signed numbers, simple equations, and modeling are introduced. Students participate in hands-on laboratories and group work instruction in study skills

## 112 Pre-Algebra (3) (NDA)

Lecture 3 hours.
Students discuss abstract ideas necessary for understanding algebra and review selected topics in arithmetic relevant to algebra. 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.
Students are introduced to logic and the construction of a formal proof, the study of plane figures such as triangles, parallelograms and other polygons, and circles. Students practice construction methods with compass and straight edge and computations for perimeter, area and volume.

## 125 Intermediate Algebra (5)

## Lecture 5 hours.

Prerequisite: Mathematics $115^{* * *}$ with a grade of "C" or better, or appropriate skill level demonstrated through the Mathematics placement process and equivalent high school preparation.
Note: Credit given for either Mathematics 125 or 126, but not both.
Students examine linear equations and inequalities, systems of linear equations and Gaussian elimination, quadratic equations, polynomials and rational expressions, exponents and radicals. Functions and their graphs, including linear, quadratic and exponential functions; logarithms, polynomials and algebraic fractions are discussed. Modeling and problem solving, sequences, conic sections, and complex numbers are presented.

## 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.
Students examine 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.
(CSU GE Area B4)

## 227 Statistics (4) UC:CSU

Lecture 4 hours.
Prerequisite: Mathematics 125 with a grade of " $C$ " or better, or equivalent high school preparation and appropriate skill level demonstrated through the Mathematics placement process.
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.
(CSU GE Area B4 • IGETC Area 2A)

## 228A Statistics Pathway Part I (5) (NDA Effective Fall 2015)

Lecture 5 hours.
Prerequisite: Math 110 or 112 with a grade of "C" or better or appropriate skill level demonstrated through the Mathematics placement process.
Students will 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

Lecture 5 hours.
Prerequisite: Math $228 A$ with a grade of "C" or higher
Students examine 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.
(CSU GE Area B4)

## 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.

## (CSU GE Area B4 • IGETC Area 2A)

## 240 Trigonometry (3) CSU

Lecture 3 hours.
Prerequisite: Mathematics 120 and 125 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.
(CSU GE Area B4)

## 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.

## (CSU GE Area B4 • IGETC Area 2A)

## 260 Precalculus (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.

## (CSU GE Area B4 • IGETC Area 2A)

## 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. (CSU GE Area B4 • IGETC Area 2A)

## 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.
(CSU GE Area B4 • IGETC Area 2A)

## 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. Students 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
Students examine 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
Students are introduced 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 <br> 285 Directed Study - Mathematics (2) CSU <br> 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.
${ }^{* *} U C$ 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 combined with Statistics 1, maximum credit one course.

## Media Arts

## Media Arts courses are listed separately under the following headings: Broadcasting <br> Cinema <br> Journalism <br> Multimedia <br> Photography <br> Public Relations

## Meteorology

## 3 Introduction to Weather and Climate (3) UC:CSU

## Lecture 3 hours.

Same as Geography 3. Credit not given for both.
Students acquire introductory knowledge of the Earth's atmosphere using an Earth Systems Science approach. Topics include atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclones, weather forecasting, climate and climate change. The following tools of inquiry may be used: weather maps, satellite imagery, and geographic information systems.

## (CSU GE Area B1 • IGETC Area 5A)

## 4 Introductory Meteorology Laboratory (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
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.

## (CSU GE Area B3 • IGETC Area 5C)

## 5 Severe and Hazardous Weather (2) CSU

## Lecture 3 hours.

Prerequisite: Meteorology 3 or Geography 3 with a grade of "C" or better. Same as Geography 23. Credit not given for both courses.
Students will learn basic principles about the atmosphere as it relates to severe, hazardous, and unusual weather events. Emphasis is first given to the properties and measurements of severe weather conditions, maps and computer simulations of severe weather events, and basic forces and dynamics of the atmosphere during severe and hazardous weather. Then a series of severe, hazardous, and unusual weather phenomena will be discussed, including thunderstorms, lightning, hailstorms, downbursts, tornadoes, tropical cyclones and hurricanes, floods, drought, and extreme mountain weather. Tools used of inquiry may include weather maps, radar and satellite imagery, and geographic information systems.

## 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 or 6; and Chemistry 51 or Physiology 1 or equivalent with a grade of "C" or better.
The major emphasis of This course is the nature of bacteria: their morphology, metabolism, genetics, growth, methods of controlling their populations, aptitude in causing infectious diseases, and relationships with host organisms. Other topics include fungi, protozoa, helminths (worms), algae, microbial ecology, and the fundamentals of virology and immunology. Laboratory techniques emphasize microscopy, aseptic techniques, cultivation, isolation, staining, enumeration, control, and identification of bacteria. Students explore microbes in soil, water, and food. There is a particular emphasis on medical microbiology and the major etiological agents of disease, as well as an introduction to biotechnology and environmental microbiology. This course is recommended for students who are pursuing professional degrees in health fields such as nursing, pharmacy, veterinary medicine, physician assistant, and optometry. The course includes more lab hours than Microbiology 20.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

## 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 or 6; and Chemistry 51 or Physiology 1 or equivalent with a grade of " $C$ " or better.
This course introduces students to bacteria, viruses, fungi, protozoa, and multicellular parasites, and includes examination of microbial morphology, metabolism, genetics, and the roles of microorganisms in infectious diseases. This course also includes immunology and methods of controlling microorganisms. The labs include microscopy, aseptic technique, cultivation, isolation and identification of bacteria, and control of bacterial populations. This course is recommended for pre-nursing and allied health students who need a 4 unit course with 3 hours of lab per week.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)
*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) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Cinema 107
Students are introduced to the basic operation of digital video cameras and shooting techniques, including application to mobile and other digital devices. Topics covered include, basic storytelling, the production process, digital formats, compression, lenses, depth of field, white balance, microphone techniques, lighting, tapeless recording methods, and an introduction to the editing process, new media publishing considerations (Web and digital devices, etc). Legal aspects, such as releases and permits, related to video production will also be covered. Beginning video production focusing on input from and output to web-based mobile digital devices and producing content for new media and emerging technologies. Students will learn from demonstrations, practicums and exercises.

## 109 Beginning Documentary Production Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Multimedia 108.
Advisory: Cinema 104.
This course provides a 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

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

Lecture 2 hours. Laboratory 2 hours.
This is an 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) CSU

Lecture 2 hours. Laboratory 2 hours.
Note: Computer application for this class is Adobe Photoshop.
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

Lecture 2 hours. Laboratory 2 hours.
This course introduces students to computer applications for the digital editing of video and sound. Emphasis is placed on non-linear post production tools.

## 340 Vector Graphics (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Note: Computer applications covered in this class are Adobe Illustrator and Adobe 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 (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Advisory: Photography 101 and Journalism 101.
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. Material created will meet the standards for possible use in student-run online media. Ethical and legal issues regarding professional journalistic practices will be covered in detail.

## 802 Introduction to Podcast (3) CSU

Lecture 2 hours. Laboratory 3 hours.
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.
This course 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.
Students are introduced to beginning level graphics for Digital Video, Animation, Gaming and New Media using digital imaging software, with an emphasis on Adobe Photoshop, including layers, filters, text, blend modes, editing tools, timeline animation, frame animation, 3D animation, and output. Course will focus on input from and output to web based mobile digital devices, and producing content for new media and emerging technologies.

## 805 Motion Graphics and Compositing for Digital Video, Animation, Gaming, and New Media (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Advisory: Multimedia 804
In this intermediate level course, students gain further expertise in dealing with motion graphics and compositing for Digital Video, Animation, Gaming and New Media using digital imaging and animation software, with an emphasis on After Effects or similar state-of-the-art software, including layers, masks, filters, text, blend modes, editing tools, timeline animation, frame animation, 3D animation, and output. Course will focus on input from and output to web based mobile digital devices, and producing content for new media and emerging technologies. Students will learn from demonstrations, practicums, and exercises.

## 806 Innovation In Motion Pictures And New Media (3) UC: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

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, interactive text, and more. An introduction to basic design principles, concepts of engagement and interactivity, and presentation of journalistic or non-fiction content on a variety of platforms will be discussed. An emphasis will be placed on accuracy, as well as clear and dynamic presentation.

## 808 Mobile Media Explorations (3) CSU <br> Lecture 3 hours.

This survey course provides a history of mobile media, including the development of emerging digital devices (mobile phones, tablets, and future devices, etc.) and their uses. An overview of user experience, impact on media consumption and communications and interactive design are given. Principles of content creation, user interface, marketability, common technical issues, etc. are discussed. Other topics include publishing mobile media and mobile/tablet applications, developing business plans, advertising, audience demographics, platform delivery and marketing possibilities for mobile applications and mobile media. Legal issues are also covered.

## 809 Mobile Game Design (3)

## Lecture 2 hours. Laboratory 2 hours.

This hands-on course will introduce students to the field of game content and design as it relates specifically to mobile and tablet devices. Practical experience in game design will be acquired from concept development to distribution. Students will acquire the fundamental skills to build a basic game. Historical and contemporary examples will be examined, along with professional roles. Students will look at elements of games that are unique to mobile/tablet such as their portability, their social nature and their technology driven evolution.

## 810 Mobile Design Studio II (3)

Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Multimedia 807 or 809.
Advisory: Computer Science 575.
This hands-on capstone course will build upon the skills learned in Mobile Design Studio I while beginning to introduce topics such as development theory and best practices in mobile design. Students will learn more advanced development techniques with a focus on design and user interface while beginning to understand the importance of things such as application structure, modulation and flowcharts. Students will begin to incorporate more advanced mobile tools such as use of device hardware (accelerometer, audio and camera). Students will complete a series of exercises around topics in the course. Students will use the skills learned in these exercises to produce an application they propose. Students will finalize a portfolio and receive feedback.


## 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.

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Music department, families have been created as follows:

MUSIC FAMILY NAMES AND COURSE NUMBERS
Classical Guitar . . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 650, 651, 652, 653, 654
Piano. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 321, 322, 323, 324, 341
Brass Instruments . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 601, 602
String Instruments . . . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 611, 612, 613, 614
Woodwind Instruments . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 621, 622, 623, 624
Voice . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MUSIC 411, 412, 413, 414

## 101 Fundamentals of Music (3) UC:CSU

Lecture 3 hours.
Students practice reading and writing music. Notation, keys, scales, intervals, chords, rhythmic drills, sight singing and ear training are examined.

## 111 Music Appreciation I (3) UC:CSU

Lecture 3 hours.
Students analyze 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 21 st century, with emphasis on perceptive listening. (CSU GE Area C1 • IGETC Area 3A)

## 121 Music History and Literature I (3) UC:CSU

## Lecture 3 hours.

## Prerequisite: Music 201

Note: Students should have some familiarity with 18 th 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.
(CSU GE Area C1 • IGETC Area 3A)

## 122 Music History and Literature II (3) UC:CSU

Lecture 3 hours.
Prerequisite: Music 201
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.
(CSU GE Area C1 • IGETC Area 3A)

## 152 Current Musical Events (1) CSU

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 Music Performance Workshop (MUS 250-1, MUS 250-2, MUS 250-3, MUS 250-4).
Students engage in 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.
Corequisite: Concurrent enrollment in a Music Performance Workshop (MUS 250-1, MUS 250-2, MUS 250-3, MUS 250-4).

Students develop study, practice, and performance skills on a principal instrument or voice through private lessons. This course parallels the offering for and requirements of UC and CSU music majors.

## 183 Applied Music III (.5) UC:CSU

Laboratory 1 hour.
Prerequisite: Music 182 with a grade of "C" or better.
Corequisite: Concurrent enrollment in a Music Performance Workshop (MUS 250-1, MUS 250-2, MUS 250-3, MUS 250-4).

Students develop study, practice, and performance skills on a principal instrument or voice through private lessons. This course parallels the offering for and requirements of UC and CSU music majors.

## 184 Applied Music IV (.5) UC:CSU

Laboratory 1 hour.
Prerequisite: Music 183 with a grade of "C" or better.
Corequisite: Concurrent enrollment in a Music Performance Workshop (MUS 250-1, MUS 250-2, MUS 250-3, MUS 250-4).

Students develop study, practice, and performance skills on a principal instrument or voice through private lessons. This course parallels the offering for and requirements of UC and CSU music majors.

## 201 Harmony I (3) UC:CSU

Lecture 3 hours.
Prerequisite: Music 101 with a grade of "C" or better.
Corequisite: Concurrent enrollment in Music 211.
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 with a grade of "C" or better.
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 with a grade of "C" or better.
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.

## 217-1 Musicianship I (1) CSU

Laboratory 3 hours.
Prerequisite: Music 101 with a grade of "C" or better.
Corequisite: Music 101.
Formerly Music 211; credit will not be awarded for both.
Musicianship is the ability to perceive and demonstrate musical artistry while reading, dictating and performing music. This course is the first in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/ or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Fundamentals (MUSIC 101) is required.

## 217-2 Musicianship II (1) CSU

Laboratory 3 hours.
Prerequisite: Music 217-1 with a grade of "C" or better.
Corequisite: Music 201.
Formerly Music 212; credit will not be awarded for both.
This course is the second in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory I (MUSIC 201) is required.

## 217-3 Musicianship III (1) CSU

Laboratory 3 hours.
Prerequisite: Music 217-2 with a grade of "C" or better.
Corequisite: Music 202.
Formerly Music 213; credit will not be awarded for both.
This course is the last in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory III (MUSIC 203) is required.

## 217-4 Musicianship IV (1) CSU

Laboratory 3 hours.
Prerequisite: Music 217-3 with a grade of "C" or better.
Corequisite: Music 203.
Formerly Music 214; credit will not be awarded for both.
This course is the third in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory II (MUSIC 202) is required.

## 250-1 Music Performance Workshop I (1) CSU

Laboratory 3 hours.
Students work in a master-class environment, rehearsing music appropriate to their instrument/voice at skill level 1. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Additional emphasis is on basic microphone technique and monitoring. Students also learn and practice professional standards of conduct. The Student Learning Outcome for This course is a final public performance.

## 250-2 Music Performance Workshop II (1) CSU

Laboratory 3 hours.
Students continue to work in a master-class environment, rehearsing music appropriate to their instrument/voice. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Additional emphasis is on basic microphone technique and monitoring. Students also learn and practice professional standards of conduct. The Student Learning Outcome for This course is a final public performance.

## 250-3 Music Performance Workshop III (1) CSU

 Laboratory 3 hours.Students continue to work in a master-class environment, rehearsing music appropriate to their instrument/voice. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression.
Additional emphasis is on basic microphone technique and monitoring. Students also learn and practice professional standards of conduct. The Student Learning
Outcome for This course is a final public performance.

## 250-4 Music Performance Workshop IV (1) CSU

Laboratory 3 hours.
Students continue to work in a master-class environment, rehearsing music appropriate to their instrument/voice. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Additional emphasis is on basic microphone technique and monitoring. Students also learn and practice professional standards of conduct. The Student Learning Outcome for This course is a final public performance.

## 251-1 Jazz Improvisation Workshop I (1) UC:CSU - RPT 3

Laboratory 3 hours.
Note: Students must be able to play a jazz instrument or voice.
In this jazz and rock-style improvisation environment, students rehearse music appropriate to the beginning skill level of instrument or voice. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Basic microphone technique and monitoring is emphasized. Students practice professional standards of conduct. The Student Learning Outcome is assessed in a final public performance.

## 251-2 Jazz Improvisation Workshop II (1) UC:CSU - RPT 3

Laboratory 3 hours.
Prerequisite: Music 251-1
Note: Students must be able to play a jazz instrument or voice.
In this jazz and rock-style improvisation environment, students continue to rehearse music appropriate to their instrument/voice at an intermediate skill level. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Basic microphone technique and monitoring is emphasized. Students practice professional standards of conduct. The Student Learning Outcome is assessed in a final public performance.

## 251-3 Jazz Improvisation Workshop III (1) UC:CSU - RPT 3

Laboratory 3 hours.
Prerequisite: Music 251-2
Note: Students must be able to play a jazz instrument or voice.
Students continue to work in an improvisation environment, rehearsing music appropriate to their instrument/voice at an intermediate-high skill level. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Basic microphone technique and monitoring is emphasized. Students practice professional standards of performance conduct. The Student Learning Outcome for This course is assessed at a final public performance.

## 251-4 Jazz Improvisation Workshop IV (1) UC:CSU - RPT 3

Laboratory 3 hours.
Prerequisite: Music 251-3
Note: Students must be able to play a jazz instrument or voice.
Students continue to rehearse music appropriate to their instrument/voice at an advanced skill level. Students prepare, rehearse and perform or record selected musical works, focusing on rhythm, intonation, articulation, expression. Basic microphone technique and monitoring is emphasized. Students practice professional standards of performance conduct. The Student Learning Outcome for This course is assessed at a final public performance.

## 261 Electronic Music Workshop (3) CSU

Lecture 2 hours. Laboratory 2 hours.

## Prerequisite: Music 161.

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.

## 265-1 Recording Arts Workshop I (3) CSU

Lecture 2 hours. Laboratory 2 hours.
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.

## 265-2 Recording Arts Workshop II (3) CSU

Lecture 2 hours. Laboratory 2 hours.
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.

## 265-3 Recording Arts Workshop III (3) CSU

Lecture 2 hours. Laboratory 2 hours.
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) CSU

Laboratory 3 hours.
Note: Designed for those students who have completed a sequence of classes and desire to develop more advanced skills.

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, including reading musical notation, playing scales and chords, use of the pedals, sight reading, terminology and theory related to the music being studied.
(CSU GE Area C1)

## 322 Elementary Piano II (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Prerequisite: Music 321.
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.
(CSU GE Area C1)

## 323 Elementary Piano III (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Elementary Piano III is a continuation of Elementary Piano II (MUSIC 322). Students must be able to perform two-octave major scales, simple melody and accompaniment pieces such as those found in 'Music or Millions, Volume 17' and two-part pieces similar to those found in Bartok's 'Mikrokosmos, Volume 2.'
(CSU GE Area C1)

## 324 Elementary Piano IV (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
A continuation of Music 323, This course consists of learning new pieces, review of chords and scales, use of piano pedals, developing tone qualities, playing cross rhythms such as two against three, rubato, sight reading, memorization, terminology and theory as related to the music studied.
(CSU GE Area C1)

## 341 Intermediate Piano (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
This course is a continuation of Piano IV (Music 324). Introduces compositions stressing scales, chords, arpeggios and harmonic structure of music. Emphasizes style and interpretation.
(CSU GE Area C1)

## 351 Piano Ensemble (1) UC:CSU

Laboratory 2 hours.
This course 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.
(CSU GE Area C1)

## 412 Elementary Voice II (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.

## Prerequisite: Music 411.

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.
This is a continuation of basic vocal technique, further practice and performance experience. Basic Italian repertory is introduced.
(CSU GE Area C1)

## 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.
(CSU GE Area C1)

## 414 Elementary Voice IV (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Further experience with and refinement of technique, repertory and performance. Along with songs in English, Italian and German, those in French or Spanish will be introduced. The development of the student's ability to analyze and interpret the song repertoire is stressed.
(CSU GE Area C1)

## 441 Song Repertoire (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
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)

## 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) - 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.
(CSU GE Area C1)

## 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.)

## 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.
(CSU GE Area C1)

## 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.)

## 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.)

## 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 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.)

## 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.
(CSU GE Area C1)

## 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.)

## 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.)

## 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.)

## 650 Beginning Guitar (2) UC:CSU

## Lecture 1 hour. Laboratory 2 hours.

This course is designed to instruct the beginning student in basic skills in reading music on the guitar, including notes, scales, chords with emphasis on learning to read music on the guitar, up to the fifth fret for the left hand. Right Hand technique will be both finger \& pick oriented; This course is a perfect introduction to either classical, commercial, of 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
The student reinforces fundamental music reading, right and left hand playing techniques and performance of elementary solo guitar compositions. For students who wish to continue beyond the beginning level. Student must provide own guitar. (If prerequisite is not met, enrollment is subject to audition.)
(CSU GE Area C1)

## 652 Classical Guitar II (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
The student reinforces fundamental music reading, right and left hand playing techniques and performance of elementary solo guitar compositions. For students who wish to continue beyond the Classical I level. Student must provide own guitar. (If prerequisite is not met, enrollment is subject to audition.)

## 653 Classical Guitar III (2) UC:CSU

## Lecture 1 hour. Laboratory 2 hours.

The student reinforces fundamental music reading, right and left hand playing techniques and performance of elementary solo guitar compositions. For students who wish to continue beyond the Classical II level. Student must provide own guitar. (If prerequisite is not met, enrollment is subject to audition.)

## 654 Classical Guitar IV (2) UC:CSU

## Lecture 1 hour. Laboratory 2 hours.

The student reinforces fundamental music reading, right and left hand playing techniques and performance of elementary solo guitar compositions. For students who wish to continue beyond the Classical III level. Student must provide own guitar. (If prerequisite is not met, enrollment is subject to audition.)

## 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.
Note: Must possess own instrument.
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.

## 663 Commercial Guitar III (2) CSU

Lecture 1 hour. Laboratory 2 hours. Note: Must possess own instrument.

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.

664 Commercial Guitar IV (2) CSU
Lecture 1 hour. Laboratory 2 hours.
Note: Must possess own instrument.
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.

## 701 Instrumental Ensemble (1)

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) - 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) CSU

## 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

## Laboratory 3 hours.

This course involves preparation for performances of brass ensemble repertoire. It provides for 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.

The student studies and performs standard percussion ensemble literature in the symphonic and commercial fields emphasizing proper execution of musical styles, phrasing, balance and blending techniques,rehearsal and performance techniques. (Confirmation of enrollment subject to audition).

## 777 Musical Theatre Workshop (3) *UC:CSU

## Laboratory 6 hours.

Practical experience using techniques and principles of acting in a musical theater will be presented before an audience. Emphasis will focus on the development of acting, singing and movement skills.

## 781 Studio Jazz Band (1) CSU

## Laboratory 4 hours.

Note: Ability to play a jazz instrument required
This course offers practical experience playing in a large jazz band. Standard and special musical arrangements are rehearsed and performed with emphasis placed upon intonation, rhythmic accuracy, artistic expression and improvisation.

## 185 Directed Study - Music (1) CSU <br> 285 Directed Study - Music (2) CSU <br> 385 Directed Study - Music (3) CSU <br> 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.
*UC Credit Limits: Music 776 and Theater 279 combined; maximum credit, one course.
*UC Credit Limits: 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 of Science Degree" on page 125 for General Education Prerequisites.

400 Adult Health Care I (5) CSU
Lecture 2 hours. Laboratory 9 hours.
Note: 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.

Note: Acceptance into the Nursing Program.
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.

Note: 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.
Note: 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.
Note: Successful 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.
Note: Successful 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.
Note: 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.
Note: 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.
Note: 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.
Note: Successful 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.
Note: Successful 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.
Note: Successful completion of the third semester of the Nursing Program or its equivalent.
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 bour.
Note: Approval to enter the Nursing Program. Must currently be a Licensed Vocational Nurse, foreign nurse graduate or a transfer nursing student. Advanced placement students take this as a bridge course concurrently with their first class in the nursing program.
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.
Note: Concurrent enrollment in the third semester of the Nursing Program.
This is an elective, instructor-guided course to facilitate enrichment, tutorial study, the utilization of independent learning and nursing skills practice.

## 185 Directed Study - Nursing (1)

285 Directed Study - Nursing (2)
Conference 1 hour per unit.
Allows students to pursue Directed Study in Nursing under the direction of a supervising instructor.

## Oceanography

See course listing under Biology for Marine Biology courses.

## 1 Introduction to Oceanography (3) UC:CSU

Lecture 3 hours.
This course 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. Students interested in earning lab credit are encouraged to enroll in Oceanography 10.
(CSU GE Area B1 • IGETC Area 5A)
10 Physical Oceanography Laboratory (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
Corequisite: Oceanography 1.
Students in This course will use 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.
(CSU GE Area B3 • IGETC Area 5C)
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.

## 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

Unlock your creativity with guided visualization in art. Learn to express yourself through drawing, painting and design. Improve your sense of well-being by holistically blending mind, body, and spirit.

## 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

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. You 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 recent 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 Body Conditioning II for Seniors

This course is designed for older adults to improve flexibility and core strength.

## Philosophy

## 1 Introduction to Philosophy (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Students analyze 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.
(CSU GE Area C2 • IGETC Area 3B)

## 2 Society and Values (3) UC:CSU

## Lecture 3 hours.

Students evaluate some of the traditional and contemporary theories in rational decision making about ethical and political issues.
(CSU GE Area C2 • IGETC Area 3B)

## 5 Critical Thinking and Composition (3) UC:CSU

Lecture 3 hours.
Prerequisite: English 101 with a grade of " $C$ " or better.
Students develop and refine the critical thinking skills necessary to formulate and evaluate argumentative essays. Critical writing about philosophical and logical concepts that are applicable to any systematic thinking is emphasized.
(CSU GE Area A3 • IGETC Area 1B)

## 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.
(CSU GE Area A3)

## 9 Symbolic Logic I (3) UC:CSU

## Lecture 3 hours.

Students analyze 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.
(CSU GE Area A3)
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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.

## (CSU GE Area C2 or E • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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).
(CSU GE Area C2 • IGETC Area 3B)

## 30 Asian Philosophy (3) UC:CSU

Lecture 3 hours.
Philosophy 30 presents the history and key teachings of the philosophical traditions of East and South Asia with emphasis on Confucianism, Daoism, Hinduism, and Buddhism.
(CSU GE Area C2 • IGETC Area 3B)

## 35 Judaism, Christianity, and Islam (3) UC:CSU <br> 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. (CSU GE Area C2 • IGETC Area 3B)

## 40 Introduction to the Philosophy of Art (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area C2 • IGETC Area 3B)

## 185 Directed Study - Philosophy (1) CSU

## Lecture 1 bours.

Students study Philosophy on a contract basis under the direction of a supervising instructor.

## Photography

## 16 Fundamental Commercial Photography (3)

Lecture 2 hours. Laboratory 3 hours.
Not offered each semester.
Prerequisite: Photography 102 with a grade of " $C$ " or better.
Covers the major phases of commercial and illustrative photography as they apply to publication photography.

## 20 Beginning Photojournalism (4) CSU

Lecture 2 hours. Laboratory 6 hours.
Prerequisite: Photography 10 with a grade "C" or better.
Students learn photojournalism methods, news, feature and sports photography. Introduction to documentary photography.

## 21 News Photography (4) CSU

Lecture 2 hours. Laboratory 6 hours.
Prerequisites: Photography 20 with a grade of "C" or better.
Students gain practical experience in taking photojournalistic pictures including news, sports and feature photos. Students take pictures for the campus newspaper, magazine and website. Students learn editing, Photoshop and design skills. Some students will serve as editors for the campus newspaper. Emphasis is placed on real world experience, photo stories, digital technology and portfolio development.

## 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.
(CSU GE Area C1 • IGETC Area 3A)

## 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.
(CSU GE Area C1 • IGETC Area 3A)

## 35 Travel Photography (3) CSU

Lecture 2 hours. Laboratory 2 hours.
Advisory: Photography 101.
Students 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 grade of " $C$ " 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.

## 37 Visual Journalism: Photography, Video and Multimedia (4) CSU

Lecture 2 hours. Laboratory 6 hours.
Prerequisite: Photography 21 with a grade of "C" or better.
Students gain practical experience in taking photojournalistic pictures and video including news, sports and features. Students take pictures for the campus
newspaper, magazine and website. Students learn video editing, Photoshop and design skills to showcase their still and video images in online publications. Some students will serve as editors for the campus newspaper/magazine. Emphasis is placed on real world experience, in-depth photo/video stories, digital technology and portfolio development.

## 49A Advanced Photographic Digital Imaging (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: Photography 10 with a grade of "C" or better. Advisory: Multimedia 200.
This digital imaging course will incorporate the use of camera, photographic software, scanners, and printers. Emphasis on creating and printing
photographic images.

## 49B Advanced Photographic Digital Imaging (3) CSU

Lecture 2 hours. Laboratory 3 hours.
Prerequisite: Photography 10 with a grade of "C" or better. Advisory: Multimedia 200.
This digital imaging course will incorporate the use of camera, photographic software, scanners, and printers. Emphasis on creating and printing photographic images.

## 100 Digital Cameras and Photographic Composition (3) *UC:CSU Lecture 3 hours.

Students learn basic information in the use of cameras, lenses and exposure to produce good photographs. Students provide their own Digital Single Lens Reflex
(DSLR) cameras.

## 101 Beginning Digital Photography (3) *UC:CSU

Lecture 2 hours. Laboratory 3 hours.
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 off-stops and shutter speeds is required.

## 102 Advanced Digital Photography (4) UC:CSU

Lecture 3 hours. Laboratory 3 hour.
Prerequisite: Photography 10 with a grade of "C" or better.
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
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.
*UC Credit Limit: Photography 27 and 27A/27B combined maximum credit one course.
*UC Credit Limit: Photography 100 and 101 combined maximum credit one course.

## 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. Students construct a meaningful understanding of physics and chemistry concepts through lecture and laboratory activities. The course covers: mechanics, electricity \& magnetism, light, thermodynamics, physical changes, chemical changes, and the periodic table.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 185 Directed Study - Physical Science (1) CSU

Conference 1 hour per unit.
Allows students to pursue Directed Study in Physical Science on a contract basis under the direction of a supervising instructor.

## Physics

All Physics, Engineering, and Astronomy majors should enroll in either Physics 101 if qualified or Physics 6 their first semester at Pierce.

## 6 General Physics I (4) *UC:CSU

Lecture 3 hours. Laboratory 3 hours.
Prerequisite: $A$ course in Trigonometry with a grade of " $C$ " or better.
This is the first course of a two semester sequence and considers the fundamental principles and applications of classical mechanics, gravitation, thermodynamics, fluids, periodic motion and waves at the algebra/trigonometry level of mathematical sophistication. The laboratory includes both quantitative and qualitative experiments which permit students to verify, illustrate, and deduce various laws of physics. (CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 7 General Physics II (4) *UC:CSU

Lecture 3 hours. Laboratory 3 hours.
Prerequisite: Physics 6 with a grade of " $C$ " or better.
This is the second course in a two course, trigonometry based sequence with Physics 6. Topics include the principles of electricity and magnetism, optics, and modern physics. The laboratory includes both quantitative and qualitative experiments which permit students to verify, illustrate, and deduce various laws of physics.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 12 Physics Fundamentals (3) ** $\Delta \mathrm{UC}: \mathrm{CSU}$

## Lecture 3 hours.

Credit not given for BOTH Physical Science 1 and Physics 12.
May be offered as an honors section.
This course provides a survey 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 a historic perspective and applications in today's culture.
(CSU GE Area B1 • IGETC Area 5A)

## 15 Physics of Music (3) UC: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.

## (CSU GE Area B1 • IGETC Area 5A)

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.
Students analyze, 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.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 67 Physics for Life Science Majors II (5) *UC:CSU

Lecture 3 hours. Laboratory 6 hours.
Prerequisites: Mathematics 261 and Physics 66 with a grade of " $C$ " or better.
This course is the second semester of a one year introductory calculus-based physics course. The main objective is to provide life science students with the basic concepts and qualitative reasoning skills connecting physics principles to natural phenomena. Lectures cover the fundamental principles and applications of electricity and magnetism, electromagnetic waves, geometric optics, wave optics, quantum physics, atomic physics and nuclear physics. The laboratory includes structured problem-solving strategies through quantitative and qualitative experiments, tutorials, and conceptual activities.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)
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.
This course begins a sequence of three calculus-based physics courses. Physics 101 considers the fundamental principles and applications of classical mechanics, gravitation, periodic motion, and fluid mechanics at the beginning calculus level of mathematical sophistication. The lecture and laboratory form a single integrated course. The laboratory includes both quantitative and qualitative experiments, tutorials, and conceptual activities which permit students to verify, illustrate, and deduce various laws of physics.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 102 Physics for Engineers and Scientists II (5) *UC:CSU

Lecture 3 hours. Laboratory 6 hours.
Prerequisites: Mathematics 262 and Physics 101 with a grade of " $C$ " or better. Corequisite: Mathematics 263.

Students continue the sequence of three calculus based physics courses begun in Physics 101. The fundamental principles and applications of introductory thermodynamics and electricity and magnetism including circuits and Maxwell's equations at a beginning calculus level of mathematical sophistication are explored. Students participate in a single integrated lecture and laboratory course. Students verify, illustrate, and deduce various laws of physics through quantitative and qualitative experiments, tutorials, and active-learning activities.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)

## 103 Physics for Engineers and Scientists III (5) *UC:CSU

Lecture 3 hours. Laboratory 6 hours.
Prerequisites: Mathematics 263 and Physics 102 with a grade of " $C$ " or better.
Students continue the sequence of three calculus based physics courses begun in Physics 101 and continued in Physics 102. Mechanical waves including sound, light and optics, relativity, introductory quantum mechanics, atomic and nuclear physics are examined. Students may also review topics in molecular and condensed matter as well as particle physics. As waves necessarily involve motion in multiple dimensions, more sophisticated elements of calculus are required. Students participate in a single integrated lecture and laboratory course.
Quantitative and qualitative experiments, tutorials, and active-learning activities which permit students to verify, illustrate, and deduce various laws of physics are included in the laboratories.
(CSU GE Area B1 + B3 • IGETC Area 5A + 5C)
185 Directed Study - Physics (1) CSU
285 Directed Study - Physics (2) CSU
385 Directed Study - Physics (3) CSU
Conference 1 hour per unit.
Students study Physics on a contract basis under the direction of a supervising instructor.
*UC Credit Limit: Physics 6 and 7, or 66 and 67, or 101, 102 and 103; maximum credit, one series.
${ }^{* *} U C$ Credit Limit: No credit for Physics 11 or 12 if taken after Physics 6, 66 or 101.
$\Delta U C$ Credit Limit: Physics 11 and 12 combined, maximum credit one course. Physiology

## 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 or 6 with a grade of "C" or better.
This course includes lectures and laboratory exercises which focus on the principle functions of the human body within the following systems: circulatory, respiratory, digestive, nervous, sensory, muscular, excretory, endocrine, and reproductive.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)

* UC Credit Limit: Physiology 1 and Anatomy 1 combined: maximum credit, 8 units.


## Plant Science

Agriculture - General $\qquad$ . Plant Science 100-199
Horticulture and Landscaping $\qquad$ . 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.
(CSU GE Area B1)


## 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.

## 711 Botany for Horticulture (3) UC:CSU <br> Lecture 2 hours. Laboratory 2 hours.

Botany for Horticulture 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, the basics of plant breeding and selection of new varieties for landscape horticulture. The class emphasizes recognition, proper utilization, and maintenance of ornamental plants.

## 714 Principles of Horticulture (3) CSU

Lecture 3 hours.
This course covers the maintenance work commonly done in home and estate gardens as well as parks and other public areas. Students learn lawn care, techniques of watering, fertilization and weed control.

## 716 Arboriculture I (Care of Trees and Shrubs) (1)

Lecture 0.5 hour. Laboratory 1.5 hours.
This course includes both a lecture and a hands-on laboratory covering 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.

## 800 Plant Identification and Use I (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Recommended: Plant Science 711.
This course involves plant identification, including woody and non-woody kinds. Emphasis 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.

## 806 Landscape Planning and Design (4) *UC:CSU

Lecture 2 hours. Laboratory 4 hours.
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) *UC:CSU

Lecture 2 hours. Laboratory 4 hours.
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.

## 812 Landscape Installation and Maintenance I (3) CSU

## 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 (3)

## Lecture 2 hours. Laboratory 2 hours.

This course covers the interpretation 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 (3) CSU

Lecture 2 hours. Laboratory 2 hours.
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.

## 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.
This course studies turfgrasses, their characteristics, uses, and management. The course includes soils, soil preparation, irrigation, fertilization, insects, weeds, disease, and special management factors involved with maintaining turgrasses in the landscape, on golf courses, and athletic fields for private and public sectors. The class may require 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) with an overview of the program and its different functions. This class will provide the student with the skills necessary to create Landscape Design plans using AutoCAD.

## 827 Sustainable Gardening for Landscapes (Horticulture) (3) CSU 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 <br> Lecture 2 hours. Laboratory 2 hours.

This course covers drought tolerant xeriscape plant identification, collection and preservation. The list of plants to be studied include trees, shrubs, vines, ground covers, 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 contracting 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.

## 896A Horticulture Projects (1) CSU

Laboratory 2 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.

## 896B Horticulture Projects (2) CSU

## Laboratory 4 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.

## 896C Horticulture Projects (3) CSU

## Laboratory 6 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.

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.
(CSU GE Area B2)
185 Directed Study - Plant Science (1)
285 Directed Study - Plant Science (2)
385 Directed Study - Plant Science (3)
Conference 1 hour per unit.
Allows students to pursue Directed Study in Plant Science on a contract basis under the direction of a supervising instructor.
*UC Credit Limit: Plant Science 806 and 807 maximum of one course.
**UC Credit Limit: Plant Science 901 and Env. Sci. 2 maximum credit one course.

## Political Science

## Also See Chicano Studies

## 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.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-2 \& US-3)

## 2 Modern World Governments (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
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. (CSU GE Area D • IGETC Area 4)

## 5 The History of Western Political Thought (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Surveys important ideas and theories in political thinking that have developed from the time of the ancient Greeks to the present day. Students will analyze the relationship between political theory and political life.
(CSU GE Area A3 or D • IGETC Area 4)

## 7 Contemporary World Affairs (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
This course is designed to introduce students to the major theoretical approaches to international politics, to explore important historical and contemporary questions and debates in international affairs, and to teach students to think critically about international relations
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 19 Women in Politics (3) UC:CSU

Lecture 3 hours.
May be offered as an honors section.
Women in Politics 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. The course examines the political institutions, processes, and problems of the national, state, and local government from a women's perspective.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-2 \& US-3)

## 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.
(CSU GE Area D • IGETC Area 4 • Satisfies CSU American Ideals Graduation Requirement US-2 \& US-3)

## 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.

## (CSU GE Area D • IGETC Area 4)

## 185 Directed Study - Political Science (1) CSU <br> 285 Directed Study - Political Science (2) CSU <br> 385 Directed Study - Political Science (3) CSU <br> 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.

## Psychology

## 1 General Psychology I (3) *UC:CSU

Lecture 3 hours.
Advisory: Eligibility for English 28 or higher.
Required for Psychology majors.
May be offered as an honors section.
Students are introduced to the scientific study of behavior and mental processes through an examination of well established psychological perspectives, theories, concepts, research methods and results. Students learn about the history of psychology, biological psychology, sensation and perception, consciousness, life span development, learning, memory, cognition, social psychology, human sexuality and gender, motivation and emotion, health psychology, personality, psychological disorders, and clinical therapy. Students may also examine intelligence and statistics.

## (CSU GE Area D•IGETC Area 4)

## 2 Biological Psychology (3) UC:CSU

## Lecture 3 hours.

Prerequisite: Psychology 1 or 6 or its college equivalent with a grade of "C" or better.
May be offered as an honors section.
Students are introduced to the scientific study of the physiological and neuroanatomical underpinnings of behavior and mental processes through discussion of research investigating core introductory psychology topics. Nature (genetics/biology) and nurture (life experiences/culture/evolution), nervous system structure, function and development, axonal and synaptic transmission, psychopharmacology, behavioral neuroscience and neuropsychological research methods, sensation, perception, consciousness, motivation, vision, sleep and biological rhythms, hormones and reproductive behavior, emotions and stress, ingestive behavior, learning, memory, communication, neurological as well as psychopathological disorders are discussed. Students may also examine audition, touch, sensorimotor and chemical senses.
(CSU GE Area B2 • IGETC Area 5B)

## 3 Personality and Social Development (3) CSU

Lecture 3 hours.
Psychology 3 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.
(CSU GE Area D or E)

## 13 Social Psychology (3) UC:CSU

Lecture 3 hours.
Advisory: Completion of Psychology 1
Psychology 13 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. (CSU GE Area D • IGETC Area 4)

## 14 Abnormal Psychology (3) UC:CSU

Lecture 3 hours.
Advisory: Completion of Psychology 1
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 sub-stance-related disorders.
(CSU GE Area D • IGETC Area 4)

16 Intimacy, Marriage, and Family Relationships (3) CSU
Lecture 3 hours.
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.
(CSU GE Area D)

## 32 Psychology of Women (3) UC:CSU

Lecture 3 hours.
Advisory: Completion of Psychology 1
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.
(CSU GE Area D or E • IGETC Area 4)

## 40 Psychology of Parent Child Relations (3) CSU

Lecture 3 hours.
Students examine how the parent-child relationship affects the long term outcome of a child's development, and the creation of an environment which fosters a child's potential.
(CSU GE Area D or E)
41 Life-Span Psychology: From Infancy to Old Age (3) UC:CSU
Lecture: 3 hours.
Advisory: Completion of Psychology 1
This course is 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.
(CSU GE Area D or E • IGETC Area 4)

## 52 Psychological Aspects of Human Sexuality (3) UC:CSU

## Lecture 3 hours.

Advisory: Completion of Psychology 1
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.
(CSU GE Area D or E • IGETC Area 4)

## 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.
(CSU GE Area E)

## 66 Introduction to Critical Thinking (3) UC:CSU <br> Lecture 3 hours.

Students examine 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.
(CSU GE Area A3 or D• IGETC Area 4)

## 69 Psychology in Film (3) CSU

Lecture 3 hours.
Advisory: Completion of Psychology 1 or 6 with a grade of "C" or better.
Students analyze 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. Students discuss topics drawn from research methods, biological psychology, sensation \& perception, states of consciousness, learning, memory, intelligence, motivation, human development, personality, emotions and stress, human sexuality and gender, social psychology, abnormal psychology, and clinical psychology.
(CSU GE Area D)

## 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.
(CSU GE Area B3 • IGETC Area 5C)

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. And Statistics 1 with a grade of "C" or better, or concurrent enrollment.
Students are introduced to 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)' are applied throughout the course.
(CSU GE Area D)

## 185 Directed Study - Psychology (1) CSU <br> 285 Directed Study - Psychology (2) CSU <br> 385 Directed Study - Psychology (3) CSU <br> 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.
*UC Credit Limit: Credit given for either Psychology 1 or Psychology 6, not both.

## Public Relations

## 1 Principles of Public Relations (3) CSU

Lecture 3 hours.
Not offered each semester.
Students evaluate public relations as a growing profession. Students look at the job opportunities for the practitioner, internal and external PR and the staff as well as the counselor tasks; investigate 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.

## 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.
This course is designed to introduce the students to the discipline of sociology. Main theoretical and research approaches will be discussed and applied to a variety of social phenomena. Issues analyzed include culture, social interaction, social structure, deviance, social inequality and social institutions.
(CSU GE Area D • IGETC Area 4)

## 2 American Social Problems (3) UC:CSU

Lecture 3 hours.
Students examine the sociological analysis of contemporary social problems in the United States. Analyzes issues of power, inequality, privilege and oppression. Topics include racism, sexism, homophobia, classism, the environment, crime, war and terrorism. This course will also offer possible solutions.
(CSU GE Area D • IGETC Area 4)

## 3 Crime and Delinquency (3) UC:CSU

## Lecture 3 hours.

May be offered as an honors section.
Students examine 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.
(CSU GE Area D • IGETC Area 4)
4 Sociological Analysis (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students examine the fundamental principles and methods of sociological research design and implementation. Students analyze the key types of evidenceincluding 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.
(CSU GE Area D • IGETC Area 4)
11 Race \& Ethnic Relations (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students examine the definitions, history, and experiences of ethnic and racial groups in the United States from a sociological perspective. Attention is given to Black, Latino, Native Americans, Asian Americans, and White Americans from an intersectional perspective. What social, economic, and political factors affect majority-minority relations? What are the sources of discrimination and prejudice? Is social equality between different groups possible?
(CSU GE Area D • IGETC Area 4)

## 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.

## (CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)
21 Human Sexuality (3) UC:CSU
Lecture 3 hours.
May be offered as an honors section.
Students analyze the social, cultural, historical, and religious influences that shape contemporary sexual values and normative beliefs in the United States. Major and diverse paradigms of sociology regarding sexual practices and behavior, including cross-cultural traditions, sexual attraction and response, sexual deviance, sexual orientations and the commercialization of love, sex, and eroticism are examined.
(CSU GE Area D • IGETC Area 4)

## 28 The Family: A Sociological Approach (3) UC:CSU

## Lecture 3 hours.

May be offered as an honors section.
This course is designed to introduce the students to the sociological analysis of the family. Examines the family as a social institution. Issues analyzed include family diversity, dating, cohabitation, marriage, parenting, socialization, violence, divorce.

## (CSU GE Area D or E • IGETC Area 4)

## 29 The U.S. and Terrorism (3) UC:CSU

## Lecture 3 hours.

This Sociology class will examine the evolution of the US presence in the Middle East and Central Asia. It will also explore the development of terrorism and the US response.
(CSU GE Area D • IGETC Area 4)

## 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.

## (CSU GE Area D • IGETC Area 4)

## 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.

## (CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## 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.
(CSU GE Area D • IGETC Area 4)

## Spanish

## 1 Elementary Spanish I (5) *UC:CSU

## Lecture 5 bours.

Students with previous knowledge of Spanish should enroll in a bigher level.
An introductory course for students who have had little or no oral or written knowledge of Spanish. Students develop listening, speaking, reading, and writing skills in communicative contexts that are focused on the cultures of the Spanishspeaking world. Upon successful completion of This course students are able to understand and engage in simple conversations on familiar topics. Conducted primarily in Spanish. Placement Advisory: Fluent Spanish-speakers who have not had formal instruction in Spanish should enroll in Spanish 35. Students who have completed two years of high-school Spanish should enroll in Spanish 2.
(CSU GE Area C2 • IGETC Area 6A)

## 2 Elementary Spanish II (5) **UC:CSU

## Lecture 5 hours.

Students continue to practice authentic language in communicative contexts and increase their listening, speaking, reading, and writing proficiency. Upon successful completion of This course students are able to describe and narrate past real-life events, give commands and recommendations, talk about health issues, understand more complex conversations and readings, and write with more accuracy and detail. Students expand their awareness of the cultural diversity of the Spanish-speaking world. Credit is given for 2 or Spanish 35, but not for both. Prerequisite: Spanish 1 with a "C" or better, or language proficiency equivalent to two years of high-school Spanish. Placement Advisory: Fluent Spanish-speakers who have not had formal instruction in Spanish should enroll in Spanish 35. Students who have completed Spanish 35 should enroll in Spanish 36. Student who have completed four years of high-school Spanish should enroll in Spanish 3 or Spanish 36.
(CSU GE Area C2 • IGETC Area 6A)

## 3 Intermediate Spanish I (5) UC:CSU

## Lecture 5 hours.

Students continue their development of their listening, speaking, reading, and writing skills in communicative contexts focused on the cultural diversity of the Spanish-speaking world. Students improve oral and writing proficiency beyond expressing basic needs of the immediate environment, such as communicating nuanced personal meaning, opinions, recommendations, and discussing complex issues and plans using abstract and conceptual vocabulary. Upon completion of this course, students demonstrate increased awareness of cultural norms and values, increased accuracy in high-frequency structures and vocabulary, and increased fluency in complex discourse. Credit is given for Spanish 3 or Spanish 36, but not for both. Pre-requisite: Spanish 2 with a grade of ' C ' or better or language proficiency equivalent to successful completion of four years of high-school Spanish. Placement Advisory: Students who speak Spanish at home but have not received formal instruction in Spanish should enroll in Spanish 35. Students who have completed Spanish 35 should enroll in Spanish 36. Native Spanish speakers with prior education in Spanish should enroll in Spanish 4 or Spanish 37.
(CSU GE Area C2 • IGETC Area 3B +6 A)

## 4 Intermediate Spanish II (5) UC:CSU

Lecture 5 hours.
Prerequisite: Spanish 3 or 36 with a grade of "C" or better, or four years of high school preparation.
This course continues to expand language acquisition through listening, speaking, reading and writing in the cultural context of the Spanish-speaking world. Students continue to develop proficiency in oral and written communication. Course content focuses on expressing nuanced meaning, expressing opinions or making recommendations, and discussing complex issues using abstract and conceptual vocabulary. This course also introduces students to the basic methodology and technical vocabulary of literary analysis. Upon completion of this course, students demonstrate increased awareness of cultural norms and values, are able to recognize and name basic discursive elements of a literary text, and demonstrate moderate accuracy in the use of complex discourse. This course is conducted in Spanish. Required for Spanish and Latin American Studies majors.
(CSU GE Area C2 • IGETC Area 3B +6 A)

## 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.
Recommended for native speakers and Spanish 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.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 6 Advanced Spanish II (5) UC:CSU

Lecture 5 hours.
Prerequisite: Spanish 5 with a grade of "C" or better, or the appropriate skill levels achieved in Spanish 5.
Recommended for native speakers and Spanish 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.
(CSU GE Area C2 • IGETC Area 3B + 6A)

## 8 Conversational Spanish (2) CSU

## 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.

Advisory: English 28.
Students engage in an interdisciplinary introduction to the Iberian civilization and cultures from prehistoric times to the present. Representative works of art, architecture, music, and literature are connected to historical, political, economic, social, and cultural developments that have shaped the historical reality of the peninsula and contributed to the configuration of Spain's identity.
(CSU GE Area C2 • IGETC Area 3B)

## 10 Latin-American Civilization (3) UC:CSU

Lecture 3 hours.
Advisory: English 28.
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.
(CSU GE Area D • IGETC Area 4)
11 Great Books of Spanish Literature (3) UC:CSU
Lecture 3 hours.
Advisory: English 28.
This course presents a chronological overview of major literary trends and cultural production from the Middle Ages to the 21st century in Spain. Students will read a representative selection of literary works, identify their aesthetic specificity and historical contexts, and practice critical reading and writing skills.
(CSU GE Area C2 • IGETC Area 3B)

## 12 Contemporary Mexican Literature (3) UC:CSU

## Lecture 3 hours.

Note: Readings are in English translation. Knowledge of the Spanish language is not required.
Students explore Mexican cultural identity through masterpieces of Mexican literature spanning the late 19th and early 21 th centuries. The works of representative authors such as Juan Rulfo, Octavio Paz, Elena Poniatowska, and Mariano Azuela will be studied in depth.
(CSU GE Area C2 • IGETC Area 3B)

## 15 Great Books of Latin American Literature (3) UC:CSU

## Lecture 3 hours.

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.
(CSU GE Area C2 • IGETC Area 3B)

## 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.
(CSU GE Area D • IGETC Area 4)

## 24 Spanish for Medical Personnel (3) CSU

## Lecture 3 hours.

Students practice oral communication for medical personnel by applying basic grammar structures and vocabulary in communicative contexts related to various medical topics.

## 25 Spanish American Short Story in Translation (3) UC:CSU

Lecture 3 hours.
Advisory: English 28.
Note: Readings are in English translation. Knowledge of the Spanish language is not required.

Students engage in a survey of the Latin American short story grounded on the region's historical, political, and cultural production from the nineteenth century up until the present time. Students learn about key literary movements and authors, demonstrate understanding of the aesthetic and cultural specificity of the works studied, and develop critical reading and writing skills.
(CSU GE Area C2 • IGETC Area 3B)

## 26 Understanding Latin America through Film (3) UC:CSU

## Lecture 3 hours.

Students review the prolific output of feature and documentary films that emphasize social themes, particularly social justice and political conflict in Latin America. Discussion centers on how various Latin America countries express their resistance to and engagement with repressive social and political practices that often seek to stifle the voice of marginalized groups.
(CSU GE Area C2 or D • IGETC Area 3B)

## 27 Cultural Awareness Through Advanced Conversation (3) UC:CSU

Lecture 3 hours.
Advisory: Spanish 3 with a grade of " $C$ " or better.
Students improve their oral proficiency in the cultural context of the contemporary Hispanic world. Students read and discuss content related to the contemporary social, cultural and political issues and review and practice advanced grammar content, such as narration in the past, the subjunctive mode, and contrary-to-fact statements. Guest speakers, community service projects, and student presentations may be included.
(CSU GE Area C2)

## 35 Spanish for Spanish Speakers I (5) *UC:CSU

## Lecture 5 hours

This course is intended for fluent Spanish speakers who have had no formal instruction in Spanish. Students are introduced to Spanish grammar and spelling rules with a focus on reading and writing skills and vocabulary expansion. Students practice the four language skills in the context of the geography, customs, and cultures of the Spanish-speaking countries and of the Latino experience in the United States. No prerequisites. Credit is given for either Spanish 35 or Spanish 2, but not both.
(CSU GE Area C2 • IGETC Area 6A)

## 36 Spanish for Spanish Speakers II (5) **UC:CSU

Lecture 5 hours.
Prerequisite: Completion of Spanish 35 with a grade of " $C$ " or better, or equivalent preparation.
This course is intended for fluent Spanish speakers who have had no formal instruction in Spanish and would like to continue improving their reading and writing skills and vocabulary expansion. Students continue to increase their awareness and proper application of linguistic registers and Spanish grammar. Students practice discussion, listening, reading, and writing in the context of the geography, customs, and cultures of the Spanish-speaking countries and of the Latino experience in the United States. Prerequisite: Spanish 35 or equivalent preparation. Credit is given for Spanish 3 or Spanish 36, but not for both.
(CSU GE Area C2 • IGETC Area 6A)

## 37 Composition and Conversation for Spanish Speakers (5) UC:CSU

## Lecture 5 hours.

Prerequisite: Completion of Spanish 36 with a grade of " $C$ " or better.
This course continues to develop Spanish language proficiency after Spanish 36 and focuses on general academic writing and formal modes of presentation. It is intended for heritage speakers of Spanish who wish to increase their oral and writing skills in the context of themes, topics, and the literary and cultural production of the US Latino population. This course familiarizes students with authentic texts written in different styles to provide a platform from which to practice the presentational mode and various rhetorical modes of writing, such as description, narration, exposition,and argumentation. Final projects consist of a research paper and a formal presentation. This course prepares heritage speakers for the Advanced level in the AA degree and for upper-division major courses at fouryear universities. Pre-requisite: Spanish 36 or permission of the instructor.
(CSU GE Area C2 • IGETC Area 6A)

## 65 Mexican Literature and Culture (3) UC:CSU

Lecture 3 hours.
Students explore the culture, literature, and peoples of Mexico from the conquest to modernity. Great authors and masterpieces are read and analyzed.
(CSU GE Area C2 • IGETC Area 3B)
185 Directed Study - Spanish (1) CSU
285 Directed Study - Spanish (2) CSU
385 Directed Study - Spanish (3) CSU
Conference 1 bour per unit.
Allows students to pursue Directed Study in Spanish on a contract basis under the direction of a supervising instructor.
*UC Credit Limit: Spanish 2 and 35 combined, maximum credit one course. **UC Credit Limit: Spanish 3 and 36 combined, maximum credit one course.

## 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.
May be offered as an honors section.
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.
(CSU GE Area B4 • IGETC Area 2A)
185 Directed Study - Statistics (1) CSU
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 and Statistics 1; 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 managementemployee relations.

## Theater

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in "active participation courses" in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per "family." Failures and 'W' grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Theater Arts \& Dance department, families have been created as follows:

## THEATER FAMILY NAMES AND COURSE NUMBERS

| Acting for the Camera | THEATER 230 |
| :---: | :---: |
| Acting Study \& Professional Applied Acting | . THEATER 270, 271, 273 |
| Directing | THEATER 225 |
| Movement | THEATER 265 |
| Musical Theater | . THEATER 279, 280 |
| Professional Ensemble Performance | THEATER 232, 250, 291, 292 |
| Voice Theory | THEATER 240 |



100 Introduction to the Theater (3) UC:CSU
Lecture 3 hours.
This is a survey and theatre appreciation course for both majors and non-majors. 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. (CSU GE Area C1 • IGETC Area 3A)

## 110 History of the World Theater (3) UC:CSU

Lecture 3 hours.
This course examines the origins and development of world theater from ancient beginnings to modern times. Topics include the relationship of theater to the historical, political, social and religious events of the day, major authors and their works, the evolution of acting styles, changes in the use of the theatrical space and innovations in staging techniques.
(CSU GE Area C1 • IGETC Area 3A)

## 114 Script Study for Theatre Performance, Production, and Appreciation

 (3) UC:CSULecture 3 hours.
This course provides principles, theories, and techniques of play script analysis for theatrical production.

## 125 Dramatic Literature (3) UC:CSU

## Lecture 3 hours.

This course Surveys dramatic literature from ancient Greece to present day. Play structure, style, language and themes will be examined and the influence of the theater as a social and cultural force will also be discussed. Play reading for pleasure, appreciation and interpretation is emphasized. Film presentations highlight outstanding plays and related topics.
(CSU GE Area C1 or C2 • IGETC Area 3B)

## 225 Beginning Direction (3) UC:CSU

## Lecture 3 hours.

Advisory: Completion of Theater 270 and one technical theater class. (Theater 300 through 400).
This course guides the directing student through the beginning process of choosing and examining a dramatic text to the final steps of staging a short one-act play to be performed before a live audience. Students are trained and gain hands-on experience in many important areas, including: research and script analysis, interpretation, auditions and casting, scheduling rehearsals, preparing a prompt book, blocking and stage business, pace and timing, creative problem-solving and effective techniques for working with the actors.

## 230 Acting for the Camera (3) UC:CSU

Lecture 3 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 II (2) UC:CSU - RPT 3

## Laboratory 6 hours.

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. Study culminates in a college public performance entered in the intercollegiate competition of the American College Theatre Festival.

## 240 Voice and Articulation for the Theater (3) UC:CSU

## Lecture 3 hours.

Students will study on the fundamentals of voice production and overall vocal effectiveness for the stage. Through theory, practice, exercises and performance, the following elements are incorporated: relaxation, breath support, physical alignment, resonance, projection, pitch, articulation, variety and expressiveness.

## 250 Children's Theater Production (2) CSU

Laboratory 6 hours.
Required auditions are held the first week of class, during which casts are selected for faculty directed productions.
Students will study on the audition, rehearsal, and performance process for the production of children's plays before a live audience of the general public. Basic guidelines and distinct performance challenges are defined, such as, developing creative storytelling skills, interacting with a younger audience, building the actor's physical and vocal energy, flexibility and variety, and exploring a broad range of unique and imaginative characterizations.

## 265 Movement for the Actor (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
This course introduces theory, principles and practical techniques of theatrical stage movement and is designed to develop the actor's physical expressiveness on stage. Exercises and explorations are utilized to develop strength, balance, energy, flexibility and creativity. Basic unarmed combat, stage falls, period movement, and physical elements of characterization are also incorporated.

## 270 Beginning Acting (3) UC:CSU

## Lecture 3 hours.

This course provides instruction in the basic fundamentals of acting theory and practice. It prepares students for subsequent acting courses and fulfills one of the requirements for production classes. Relaxation, concentration, physical and vocal expressiveness, improvisation, scene and monologue performances, acting terminology, script analysis, and character development are primary areas of focus. (CSU GE Area C1)

## 271 Intermediate Acting (3) UC:CSU

Lecture 3 hours.

## Prerequisite: Theater 270 with a grade of " $C$ " or better.

Students receive further instruction in acting fundamentals through scene study. By exploring a broader scope of character roles and material, students form an enhanced sense of self awareness and confidence on stage and continue to build performance skills involving body, voice, movement, concentration, emotional range, imagination and spontaneity. Object exercises, games, improvisations, discussions, cold readings, scene and monologue performances, script and character analysis, and performance critiques are additional elements of the class.
(CSU GE Area C1)

## 273 Advanced Acting (2) UC:CSU

Lecture 1 hour. Laboratory 2 hours.
Prerequisite: Theater 270 and 271 with a grade of "C" or better.
This course offers advanced students a focused and in-depth study of acting concepts, methods, and techniques utilizing scenes from major plays and authors in both historical and contemporary drama. Continued performance experience develops acting ability and confidence in the areas of voice, body, character development, emotional range, energy, and overall stage presence. Requirements for historical periods and styles are examined along with audition guidelines and procedures. Exercises, improvisations, scene and monologue performances, comprehensive script analyses, and detailed critiques are designed to expand the student's training and sharpen acting skills.
(CSU GE Area C1)

## 279 Musical Theatre (2) *UC:CSU

Lecture 1 hour. Laboratory 2 hours.
This course is survey of American Musical Theatre with emphasis on the development of singing, dancing, movement, acting skills and techniques, as well as, an analysis of musical theatre composition and development. Opportunity is offered to apply these skills in a performance project before a live audience. Students are advised to have some background in music and vocal techniques.

## 280 Musical Theatre Workshop (3) *UC:CSU

## Laboratory 6 hours.

This course will provide practical experience in using techniques and principles of acting in the musical theatre and will culminate with a live performance before an audience. Emphasis will focus on the development of acting, singing, and movement skills. Students are advised to have some knowledge of reading music and vocal singing ability.

## 291 Rehearsals and Performances I (1) UC:CSU - RPT 3

Laboratory 3 hours, plus rehearsals and performances.
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 a Theatre department play presented before a public audience. All areas of the production process are incorporated, including acting, stage management, technical theatre and back stage crews, costumes, make up and house management. Students must be available to meet all scheduled technical rehearsal and performance dates. Study culminates in a college public performance entered in the American College Theatre Festival.

## 292 Rehearsals and Performances II (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.
Students are actively involved in the production of a Theatre department play presented before a public audience. All areas of the production process are incorporated, including acting, stage management, technical theatre and back stage crews, costumes, make up and house management. Students must be available to meet all scheduled technical rehearsal and performance dates. Study culminates in a college public performance entered in the American College Theatre Festival.

## 300 Introduction to Stage Craft (3) UC:CSU

## Lecture 3 hours.

Through lecture and laboratory demonstration, This course covers all phases of scene construction, painting, mounting and running of stage scenery. This course 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.

## 305 Introduction to Design for Theater (3) CSU

## (Pending State approval)

Lecture 2 hours. Laboratory 2 hours.
This course offers students a survey of scenery, lighting, sound, props, costumes and make-up, theatrical equipment, and construction techniques through demonstration and laboratory experience.

## 310 Introduction to Theatrical Lighting (3) UC:CSU <br> Lecture 3 hours.

This course presents the basic skills of theatrical lighting, its equipment, medium and design; with special emphasis on practical application of computer-aided drafting, design and intelligent lighting systems.

## 315 Introduction to Theatrical Scenic Design (3) UC:CSU

## Lecture 3 hours.

This course explores the training, practice, and problem solving skills of designing scenery for the stage. The course includes concept design development, construction and painting techniques, sketching and rendering media skills, and model making. In addition, the course will include an introduction to the use of the Vectorworks computer program for drafting and rendering a scenic design.

## 320 Computer Aided Drafting and Designing for the Theatre (3) CSU <br> Lecture 1 hour. Laboratory 2 hours

This course explores the drafting techniques and skills needed to express the art of theatrical design in lighting, scenery, and sound through the medium of the computer. Students will study primarily on the computer drafting program known as Vectorworks.


## 340 Theatre Management-On and Off Stage (3) UC:CSU

## Lecture 3 hours.

This course exposes the students to the knowledge and skills necessary to stage manage a theatrical production, and covers an overview of theatre administration including theatre management, production management, and producing.

## 342 Technical Stage Production (2) UC:CSU - RPT 3 Laboratory 6 hours.

Students 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. Study culminates in a college public performance entered in the American College Theatre Festival.

## 411 Costuming for the Theater (3) UC:CSU <br> Lecture 2 hours. Laboratory 2 hours.

This course Surveys theatrical costuming as a craft and design art. It introduces and incorporates 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 (3) UC:CSU

Lecture 2 hours. Laboratory 2 hours.
Students are introduced to the basic techniques and materials of theatrical stage makeup and provides practice in its application. Students learn to create designs and apply straight, corrective, middle age, old age, character and fantasy makeups. The application of facial hair, scars, bruises, and prosthetics are also studied. Lab work may include work on current departmental productions.

## 185 Directed Study - Theater (1) CSU

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.
*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



## A

## Abbamontian, Ramela (2007)

Art
B.A., M.A., Ph.D., University of California, Los Angeles

## Abels, Beth (2008)

Architecture
B.A., University of Michigan
B.S., Kent State University
M.Arch., University of California, Los Angeles

## Accardo, Donna L. (1989)

English/English as a Second Language
B.A., M.A., University of Nevada, Reno

Ahrens, Stephen R. (1980)
Business
B.S., University of Vermont
J.D., New York Law School

## Anderson, Barbara A (2001)

Dean, Academic Affairs
B.A., M.A., California State University, Northridge

## Anderson, Emily (2013)

English
B.A., University of California, Los Angeles
M.A., New York University

## Atondo, Elizabeth (2001)

Counseling
B.A., Stanford University
M.S., California State University, Los Angeles

## B

## Bass, Wendy (2010)

Distance Education
B.A., University of Arizona
M.A., California State University, Northridge

Ph.D., University of California, Los Angeles

Bates, Maria (2006)
English
B.A.,Ph.D., University of California, Santa Barbara

Belden, Angela (2010)
Psychology
B.A., University of Arkansas, Little Rock
M.S., Ph.D., Oklahoma State University

Benne, Elizabeth (1993)
Director, Health Center
B.S.N., Point Loma College, San Diego
M.A., California State University, Los Angeles

## Berger, Sheri L. (2014)

Vice President, Academic Affairs
B.A., M.A., California State University, Northridge

## Bespolov, Oleg (2014)

Dean, Institutional Effectiveness
M.A., La Salle Univerisity

Binsley, Jill R. (2001)
Computer Applications and Office Technologies
A.A., Pierce College
B.S., Old Dominion University
M.B.A., College of William and Mary

Blaine, Ida (2002)
Director, Encore
B.A., M.A., California State University, Northridge

Borg, Darren (2008) English
A.A., Ventura College B.A., M.A., California State University, Northridge

## Braun, David S. (1986)

Business Administration B.A., M.A., California State University, Los Angeles

Brown, Pamela J. (2002)
Economics
B.A., University of Rhode Island

Ph.D., George Mason University

Bruzzese, Anna (2006)
Sociology
B.A., M.A., Ph.D., State University of New York

Stony Brook
Burke, Kathleen F. (2010)
President of the College
B.A., University of California, Irvine B.A., M.A., California State University, Northridge Ed.D., Pepperdine University
Burns, Karin R. (1991)
English
B.A., M.A., University of California, Los Angeles

## C

## Cain, Cassie (2009)

Mathematics
B.A.,M.S., University of Oklahoma

## Campbell, Kaycea (2011)

Economics
M.A., University of Southern California
B.Sc., M.Sc., University of the West Indies

Chartrand, Frank (2010)
History
B.A., University of California, Los Angeles M.A., California State University, Northridge

Cheung, Elizabeth (2010)
CAD/Engineering
B.S., University of Cincinnati
M.S., University of California, San Diego

Chow, Steve (2013)
Mathematics
B.A., University of California, Berkeley
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## ark, Lyn (1961)

 Los Angeles

Connolly, Jill P. (2006) tography B.A., State University of New York, Plattsburgh .S., Boston University

Microbiology
B.A., Ph.D., University of Arizona

Cooper, Melody (2006)
B.A., M.A., California State University, Northridge

Cooper Frig, Yvonne (2007)

Cooperman, Michael (2010) rt Multimedia B.S., California State University, Northridge M.A., San Diego State University

D
De La Garza, Marco J. (2002)
B.A., M.A., California State University, Northridge

DeVaney, Shannon (2010)
B.A., University of Washington

Ph.D., University of Kansas

Communication Studies B.A., M.A., California State University, Northridge

Del Bosque, Monika (2009)
B.A., M.F.A., John F. Kennedy University

Diehl, Marisa (2012)
M.A., San Jose State University

Ph.D., Hastings University
Dobbertin, Monique S. (2000) nglish B.A., University of California, Irvine , TESOL, Seattle University

Child Development
B.A., M.A., California State University, Northridge me, Rudy (1978)
B.A., M.A., California State University, Northridge

Drelen, Traci (2008)
Child Development
B.S., M.S., California State University, Northridge

Eisenlauer, Joseph (1996)
anthropology and Archaeology
M.A., Cal State, Hayward

Ersig-Marcus, Christine (2012)
M.A., California State Unviersity, Long Beach

F
Paris, Patricia A. (1992)
Biology
avre, Jeff (2013)
ournalism/Media Arts
B.A., Indiana University
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Dean, Academic Affairs
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Fields, Dale (2006)
B.S., University of Arizona, Tucson
M.S., Ph.D., The Ohio State University, Colombus
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M.A., Cal Lutheran University
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B.S., Northern Illinois University
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Mathematic
B.S., University of Illinois, Chicago
ortune, Tom (2005)
Automotive Service Technology
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Accounting and Business A.A., College of the Canyons B.S., California State University, Long Beach M.Ed., National University
urmuly, Roya (2006)
Mathematics
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abrielli, Anthony (2008)
B.A., University of Nebraska
M.A., Northeastern University
D., University of Nebraska

Dean, Academic Affairs
A.A., Los Angeles City College
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Library Science
M.A., San Jose State University

Gelardi, Katherine (2007)
Nursing
B.S., M.S.N., A.N.P., California State

University, Los Angeles
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Technical Theater
A.A., Los Angeles Pierce College B.F.A., M.F.A., California Institute of the Arts

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Psychology B.A., University of Southern California M.A., Ph.D., University of California, Riverside

Gibson, Denise (2008)
Dance A.A, Moorpark College B.A., University of California, Santa Barbara M.F.A., University of California, Irvine

Gilbertson, Greg E. (2000) Art
B.F. A., The School of The Art Institute of Chicago M.F.A., University of Southern California

Giles, Melva T. (1989) Nursing A.A., Catonsville Community College B.S.N., California State University, Los Angeles M.S.N., California State University, Dominguez Hills Ed.D., Pepperdine University

Willis, Art (2004)
Director, PACE B.S.D.A., Roosevelt University, Chicago M.S., Golden Gate University, San Francisco Ed.D., Southeastern University, Fort Lauterdale

Gillis, Cara (2009) Philosophy B.A., University of Western Ontario M.A., California State University, Long Beach M.A., PhD., University of California, Irvine

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Addiction Studies B.A., California Institute of the Arts M.A., Phillips Graduate Institute

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Goodman, Isidore I. (1984)
Chemistry
B.S., State University of New York, Albany Ph.D., University of California, Los Angeles
Gottlieb, Miriam (1992)
Special Education
B.A., University of California, Santa Barbara M.A., California State University, Northridge

Grear, Valorie L. (1979)
Theater Arts B.F.A., Memphis State University M.F.A., Cornell University

Greenberg, Lionel (1966) Music B.A., B. Ped., University of Manitoba M.M., University of California

Grogan, Robert (1997)
Computer Science and Information Technology A.S. Los Angeles Valley College B.S. California State University, Northridge

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| Biology | Director, Center for Academic Success |
| B.A., M.A., California State University, Northridge | B.A., Ph.D, California State University, Northridge M.S.W., University of California, Los Angeles |
| H | Kocs, Constance (2002) |
|  | B.A., Scripps College |
| Habata, Michael, H. (2010) | M.F.A., Northern Illinois University |
| Library Science |  |
| B.A., Stanford University | Kramer, Craig (2006) |
| M.L.I.S., University of California, Los Angeles | English |
| Hall, Kristine (2010) | B.A., University of California, Santa Barbara M.A., University of Michigan |
| American Sign Language |  |
| B.A., Gallaudet University | Kraus, Larry (1975) |
| Hamma-Kraemer, Marra (2013) | Associate Vice President, Administrative Services <br> B.A., M.B.A., Woodbury University |
| English |  |
| B.A., University of California, Los Angeles | Krikorian, Lawrence V. (1988) |
| M.A., University of California, Irvine | English |
| Hamilton, Christianne (1997) | B.A., Point Loma College |
| Nursing | M.A., University of California, Los Angeles |
| A.D.N., Pierce College | Krimm, Susan (1982) |
| M.N., University of Phoenix | Computer Science and Information Technology |
| Hart, Robert R. (2002) | B.A., University of California, Los Angeles |
| Computer Science and Information Technology |  |
| B.S., University of California, Riverside | L |
|  |  |
| Harvey, Sara (2010) | LaChance, H. Jody (2009) |
| Chemistry | Horticulture |
| B.A., University of California, Santa Barbara | A.A., Los Angeles Pierce College |
| M.S., Ph.D. University of California, Los Angeles | B.S., California State Polytechnic University, Pomona |
| Hennessey, Anne (2006) | Lakin, Karen H. (1996) |
| Psychology | EOPS Counselor/CARE Coordinator |
| B.A., Goucher College | B.A., M.A., Cal State, Dominguez Hills |
| M.A., Ph.D., Emory University | Lam, Daisy (2012) |
| Hoshair, Mitra (2005) | Mathematics |
| Sociology | M.A., University of Riverside |
| B.A., Tehran University, Iran | Lassonde, Kristin (2013) |
| M.A., Ed.D., California State University, Northridge | Mathematics |
| Hoskinson, Marjorie H. (1969) | B. S., University of Texas, Arlington |
| English | B.S., Texas A \& M |
| B.A., M.A., University of California, Los Angeles | M.A., Claremont University |
|  | Le Barbu, Anne (2012) |
| J | French |
| J | B.A., Universite de Rennes II |
| James, John Robert (1989) | M.A., San Diego State University |
| Counseling, Assistant Director of EOPUS | Lee, Stephen (1984) |
| B.A., California State University, Long Beach | Geology |
| M.S., University of Southern California | B.S., University of Illinois |
| Johnson, Jodi A. (1986) | C. Phil., University of California, Los Angeles |
| English | Lehavi, Sheri (2007) |
| B.A., M.A., California State University, Northridge | Mathematics |
|  | B.A., University of California, Berkeley |
|  | M.S., California State University, Northridge |
| K | Lemus, Bonnie (2008) |
|  | Nursing |
| Karamian, Martin (2009) | B.A., M.A., Occidental College |
| Business | M.B.A., California State University, Northridge |
| B.A., San Francisco State University | M.S.N., California State University, Los Angeles |
| M.B.A., California State University, Northridge | Lim, Raymond (2006) |
| Kassamanian, Sally (2013) | Psychology |
| Communication Studies | B.A., California State University, Los Angeles |
| B.A., M.A., California State University, Northridge | M.S., Ph.D., North Carolina State University |
| Kelly, Diane R. (2006) | Lindsay-Sawyer, Robin (1995) |
| Physical Education | Counseling |
| B.S., George Washington University | B.S., Arizona State University |
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Habata, Michael, H. (2010)
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American Sign Language
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English
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J
James, John Robert (1989)
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B.A., California State University, Long Beach
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Kocs, Constance (2002)
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Kramer, Craig (2006)
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Lee, Stephen (1984) cos
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Mathematics
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Lemus, Bonnie (2008)
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Lim, Raymond (2006)
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B.A., California State University, Los Angele

Lindsay-Sawyer, Robin (1995)
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Lofrano, Robert J. (1989)
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## Longmore, Staceylee (2006)

 Child Development B.S., M.S., California State University, NorthridgeLoveridge, Lee (2009)
Physics
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## Low, Teresa (2007)

## Biology

B.A., University of California, Davis M.S., University of California, Los Angeles

Lyons, Robert M. (1964)
Business Education B.S., M.B.A., University of California, Los Angeles

M
Maccarone, Scott (2013)
Mathematics M.A., California State University, Irvine

Marano, Damiano A. (1989)
Modern Languages B.A., Hunter College M.A., M.B.A., University of California, Los Angeles

Martinez, Jennifer (1996) Mathematics B.A., California State University, Long Beach M.S., University of California, Irvine

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McHargue, D. Steven (2002)
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McKeever, (James) Arthur (2009) Sociology A.A., Los Angeles Valley College B.A., California State University, Los Angeles M.A., Ph.D., University of Southern California

McMillan, Richard B.(1996)
History B.A., M.A., California State University, Northridge

McQuitty, Melanie (2010) Philosophy B.A., LaSalle University Ph.D., Temple University

Meyer Joiner, Cari (2007) Chemistry B.S., Ph.D., University of California, Los Angeles

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Nursing
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Psychology
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## N

Nabulsi, Kassem (2009)
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## Nantroup, Sherry L. (2001)

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Mathematics
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Nomelli, Sheryl (2012)
 M.A., California State University, Northridge

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Counseling B.A., M.S., California State University, Northridge

## O

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Administration of Justice
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Chemistry
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PhysicalScience
B.A., University of Washington

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Chemistry
B.S., Reed College

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Partington, Alfred M. (1978)
Business Administration
B.B.A., University of Miami
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Perkins, Wayne (2006) Music
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Computer Applications and Office Technologies
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Psychology
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Peters, Earic (2013)
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SpecialEducation
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## Pillado, Margarita (2009)

Spanish
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Mathematics B.S., M.A., Ph.D., University of California, Santa Barbara

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Rashidian, Mehrdokht (2013)
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English as a Second Language
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Reynoso, Aurora (2006)
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Rich, Kim (2010)
Administration of Justice B.A., M.A., California State University, Northridge

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Roberson, Joseph (2009)
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Rodriguez, Cristina (2006)
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English
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Sandico, Abigail (2010) Counseling
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## Music

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## Sheldon, Charles C. (1988)

 English B.A., University of California, Santa Barbara M.Litt., University of Edinburgh, ScotlandSilver, Michelle (2010)
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Computer Applications and Office Technologies B.A., California State University, Northridge M.B.A., California Lutheran College

Skidmore, Richard D. (1975) Business B.S., M.S., California Polytechnic State University, San Luis Obispo
Smetzer, Ronald D. (1981) Industrial Technology A.A., A.S., Pierce College B.A., University of State of New York CMfgE (Certified Manufacturing Engineer) Society of Manufacturing Engineers
Smith, Benjamin (2009)
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Snow, Chadwick (2007) Psychology B.A., Skidmore College M.A., Ph.D., University of Southern California

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Child Development
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Mathematics
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B.A., M.A., M. S., California State University, Los Angeles
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Nursing
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## T

Tabatabai, Zhila (2002)
Mathematics
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Taylor, Jamie (2009)
Life Science
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B.S., University of California, Los Angeles M.S., California State University, Northridge

Tchertchian, Edouard (2012)
Mathematics
M.A., California State University, Northrdige

Thorne, Kirsten (2006) Spanish
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Thouin, Laurence G. Jr. (1982)
Biology
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M.S., Ph.D., University of Southern California

Tiu, Concepcion (2005)
Nursing
B.S.N., Pamantasan Ng Manila M.S.N., California State University, Dominguez Hills
Traughber, Lucinda (2006) Nursing B.S.N., M.S.N., University of Phoenix

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

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

Van Norman, Moriah (2013)
English as a Second Language
B.A., University of Southern California M.A., Azusa Pacific University

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Mathematics
M.S., University of California, Irvine B.S., University of California, Los Angeles

Villanueva, Donna-Mae (2000)
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Voss-Rodriguez, Joleen (2001)
Child Development
B.A.,M.A., California State University, Northridge

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

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

Webber McLean, Kalynda (2014)
Dean, Student Services B.A., M.A., San Diego State University Ed.D., Pepperdine

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

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

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

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

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

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Mathematics B.A., Mount St. Mary's College M.A., University of California, Santa Barbara M.S., California State University, Northridge

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

Z
Zimring Towne, Joanna (2009)
Counseling
B.A., University of Wisconsin-Madison
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## Emeriti Faculty

## Adelson, Ben H.; 1965-1981

Journalism

Aguilar, Amara; 2008-2012
Journalism and Multimedia
Ahmadian, Jack; 1980-2012
Mathematics
Alberti, Leo; 1956-1980 Chemistry
Allocco, Brenda K.; 1986-2001 Nursing
Alvarez, E.C.; 1955-1983 Computer Science
Aminoff, Susan; 1996-2010 Sociology
Anderson, Arthur J.; 1955-1980 Business Administration
Anderson, Donald; 1962-1995 Philosophy
Anderson, Ellen S.; 1965-1993 Business
Anderson, Marcia; 1989-2006 Nursing
Anderson, Richard; 1964-2004
Counseling; Psychology

Anderson, Roger; 1994-1995 Mathematics
André, Lawrence; 1998-2009 Philosophy
Andrino, Ruben D.; 1966-1993 Modern Languages
Baker, Robert S.; 1985-1995 Theater Arts
Ball, Odis C.; 1975-1995
Theater; Physical Education
Barlow, John D.; 1949-1984 Animal Science
Basil, Kathleene L.; 1965-2001 Business Department Chairperson, Office Administration

## Bayer, Diana E.; 1967-1984

Special Reading/English
Bell, Michael R.; 1968-2004
Physical Education, Department Chair, Physical Education Men's
Beller, Anthony; 1968-1998 Business Administration

Beyer, Frank; 1968-2002 English, Department Chair, English

## Bird, Billy G.; 1968-1995

 Floral DesignBixler, Margaret L.; 1979-1993 Teacher, Campus Child Development Center
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Teacher, Child Development Center
Boyd, Barbara J.; 1966-1973 Physical Education
Bravo, Edward; 1970-1991 Physical Education
Brown, Roger A.; 1971-2004 Counseling
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Cameron, Catherine M.; 1973-1994
Nursing; Acting Dean, Administration
Campbell, E. Dudley; 1975-1999 Psychology
Campbell, Thomas R.; 1975-2006 Biology
Carrillo, A. Alexander; 1968-1989 Art

Carthew, John A; 1964-2010 Geography
Cavenaugh, Jane T.; 1970-1982 Psychology
Chambers, James V.; 1968-1983 English
Chambers, Robert D.; 1957-1989 Physical Education
Chapman, Norman C.; 1957-1968 1977-1982, Music, Dean of Instruction
Chase, Robert; 1971-1985 Dean of Academic Affairs
Chavarria, Mary M.; 1984-2012 English
Christensen, Audrey; 1965-2001
Speech Communication
Christie, Evelyn G.;1965-1997 Chemistry
Cluff, John M.; 1966-1989 PoliticalScience
Cohen, Jeffrey L.; 1977-2013 Psychology
Cohen, Sylvia L.; 1965-1995 Psychology
Cook, Leslee; 1979-2009 Counseling
Corbeil, John W.; 1965-1992 Art
Cornner, Mike; 1975-2006 Journalism
Crandall, James W.; 1965-1991 Art

Crawford, Roger C.; 1971-1999 Physics
Crossen, James; 2000-2012 Addiction Studies

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Special Education, Director; Special Services
Curby, J. C. (Suzette); 1971-2001
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Deonik, Walter A.; 1957-1988 Engineering
de Rubertis, William A.; 1970-2010 Political Science

DesMarteau, Philip D.; 1976-92 Animal Science
Deutsch, Diana; 1978-2012 Child Development
Dixon, James; 1949-1982
Horticulture, Coordinator of Administrative Services
Doctor, Charlotte B.; 1989-2007
English, Dean, Academic Affairs
Drooyan, Irving; 1956-1983 Mathematics

Drummond, Patricia A.; 1991-1995 Counseling
Duxler, Mary; 1970-2012
Speech Communications
Duxler, William; 1972-2012 Physics
Ehrhardt, Luise; 1989-2009 Library Science
Eisenbart, Gordon J.; 1975-2005 History
Elman, Sidney H.; 1961-1995 PoliticalScience
Enger, Robert R.; 1988-1996 Business
Enkema, Patricia; 1967-1987 Biology
Epstein, Allen; 1999-2009 Mathematics
Eskelin, Gerald Ray; 1973-2001 Music

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

Farrar, Ronald D.; 1968-1989

> Foreign Languages Department Chairperson, Foreign Languages
Feldman, Bernard; 1967-1983 Mathematics

Fiorello, Geraldine Y.; 1961-1990 Physical Education
Fish, Barbara; 1977-2006 Counseling
Fisk, Richard; 1985-1995 Music
FitzGerald, Richard E.; 1970-1995 English
Flores-Esteves, Manuel; 1989-2008
Counseling

Follett, Richard; 1984-2013 English
Foster, Harold; 1963-1984 Psychology
Fox, Stuart; 1986-2006 Life Science
Friedrich, Linda B.; 1987-1995 Nursing
Frith, Stefanie; 2009-2014 Journalism

Fujimoto, Jack; 1996-1996 President of the College
Furman, Mildred; 1971-1986 Health Education
Gani, Scarlett; 1985-2003 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 Architecture
Gerstl, Shelly; 1981-2008
Dean, Admissions and Records
Gibson-Lott, Anne; 1987-2010 Library Science

Girgis, Amal Y.; 1976-2007 Chemistry
Goerss, Harold; 1971-2006 Economics
Goldbloom, Erwin M.; 1965-1995 Physical Education
Goldblum, Sheldon M.; 1970-1995 History
Gonzalez, Margarita L.; 1984-2005 Counseling
Gottlieb, Seymour; 1970-2003 Mathematics
Greer, Fontaine; 1989-2002 English

Guffey, Mary Ellen; 1975-1994
Office Administration
Habib, Nicholas; 1976-2008
Department Chairperson, Philosophy/Sociology Philosophy
Haile, Lynne H.; 1968-1998
Physical Education
Hall, Fay K.; 1986-1989 Nursing
Hankammer, Larry; 1968-1995
Physical Education
Hardesty, James N.; 1965-1995 Mathematics
Harland, John; 2010-2012 Mathematics
Harwick, Betty C. B.; 1966-1995 Sociology
Haskell, Barry S.; 1958-1999 Geology
Heckel, Russel H.; 1969-1995 History
Herbst, Cynthia L.K.; 1979-2014 American Sign Language/Interpreter Education
Hoffmann, Edmund C.; 1970-1999 Computer Science and Information Technology
Hopper, Barbara K.; 1968-1982 Biology
Horne, Janet B.; 1979-2005
Computer Applications and Office Technologies
Horst, Donald P.; 1970-1988 Theater
Horstein, Charlotte G.; 1986-1997 Nursing
Horvath, Rozsa J.; 1981-2010 Theater Arts
Houghten, Sadako H.; 1966-1986 Biology
Houston, Ann H.; 1969-1999
Biology
Department Chairperson, Life Science
Huber, William A.; 1965-1989
Chemistry
Department Co-Chairperson, Chemistry
Hubbell, John L.; 1965-1984 Foreign Languages
Hume, Carlyle M.; 1975-2000 Department Chairperson, Music Music

Hutner, Lavina; 1998-2006 Counseling
Hylton, Wallace; 1985-1989 Art
Ikkanda, J. Martin; 1971-2007 Biology
James, Anna Gale; 1966-1999 Articulation Officer Psychology
Johnson, J. Thomas; 1972-2001 Philosophy

Johnson, Ray; 1964-1973
Dean of Instruction
Jones, Edwards; 1986-2008 PoliticalScience

Jones, Harry; 1963-1994 Electronics
Kamuk, John; 1985-1989
Lecturer of Industrial Education
Khasigian, Amos; 1965-1983 Economics
Kinchloe, Ralph; 1970-2001 Biology
Kistel, Paul D.; 1977-2004 English
Klass, Bernard M.; 1965-2001 History
Kleeb, Jane; 1963-1986 English
Koller, Evelyn M.; 1986-2013 Biology, Department Chairperson, Life Sciences
Kostanick, Celeste B.; 1957-1983 Geography
Kramer, G. Thomas; 1971-1999 Journalism
Krause, Gary B.; 1979-2005
Landscape Architecture
Kubach, Kathleen L.; 1995-2010 Biology
Kuczynski, John; 1968-2000 Art
Kuljian, Ernest S.; 1951-1984 Chemistry
Lagerstrom, James; 1966-1997 Speech Communication Department Chairperson, Speech Communication
Landau, William; 1966-1989 English
Lange, Donna L.; 1975-2003
PhysicalEducation/Health Department Chair, Physical Education Women's
Larson, Eugene; 1970-2012 History

Lenier, Minnette G.; 1984-2001 English
LeRoy, Martie F.; (2001) Teacher, Child Development Center
Leventhal, Robert M.; 1963-1995 History
Levine, Diane; 1998-2013 Anthropology, Department Chairperson, Anthropological and Geographical Sciences

Levy, Norman S.; 1985-2010 PoliticalScience
Lewis, Henry E.; 1963-2004 Physical Education
Lewis, William E.; 1981-1984
Dean, Student Services
Business Administration

Lieu, Sandi; 1985-2007 Mathematics

Logan, Barrie; 1972-2006 Chemistry

Lopez, Henry P.; 1966-1999 Modern Languages

Luke, Roy; 1964-1995
Mathematics
MacMaster, Joan H.; 1969-1995

## History

Department Chairperson, History/Humanities
Madson, Derald L.; 1969-1995 Biology

Majer, Lincoln; 1972-1975
Lecturer in Vocational Education
Martinez, Carlos; 1992-2006

> Dean, Academic Affairs

Mason, Joyce; 1967-1990 Business

Mazeika, Edward R.; 1986-2010 Psychology
McCarty, Marcella A.; 1961-1981 Health Services

McCaslin, Joy; 1988-2012 Vice President, Student Services
McClatchey, William D.; 1986-1989 Antbropology
McCrackin, Russell; 1963-1983 Physics

McCutcheon, Thomas; 1983-1994 Mathematics
McWilliams, Marian; 1958-1995
Physical Education
Means, Daniel G.; 1989-1991
Educational Guidance
President of the College
Mehlman, Mary R.; 1964-1995
Mathematics
Meyers, Paul A.; 1974-2005 Biology
Meziere, Mary J.; 1965-1995 English
Migliore, Barbara; 1989-2006 Nursing
Muir, John K.; 1964-1989 Lecturer in Physical Education Mull, Charles H.; 1982-1998 Industrial Technology

Mundsack, Allan; 1995-2003 Mathematics
Munsey, Robert E., Jr.; 1965-1995 Industrial Technology

Nabi, Hosni; 2001-2002 Biology
Nardin, Barbara; 1976-1988 Geology
Nelson, Lori; 2010-2012
Reading Specialist/English
Nicklin, John R.; 1970-1973 Acting President of the College

Nordberg, Paul C.; 1976-1999 Art
Norton, William; 1989-2012
Physical Education Department Chairperson, Physical Education
Obayani, Kambon; 1991-2013 English
Obrecht, Frederick P.; 1992-1995 English
O'Connor, Robert; 1965-1994 Health Education
O'Dea, Marcia C.; 1991-2005 Modern Languages

O'Dea, Thomas F.; 1985-2005 Modern Languages
Odegard, Patricia; 1979-1989 Nursing
Odello, Elizabeth; 1980-2009
Department Chairperson, Philosophy/Sociology, Philosophy
0'Hanlon, Lynne; 1969-2012
Computer Science \& Information Technology
Department Chairperson, Computer
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Oliver, Tim; 1999-2006
Vice President, Administration
Oliver, Tom; 2000-2006
Vice President, Development
O'Neil, Robert; 1989-2011 Journalism
Ono, Robert K.; 1981-2012 Chemistry
Osborne, Philip R.; 1980-1999
Vocational Education
Director, Cooperative Education
Oshima, David; (1997)
Art
Pam, Irene S.; 1974-1995 Counseling
Pandey, Carol J.; 1971-2005 Psychology
Paulman, Jack S.; 1967-1977 Computer Science
Pawlicki, Michael J.; 1976-2013 Music
Pence, Robert L.; 1969-1995 Antbropology

Pendleton, James; 1970-1989 PhysicalEducation
Penrod, Richard, G.; 1970-2008 History
Perry, Gerald E.; 1964-1995
Physical Education
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Peterson, Lynne; 1976-2006 Psychology
Peterson, Philip E.; 1975-1994 Mathematics

Piazza, Stephen Paul; 1978-2012 Music

Pickard, Dean; 1983-2004
Pbilosophy/Humanities
PhysicalEducation
Pill, Beatrice L.; 1955-1982
Chemistry
Pinkston, Howell; 1970-2001 Art
Ponsor, Judith; 1980-2003
Nursing
Powell, Mark L.; 1967-1995
Geography
Department Chairperson, Earth Science/Physics
Pregerson, Bernadine S.; 1976-2012 Microbiology

Putnam, Gene; 1989-2011
Theater Arts
Department Chairperson, Theater Arts
Raboy, Joseph; 1968-1989 English
Ramirez, Lucia; 1984-2004
Counseling
Ravetch, Herbert; 1958-1970
1978-1985
President of the College
English
Reidy, James B. Jr.; 1976-1989
Computer Science
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Science and Information Technology
Reiter-Vasquez, Kathleen L.; (1975-2012) Child Development
Renzi, Joseph; 1971-1983
VocationalEducation
Richards, James R.; 1986-1991
Psychology
Rikel, James E.; 1977-2010 Biology
Rinnander, Elizabeth A.; 1981-2004
Associate Dean, Academic Affairs
Robin, Florence K.; 1975-2012
Library Science
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Robbins, Kent; 2009-2013
Anatomy/Physiology
Rooney, Colleen; 1975-2006 Counseling
Rosdahl, Thomas; 1986-2013 Industrial Technology
Rose, Jacquinita; 2007-2011 Dean, Academic Affairs

Rosemark, Erika; 1974-1989
Early Childhood Education Director, Campus Children's Center

Rosen, William J.; 1976-1988 Mathematics
Ross, Bernice; 1986-2006 Psychology

Ross, D. Lee; 1971-1986
Dean, Academic Affairs
Roth, Sheldon; 1989-2013 Counseling
Rowe, Bruce; 1971-2012 Anthropology
Rupert, Dorothy; 1994-2008 Dean, Academic Affairs
Russell, William H.; 1984-2009 Geography
Salazar, Patrick; 2010-2012 Grant Writer
Scheibel, Barbara G.; 1976-1989 Special Reading/English
Scheibel, Robert W.; 1969-1989 Journalism
Schneider, Sandra; 1991-2013 English
Schneiderman, Beth; 1971-1991 English
Schulman, Benson R.; 1966-1989 English
Schulman, Florence W.; 1968-1987
Health, Physical Education, Leisure Management

Schulman, Sandra; 1972-1989
Director, Study Skills Center
Special Reading/English
Schutzer, David; 1985-2012 Antroopology
Sears, Malcolm G.; 1976-2005 Natural Resources Management
Sharpe, Kenneth J.; 1984-2014 Electronics
Shaver, James R.; 1987-1995 Sociology
Shaw, William L.; 1958-1995 Electronics
Sheff, Eileen T.; (1979) Counseling, Psychology
Shepherd, Henny B.; 1970-2005 Physical Education
Sherman, Arthur A.; 1984-2002 Computer Science and Information Technology
Shocket, Sol; 1959-1992 Economics
Siemens, David F., Jr.; 1966-1986 Pbilosophy
Silver, Constance R.; 1969-1988 Counselor
Siskin, Burton F.; 1986-1995 Anthropology

Slattery, Eugene R.; 1950-1993
Mathematics
Small, Laurence; 1974-2007 Mathematics
Smith, Richard A.; 1986-2003 Psychology
Smith, Thomas; 1964-1987
Library Services
Smith, Walter Henry; 1956-1995 Art
Snooks, A. Nancy; (1971) Art
South, Richard; 1976-2010 Horticulture
Sparks, Donald M.; 1989-2013 Pbysics
Stanley, Kenneth; 1966-2002
Pbysical Education

Stein, Philip L.; 1965-2009
Antbropology, Department Chairperson, Antbropological
and Georgraphical Sciences

Stellwagen, Karin.; 2012-2012 Cinema
Sterk, Jack.; 2007-2011 Speech
Sutherland, Miriam M.; 1976-1989 Nursing
Thomas, Louise B.; 1975-2001 Nussing
Thompsen, Terry; 1966-2006 Business Administration
Thomsen, Mary Joan M.; 1964-1999 Psychology
Tishler, Roger; 1984-2012 Mathematics
Tontsch, John W.; 1965-1995 Computer Science and Information Tecbnology
Toyoshima, Joe; 1964-1989 Lecturer in History
Trinchero, Bart L.; 1968-2000 Industrial Technology
Turney, Kay E.; 1965-1995
Physical Education
Department Chairperson, Physical Education/Women
Van Auker, Alfred J.; 1961-1986 Art

Van Tamelen-Hall, Victoria; 1991-2012 Counseling
Van Voorhis, James C.; 1964-1989 Architecture

Vernon, James Y.; 1971-1986 Meteorology
Vree-Brown, Marion F.; 1958-1985 Music

Waldron, Jill R.; 1971-1998 English
Walker, John Michael; 1973-1989
Lecturer of Horticulture
Wechsler, Ron; 1978-2006 Animal Science
Weiser, Marian S.; 1963-2012 Dance
Whalen, Paul L.; 1985-2012
Dean, Academic Affairs
Whitman, Orene; 1972-1989 Nursing
Wilkinson, Jean; 1964-1984 English
Williams, Charles R.; 1974-1995 Physical Education
Williams, Robert L.; 1969-1980 History
Williams, Shiela; 1990-2010 History
Wilson, Charles C.; 1961-1984 Journalism
Wilson, Gussie Edwards; 1964-1975 Business
Wittman, Darlene K.; 1979-2013 American Sign Language, Interpreter Education
Woods, Dorris S.; 1989-1995 Nursing
Wynns, John; 1957-1978
Philosophy
Yamada, Katsuya; 1989-2013 Physics
Yoshiwara, Bruce W.; 1989-2014 Mathematics
Yoshiwara, Katherine; 1980-2013 Mathematics

Young, Sylvie; (2009) French
Zappala, Robert R.; 1976-2002 Astronomy
Zayac, John; 2007-2013
Geology
Department Chairperson, Physics \& Planetary Sciences
Zitzelberger, John F.; 1987-2014
Electronic

# 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 $\mathrm{K}-12$ 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or F .
Units Completed - Total number of units in the courses for which a student received a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or CR .
W - An administrative symbol assigned to a student's permanent record for all classes which a student has dropped or has been excluded from by the instructor after the end of the non-penalty drop date but before the last day to drop.

Withdrawal - The action a student takes in dropping all classes during any one semester and discontinuing coursework at the College.

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## Pierce College Village Map







[^0]:    photography > Yvonne K. Kleiman and Doreen J. Clay publication coordinator > Giselle Calubayan
    GRAPHIC ARTIST > Yegor Hovakimian

[^1]:    See Pierce College Website for more details.

[^2]:    See page 47 of this catalog for more information on transfer requirements and resources.

[^3]:    MAJOR - TOTAL UNITS.

