



# Description of Courses

*Announcement of Courses*

**114–211**



# Announcement of Courses

## LIMITATIONS ON SCHEDULING COURSES

Some courses in this catalog will not be scheduled in 2007-2008. Additional courses may be added. Skyline College reserves the right to discontinue, postpone, or combine classes and to change instructors when circumstances warrant such changes. Further, it reserves the right to cancel classes that do not reach a minimum enrollment.

## COURSE DESCRIPTIONS INFORMATION

Courses on the following pages form the basic offerings at Skyline College. Generally, in the following course descriptions, both semesters of a year's course are listed together if the first semester course is a prerequisite to the second semester course. If there is no entry, the course has no prerequisite. All courses are offered for a letter grade, unless otherwise noted.

The credit value of each course in semester units is indicated by the number in parentheses following the title. A semester unit of credit is based upon one hour of the student's time at the college per week in lecture or recitation throughout one semester, together with the time necessary in preparation, or a longer time in laboratory or other exercises not requiring outside preparation. A normal schedule of 15 college units presupposes that the average student will devote approximately 45 hours per week to class attendance and preparation.

Skyline College reserves the right to make appropriate course and program changes during the course of the year which may not be reflected in this catalog.

## COURSE NUMBERING AND TRANSFERABLE CREDIT

The course numbering system in use at Skyline College as part of the San Mateo County Community College District categorizes courses according to the following:

**100-599** Courses generally transferable to a four-year college or university.

**600-699** Courses varying in content and which are usually transferable.

**700-799** Courses that are part of a specific occupational program and which are not generally regarded as transferable.

**800-899** Courses that are non-transferable in nature.

Courses accepted by the University of California are indicated at the end of each course description as "UC". A complete list of transferable courses will be found following the course description section, pages 214-216.

Courses identified by Skyline College as transferable to California State Universities are indicated at the end of each course description as "CSU". Courses that fulfill general education requirements show an area letter designation following. All transferable courses that satisfy general education to CSU are listed on pages 217-222.

Because of changing regulations governing the transferability of courses among the segments of higher education in California, students should consult a counselor for current information about specific items.

From time to time, a department may offer a course which is experimental in nature, covers a special topic, or which consists of independent study tailored to a student's needs. Because such courses are never exactly the same, you will not find them described in the catalog. They are, however, regular credit courses of the College. Usually they will be described in the Schedule of Classes or in other course advertising and will have a department name followed by one of the following numbers:

**670** Vocational Cooperative Education courses (1-4)

Vocational Cooperative Education courses are offered under COOP 670 as well as the 670 number in a variety of vocational disciplines. Courses numbered 670 are transferable to CSU.

**680, 880** Experimental Courses

Courses designed to study a particular area or problem beyond the scope of regularly offered courses. These courses can be offered for a letter grade or for Credit/No Credit.

**690** Individual Study in Department (1-3)

Individual study of a particular area or problem beyond the scope of regularly offered courses. Courses numbered 680 or 690 are generally transferable. Courses numbered 880 are not transferable. See a counselor for specifics.

Unless otherwise designated, any course may be offered either in day or evening. Specific information concerning class hours and rooms will be found in the current Class Schedule.

## COURSE REPETITION

The Board of Trustees of the San Mateo County Community College District has adopted a policy (District Rules and Regulations, Section 6.12) which permits a student to repeat certain courses for credit a maximum of three times (total of four class enrollments).

These courses require increasing levels of student performance or provide significantly different course content each subsequent semester. Such courses will be designated as "may be repeated for credit" in the College Catalog. For more information on this policy, please consult your College counselor.

Notwithstanding the exceptions cited in the previous paragraph, a student who has received a grade D, F or NC may repeat the course one time for the purpose of grade alleviation.

A student will be permitted to repeat courses indefinitely where repetition is needed for the student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. The grade received each time shall be included for purposes of calculating the student's grade point average. Students who wish to repeat courses must present documentation that course repetition is necessary to complete legally mandated training requirements.

For further information, see Course Repetition under the Academic Standards section of this Catalog.

## CALIFORNIA ARTICULATION NUMBER SYSTEM (CAN)

The California Articulation Number (CAN) identifies some of the transferable, lower division, introductory, (preparatory) courses commonly taught within each academic discipline on California college campuses. The system assures that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course for the major on another participating campus. Example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on another participating campus. The CANs are listed by the course descriptions in the Skyline College Catalog. A master list of all Skyline courses for which there are articulated CAN numbers can be found on page 227 of this catalog and can be obtained from the Counseling Office.

**Note:** CAN will be phased out in Fall 2008. See a counselor for further information.

## ACCOUNTING (ACTG)

### ACTG 100 ACCOUNTING PROCEDURES (1.5-3)

Three lecture hours per week plus two lab hours per week by arrangement. Prerequisite: MATH 811 or equivalent. Recommended: BUS. 115 or equivalent, either CAOT 104 or CAOT 225 or equivalent, and eligibility for ENGL 836.

Introduction to financial accounting procedures for businesses, with emphasis on service and merchandising operations. Instruction in manual and computerized accounting systems with hands-on computer experience. May be repeated for credit up to a maximum of 3 units. Transfer credit: CSU.

### ACTG 103 TEN KEY SKILLS (.5) (Credit/No Credit.)

One class hour plus two lab hours per week for eight weeks.

Proficiency in using the touch method is developed on the ten-key calculating machine for the four basic func-

tions of addition, subtraction, multiplication, and division. May be repeated once for credit. Transfer credit: CSU.

### ACTG 121 FINANCIAL ACCOUNTING (3)

Three lecture hours per week and one lab hour per week by arrangement. Prerequisites: ACTG 100 (3 units) with a grade of C or better, or equivalent. Recommended: MATH 120 with a grade of C or better, or equivalent; CAOT 225 or equivalent; and eligibility for ENGL 836.

Introduction to financial accounting principles and concepts, content and meaning of balance sheet, income statement, and cash flow statements. Meaning and application of generally accepted accounting principles (GAAP). Transfer credit: UC; CSU. (CAN BUS 2; ACTG 121 + ACTG 131 = CAN BUS SEQ A).

### ACTG 131 MANAGERIAL ACCOUNTING (3)

Three lecture hours per week and one lab hour per week by arrangement. Prerequisite: ACTG 121 with a grade of C or better, or equivalent. Recommended: Either BUS. 120 or MATH 241, or equivalent; and CAOT 225 or equivalent.

Accounting techniques which serve the needs of management. Includes: forecasting, budgeting, cost accounting, break even analysis, responsibility accounting, and other practices which facilitate decision making. Transfer credit: UC; CSU. (CAN BUS 4; ACTG 121 + ACTG 131 = CAN BUS SEQ A).

### ACTG 171 FEDERAL INCOME TAX (3)

Three lecture hours and one lab hour plus two lab hours per week by arrangement per week.

Preparation of Federal and California income tax returns for individuals; basic income tax law, theory and practice. Students who successfully complete this course may apply to the CTEC, the California Tax Education Council, to become a Registered Tax Preparer in California. May be repeated twice for credit. Transfer credit: CSU.

### ACTG 172 BUSINESS INCOME TAXES (3)

Three lecture hours per week plus two lab hours per week by arrangement. Prerequisite: ACTG 100 or ACTG 121, or equivalent. Recommended: ACTG 171 or equivalent.

Preparation of Federal and California income tax returns for corporations, partnerships and sole proprietorships. Completion of ACTG 171 and ACTG 172 will enable students to complete most tax returns required of professional tax preparers. Transfer credit: CSU.

### ACTG 194 INTRODUCTION TO QUICKBOOKS PRO (1)

(Credit/No Credit or letter grade.)

A total of sixteen lecture hours plus sixteen lab hours by arrangement. Recommended: Eligibility for READ 836 and ENGL 836.

Development and operation of a computerized accounting system using QuickBooks Pro. Transfer credit: CSU.

**ACTG 196 INTERMEDIATE QUICKBOOKS PRO (1)  
(Credit/No Credit or letter grade.)**

*A total of sixteen lecture hours plus sixteen lab hours by arrangement. Prerequisite: ACTG 194 or equivalent.*

Financial accounting features of setting up and maintaining a computerized accounting system using the advanced features of QuickBooks Pro along with coverage of the financial information and complex issues encountered with QuickBooks Pro. *Transfer credit: CSU.*

**ACTG 197 COMPUTERIZED ACCOUNTING (1.5)  
(Credit/No Credit or letter grade.)**

*A total of twenty-four lecture hours plus sixteen lab hours by arrangement. Prerequisite: ACTG 100 or equivalent.*

Students will install and set up Peachtree, a popular integrated commercial accounting software package. Peachtree will be used to perform daily processing tasks related to the General Ledger, Accounts Receivable/Payable, Inventory, and Job Costing.

A review of accounting concepts and principles is an integral part of the course. *May be repeated once for credit. Transfer credit: CSU.*

**ACTG 198 ADVANCED COMPUTERIZED  
ACCOUNTING WITH PEACHTREE (1.5)  
(Credit/No Credit or letter grade.)**

*A total of twenty-four lecture hours plus sixteen lab hours by arrangement. Prerequisite: ACTG 197 or equivalent.*

Peachtree, an integrated commercial accounting software package, will be used to review, differentiate, and interpret accounting concepts and data in a multitude of business situations. Topics include payroll, book and tax depreciation methods, advanced general ledger tasks, cash flow analysis, and financial statement analysis using computerized modules: payroll, fixed assets, reports, analyses and budgets. Advanced features will be discussed. *Transfer credit: CSU.*

**ACTG 665 SELECTED TOPICS IN ACCOUNTING  
(0.5 or 1 or 1.5 or 2 or 3)  
(Credit/No Credit or letter grade.)**

*Eight lecture hours plus a minimum of four lab hours by arrangement for each .5 unit.*

Short course used to introduce, develop or review accounting and/or financial topics related to financial planning. Focus on a variety of topics, such as basic accounting skills, introduction to current accounting and financial software applications, upgrades to accounting software, and other related financial planning and budgeting topics. *May be repeated for credit dependent on topic. Transfer credit: CSU.*

**ADMINISTRATION OF JUSTICE  
(ADMJ)****ADMJ 100 INTRODUCTION TO ADMINISTRATION OF  
JUSTICE (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

History and philosophy of administration of justice in America; recapitulation of the system; identifying the various subsystems, role expectations and their interrelationships; theories of crime, punishment, and rehabilitation. Survey of the ethics, education, and required training for professionalism in the system. *Transfer credit: UC; CSU (D3). (CAN AJ 2).*

**ADMJ 102 PRINCIPLES AND PROCEDURES  
OF JUSTICE (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

The role and responsibilities of each segment within the administration of justice system – law enforcement, judicial, and corrections. Procedures in each sub-system and how they relate to one another. May include field research. *Transfer credit: CSU.*

**ADMJ 104 CONCEPTS OF CRIMINAL LAW (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

Historical development and philosophy of criminal law and constitutional provisions. Special emphasis on legal definitions, the classifications of crime and their application to the administration of justice system. Study of case law, methodology, and concepts of law as a social force. *Also listed as LEGL 304. Transfer credit: CSU. (CAN AJ 4).*

**ADMJ 106 LEGAL ASPECTS OF EVIDENCE (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

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 and interpreting individual rights and case studies. *Also listed as LEGL 306. Transfer credit: CSU.*

**ADMJ 108 COMMUNITY RELATIONS (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

The roles of administration of justice practitioners and their agencies. Principal emphasis upon professional image of the system of justice administration and the development of positive relationships between members of the system and the public. *Also listed as SOCI 108. Transfer credit: UC; CSU.*

**ADMJ 110 POLICE REPORT WRITING (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Exploration of effective police report writing techniques, including crime, arrest and incident reports. Examination of interview methods, note taking, report organization and documentation, crime scene diagrams, search warrant affidavits, and case preparation for prosecution. Emphasis on essential principles of written and oral communication in law enforcement, including testifying in court. *Transfer credit: CSU.*

**ADMJ 120 CRIMINAL INVESTIGATION (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A course designed for introductory and in-service Administration of Justice students to provide orientation to general and specific aspects of crimes and detection. The course also covers crime scene searches and suspect apprehension. Also listed as LEGL 320. *Transfer credit: CSU.*

**ADMJ 123 CONCEPTS OF ENFORCEMENT PRINCIPLES (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Explanation of theories, philosophies, and concepts related to the role expectations of the enforcement officer. Emphasis is placed on patrol, traffic, and public service responsibilities and their relationship to the administration of justice systems. *Transfer credit: CSU.*

**ADMJ 125 JUVENILE PROCEDURES (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

The study of the extent, causation, and prevention of juvenile delinquency. Includes an analysis of juvenile courts, probation, institutional treatment, parole, and prevention programs. The sociological and anthropological approaches to juvenile delinquency will be discussed in terms of their relationship to the administration of justice systems. *Transfer credit: CSU.*

**ADMJ 135 NARCOTICS AND SPECIAL INVESTIGATIONS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

This course is designed to acquaint the Administration of Justice student with background and historical information necessary to enter a law enforcement agency. Such information involves identification of drugs, drug abuses, mental and physical effects, and addiction. There will also be special emphasis on vice and deviant behavior including victimless crimes. *Transfer credit: CSU.*

**ADMJ 180 CRIMINAL IDENTIFICATION (3)**

Three lecture hours per week. Recommended: Completion of ADMJ 102 and ADMJ 106 with grades of C or better; and eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

Theory and practices in the science of fingerprints, including classification, filing, comparisons, latent print technology, preservation of evidence, court testimony, rolling prints, computers, and the law as it pertains to Criminal Identification. Other aspects of personal identification include skeletal identification, portrait parle, composites, blood evidence, and basic camera procedures. *Transfer credit: CSU.*

**ADMJ 205 JUDICIAL PROCESS IN CALIFORNIA (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

An overview of the federal court system, the California courts, and administrative agency tribunals. Careful examination of roles and relationships of the courthouse work group. Also listed as LEGL 305. *Transfer credit: CSU.*

**ADMJ 665 SELECTED TOPICS IN ADMINISTRATION OF JUSTICE (.5-2)**

(Credit/No Credit.)

Eight lecture hours per .5 unit.

Advanced specialized study in Administration of Justice. This program is designed to offer unique or specialized criminal justice topics of contemporary student interest. Students will learn from and work closely with criminal justice practitioners and bring this newly acquired knowledge back into the community. Topics vary. May be repeated for credit as topics vary. *Transfer credit: CSU.*

**AMERICAN SIGN LANGUAGE (ASL)****ASL 111 AMERICAN SIGN LANGUAGE I (3)**

(Credit/No Credit or letter grade.)

Three lecture hours and one lab hour by arrangement per week.

A basic course in American Sign Language with focus on everyday communication: exchanging information, beginning with exchanging names and moving to talking about one's background; identifying others; making requests; giving reasons; giving opinions; giving simple directions. Topics center around personal information and the immediate environment. Grammar is introduced in context, with an emphasis on developing question and answer skills. Students rehearse conversation strategies for getting attention, asking for clarification, and correcting information to minimize misunderstanding. *Transfer credit: UC; CSU (C2).*

**ASL 112 AMERICAN SIGN LANGUAGE II (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and one lab hour by arrangement per week. Prerequisite: ASL 111 or equivalent.

Functions and grammar introduced in American Sign Language I are reviewed and expanded to include giving directions, making plans, describing and identifying objects and locations, giving simple instructions, and telling what happened. Topics move from students talking about themselves and the immediate environment to talking about others and their community. Students develop language skills necessary to question, describe, and explain. Students rehearse conversation strategies and volunteer appropriate information to maintain a comfortable exchange. Transfer credit: UC; CSU (C2).

**ASL 121, 122 ADVANCED ELEMENTARY AMERICAN  
SIGN LANGUAGE I AND II (3, 3)  
(Credit/No Credit or letter grade.)**

Three lecture hours plus one lab hour by arrangement per week. Prerequisites: ASL 121 – Completion of ASL 112 or equivalent curriculum with a grade of C or better. ASL 122 – Completion of ASL 121 or equivalent curriculum with a grade of C or better.

Covers the fundamental principles of Level II American Sign Language and introduces more advanced information about the Deaf community and Deaf culture. Transfer credit: UC; CSU.

**ANTHROPOLOGY (ANTH)**

**ANTH 110 CULTURAL ANTHROPOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

A comparative analysis of human cultures with an emphasis on core concepts such as kinship, religion, politics, technology, and an appreciation of societal variability. When appropriate, comparison is made with present-day American society to show the effect of societal diversity, size and complexity on cultural factors. Transfer credit: UC; CSU (D3). (CAN ANTH 4).

**ANTH 125 PHYSICAL ANTHROPOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

Biological consideration of the origin, development, and potential survival of humans and other primates. Topics include concepts of evolution: natural selection and populations, patterns of inheritance, the fossil record, and behavioral adaptations. The course will examine how biological, physical, and cultural variations have allowed human populations to adapt to various physical environments. Transfer credit: UC; CSU (B2). (CAN ANTH 2).

**ANTH 150 INTRODUCTION TO ARCHAEOLOGY:  
BONES, BEADS AND THE BASICS OF  
MATERIAL CULTURE (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

Explore cultural diversity using theories and methods of anthropological archaeology. The course typically includes discussions of the development of archaeological research, excavation methods, data analysis, and selected cultural sequences. Field trips may be required. Transfer credit: UC; CSU (D3).

**ANTH 155 HUMAN PREHISTORY AND THE RISE  
OF CIVILIZATION (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

An anthropological survey of human and hominid prehistory spanning over two million years. Emphasis is on the origin and cultural evolution of the world's first settled communities and early civilizations, including Mesopotamia, Egypt, India, China, Europe, Central America, and South America. Transfer credit: UC; CSU (D3).

**ANTH 165 SEX AND GENDER:  
CROSS-CULTURAL PERSPECTIVES (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

A survey of cross-cultural and historical factors influencing human sexuality, gender roles and identity. The course emphasizes non-Western cultures such as Asian, African, and the Indigenous Americas. Diverse cultural forces affecting both female and male status, such as economics, religion, and sexual practices, will be examined. Transfer credit: UC; CSU (D3).

**ANTH 180 MAGIC, WITCHCRAFT AND RELIGION (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

A cross-cultural exploration of supernatural belief systems focusing on non-literate, tribal and ethnic cultures; history and methods of the anthropological approach to religion; the dynamics of myth, magic, totem, taboo, cults, and sects. Transfer credit: UC; CSU (D3).

**ANTH 360 NATIVE PEOPLES OF NORTH AMERICA (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An introduction to the life ways of representative Native American culture groups found in different geographical areas of North America. The course will examine settlement patterns and environmental adaptations, social organizations, world view, and the arts chronologically and cross-culturally, with emphasis on the impact of contact with European cultures. Field trips may be arranged to investigate archaeological evidence. *Transfer credit: UC; CSU (D3).*

**ARABIC (ARBC)****ARBC 111 ELEMENTARY ARABIC I (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and one lab hour by arrangement per week.

The first of a two-course sequence in basic elementary Arabic. Conversation in the language, dictation, reading, and study of the fundamentals of grammar; simple oral and written exercises; an introduction to Arabic culture. *Transfer credit: UC; CSU (C2).*

**ARBC 112 ELEMENTARY ARABIC II (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Completion of ARBC 111 with a grade of C or better, or equivalent.

Second course of a two-semester sequence in basic elementary Arabic. Conversation in the language, dictation, reading and study of the fundamentals of grammar, simple oral and written exercises, and an introduction to Arabic culture. *Transfer credit: UC; CSU (C2).*

**ARBC 121 ADVANCED ELEMENTARY ARABIC I (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Completion of ARBC 112 with a grade of C or better, or equivalent.

First course of a two-semester sequence in advanced elementary Arabic. Students practice and develop further communicative competence in written and spoken Arabic for use in a variety of social contexts and settings. Conversation in the language, reading and study of the fundamentals of grammar, and simple oral and written exercises. Cultural aspects of the Arabic-speaking world are emphasized. The course is conducted primarily in Arabic. *Transfer credit: UC; CSU (C2).*

**ARBC 122 ADVANCED ELEMENTARY ARABIC II (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Completion of ARBC 121 with a grade of C or better, or equivalent.

Second course of a two-semester sequence in advanced elementary Arabic. Students practice and develop further communicative competence in written and spoken Arabic for use in a variety of social contexts and settings. Conversation in the language, reading and study of the fundamentals of grammar, and simple oral and written exercises. Cultural aspects of the Arabic-speaking world are emphasized. The course is conducted primarily in Arabic. *Transfer credit: UC; CSU (C2).*

**ARBC 801 STANDARD SPOKEN ARABIC I (2)  
(Credit/No Credit.)**

Three lecture hours and one lab hour by arrangement per week.

A practical course in the Arabic language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech in standard spoken Arabic, with sufficient grammar to give flexibility to the spoken language. Introduction to Arabic culture. *(This course will not fulfill the foreign language requirement at California State Universities or at the University of California.)*

**ART (ART)**

Art majors should consult the program outlined in "Degree Programs" for suggested plan of study.

Studio art courses are offered for two or three units according to the number of class hours a course meets per week. Studio art courses offered for two units of credit consist of two hours lecture and two hours lab per week plus two studio hours by arrangement per week. Studio art courses offered for three units of credit consist of three hours lecture and three hours lab per week plus three studio hours by arrangement per week.

**ART 101, 102 HISTORY OF WESTERN ART I, II (3, 3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

Comprehensive survey of the history of architecture, painting and sculpture in the western world and the relation of art to the development of history. Illustrated lectures. *(ART 101 + ART 102 = CAN ART SEQ A).*

**ART 101 History of Western Art I** – Ancient and Medieval art to the beginning of the 14th century. *Transfer credit: UC; CSU (C1). (CAN ART 2).*

**ART 102 History of Western Art II** – Renaissance to modern art from the 15th to the 20th centuries. *Transfer credit: UC; CSU (C1). (CAN ART 4).*

**ART 105 ART OF ASIA AND THE NEAR EAST (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

Survey of Asian and Near Eastern Art, especially India, China and Japan, and Persia. Investigation of the cultural sources of art work as well as their aesthetic qualities. *Transfer credit: UC; CSU (C1).*

**ART 107 ART OF OUR TIMES (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

An introduction to the American visual experience of today including painting, sculpture, architecture, industrial, interior, package, advertising, furniture, design, etc. *Transfer credit: CSU (C1).*

**ART 115 ART, MUSIC AND IDEAS (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An integrated consideration of art and music as reflections of the philosophies and traditions of cultures. The understanding of the various elements common to the creative efforts of art and music are emphasized as a means to enhance and extend a student's recognition, involvement, and ultimately, appreciation of these efforts. Diverse media are examined to demonstrate the realizations of ideas into works of art and music. *Also listed as MUS. 115. Transfer credit: UC; CSU (C1).*

**ART 120 ART OF THE AMERICAS (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

An examination of the diverse indigenous arts and cultures of the Americas, the impact of colonialism and the development of ethnic arts in the 19th and 20th centuries in the Americas. *Transfer credit: UC; CSU (C1).*

**ART 130 ART APPRECIATION (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An investigation of the concepts and traditions of art to develop the recognition of arts' communicative abilities. Historical events, customs, traditions, and technology are to be evaluated as integrated and interactive elements which influence the creation of art. The synthesis and articulation of the students' perceptions for discussion are emphasized. *Transfer credit: UC; CSU (C1).*

**ART 201, 202 FORM AND COMPOSITION I AND II  
(2 or 3)**

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 202 – ART 201.*

**ART 201 Form and Composition I:** – Study of form and space relationships with rendering of line, mass, and values through a sequence of original problems based on the fundamental understanding of geometric forms. Media will include pencils, conte crayons, inks and paints. Recommended as a first level course for anyone desiring to participate in an art experience or program. *Transfer credit: UC; CSU (C1).*

**ART 202 Form and Composition II** – Further study of form and advanced composition using various media in black and white and in color, illustration, experimental pictorial composition and three dimensional constructions. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**ART 204, 205 DRAWING I AND II (2 or 3)  
(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 205 – ART 204 or ART 201.*

**ART 204 Drawing I** – Basic introduction to drawing using both simple and complex forms derived from nature, life, and still life sources. A variety of media will be used. Recommended as a first level course for anyone desiring to participate in an art experience or program. *Transfer credit: UC; CSU (C1). (CAN ART 8).*

**ART 205 Drawing II** – Materials and techniques in common use; traditional and contemporary pen, pencil, and conte crayon expression. Rendering of everyday objects and scenes. Methods of depicting shade, shadows, and textures, and acquiring skill in value transition. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**ART 207 LIFE DRAWING (2 or 3)  
(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week.*

Study of the human form in art. Fundamentals of anatomy and expressive representation of the human figure. Studio practice drawing from life. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*



**ART 208, 209 PORTRAIT DRAWING I AND II (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 209 – ART 208.

Portrait characterization class for both advanced and beginning students who will work at their own level with individual instruction. Students can choose and experiment with drawing media and color. Male and female models will sit for portraits. ART 209 may be repeated twice for credit. Transfer credit: UC; CSU.

**ART 214 COLOR (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week.

Drawing proficiency is not required. Introduction to the physical and psychological properties of color. This course stresses the knowledge and skills needed to use color aesthetically. Transfer credit: UC; CSU.

**ART 221, 222 PAINTING I AND II (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 222 – ART 221.

**ART 221 Painting I** – Basic introduction to form and color through painting. A choice of oil paints, acrylics, or poster paints. Studio practice and projects. Various approaches to design and painting. Recommended as a first level course for anyone desiring to participate in an art experience or program. Transfer credit: UC; CSU (C1). (CAN ART 10).

**ART 222 Painting II** – Additional study of form and color through painting. Studio practice and projects involving painting, design, and composition. May be repeated twice for credit. Transfer credit: UC; CSU.

**ART 231, 232 WATERCOLOR I AND II (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisites: ART 231 – Satisfactory completion of one or more college level studio art courses is recommended. ART 232 – ART 231 or equivalent is required.

**ART 231 Watercolor I** – Introduction to Transparent and Opaque Watercolor. Varied approaches and techniques. Transfer credit: UC; CSU.

**ART 232 Watercolor II** – Additional exploration of watercolor painting as a vehicle for creative art expression. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.

**ART 234 PRINTMAKING I (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week.

Introduction to printmaking including etching, monotype, woodcut and linocut techniques. Limited editions of prints will be produced in each of the four areas. Transfer credit: UC; CSU.

**ART 235 PRINTMAKING II (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week.

Further exploration of printmaking techniques including etching, monotype, woodcut and linocut. Students will specialize in an area for advanced study and production. May be repeated twice for credit. Transfer credit: UC; CSU.

**ART 248 PORTRAITS IN PASTEL (2 or 3)**  
(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 208 or equivalent.

Painterly approach to portraiture using soft pastel to draw and color. Pastel techniques involved in application, color mixing, and the use of different surfaces will be presented in conjunction with drawing and coloring the portrait. Main media will be soft pastels. Other related media may be used. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1).

**ART 301, 302 DESIGN AND ADVANCED DESIGN**  
(2 or 3)

(Credit/No Credit or letter grade.)

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisites: ART 302 – ART 301.

**ART 301 Design** – Introduction to basic design elements and principles including color, line, and form. Studio application involving various approaches to subject matter and abstract organization. Both two and three dimensional applications will be explored. *Transfer credit: UC, CSU (C1). (CAN ART 14).*

**ART 302 Advanced Design** – Additional study of design elements and principles. Studio practice centered upon creative interpretations and problem solving, using varied art materials and techniques both two and three dimensional. *May be repeated twice for credit. Transfer credit: UC, CSU.*

**ART 311, 312 LETTERING AND LAYOUT I AND II**

(2 or 3)

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week.*

Development of student proficiency in lettering and layout techniques and principles required for graphic design. *ART 312 may be repeated twice for credit. Transfer credit: CSU.*

**ART 322 ILLUSTRATION (2 or 3)**

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 204 Drawing I; Recommended: ART 301 Design.*

The use of diverse art techniques and materials to meet the image or illustration requirements of commercial designs. Drawing, painting, three-dimensional, and photographic techniques will be examined. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**ART 338 ADVERTISING ART (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and two lab hours per week plus one studio hour by arrangement per week.*

Study of commercial art techniques and approaches with an emphasis on creative design and illustration used in advertising art. Studio practice in preparation of art work for reproduction. *May be repeated once for credit. Transfer credit: CSU.*

**ART 350 VISUAL PERCEPTION THROUGH PHOTOGRAPHY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

A basic photography course which integrates “how-to-take” photographs with analytical considerations of image compositions, visual vocabularies, and photographic techniques to gain insights into photography’s communicative abilities. Images from print media, movies, and television are explored to learn how photography communicates ideas and influences viewers’ understanding of photographs. *Transfer credit: CSU (C1).*

**ART 351, 352, 353 PHOTOGRAPHY I, II AND III (2 or 3)**

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisites: ART 352 – ART 351 or equivalent; ART 353 – ART 352 or equivalent.*

**ART 351 Photography I** – Use of exposure meter, filters, print papers, formulas and processing, and special lenses and shutters. Problems of artificial and natural lighting, enlarging or spotting prints, and print finishing and mounting. Individual projects are chosen from the fields of scenic and nature photography, as well as portraiture. *Transfer credit: UC; CSU (C1). (CAN ART 18).*

**ART 352 Photography II** – Study of photographic and printmaking processes supplemented with individual projects. *Transfer credit: UC; CSU (C1).*

**ART 353 Photography III** – Provides the serious student with a first-hand working knowledge of advanced camera, studio and darkroom techniques. The class concerns itself with studio and location exercises. Assignments are selected from the areas of fashion, advertising, photojournalism, architecture, and portraiture. *May be repeated once for credit. Transfer credit: CSU.*

**ART 354, 355 COLOR PHOTOGRAPHY I AND II**

(2 or 3)

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 355 – ART 354 or equivalent. Transfer credit: CSU (C1).*

**ART 354 Color Photography I** – Introduction to the use of color materials as expressive media. Use of photographic equipment, materials and chemical processes in color photography. Mastery of the technical aspects of color balance and exposure will be emphasized.

**ART 355 Color Photography II** – Application of skills learned in beginning color photography to projects in advanced exposure control, chemical processes, composition, color balance and lab skills. Expands basic knowledge through a more intensive and thorough investigation of tools and techniques within color photography. *May be repeated twice for credit.*

**ART 363 ALTERNATIVE PROCESSES IN PHOTOGRAPHY I (3)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours plus three lab hours per week. Prerequisite: ART 351 or demonstration of basic darkroom skills.*

An introduction to non-silver printing processes, transfer of Polaroid images to other media, and hand-coloring techniques for print modification. Explores manipulations of original images to reveal forms of expression unattainable through traditional photographic processes. *Transfer credit: CSU.*

**ART 364 ALTERNATIVE PROCESSES IN PHOTOGRAPHY II (3)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours plus three lab hours per week. Prerequisite: ART 363 or equivalent skills and techniques.*

Elaboration and refinement of techniques introduced in ART 363: non-silver printing processes, Polaroid transfer, emulsion transfer, lithographic materials, and others. Emphasizes the completion of a cohesive portfolio of personally significant images utilizing sophisticated application of non-traditional photographic processes. *May be repeated twice for credit. Transfer credit: CSU.*

**ART 376 DIGITAL IMAGING I (2)**

**(Credit/No Credit or letter grade.)**

*One and one half lecture hours plus one and one half lab hours per week.*

A beginning course to explore digital computer imagery as an art medium. Students work with digital files and digital image manipulation programs such as Adobe Photoshop to produce personally significant works. Introduction to principles of design, art theory, and the works of contemporary and historic artists. *Transfer credit: UC; CSU.*

**ART 377 DIGITAL IMAGING II (3)**

**(Credit/No Credit or letter grade.)**

*Two lecture and three lab hours per week plus one lab hour by arrangement per week. Prerequisite: ART 376.*

An intermediate course expanding creative efforts in producing art with computerized imaging and the alteration of the art with image manipulation software such as Adobe Photoshop. Refinement of use of output modes for digital files. Continued in-depth application of principles of design, art theories, and consideration of the works of contemporary and historic artists. *May be repeated twice for credit. Transfer credit: CSU.*

**ART 405, 406 SCULPTURE I AND II (2 or 3)**

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisites: ART 406 – ART 405.*

**ART 405 Sculpture I** – An introduction to sculpture processes. Studio practice using a variety of materials e.g., wood, metal, plaster, clay, stone and mixed-media assemblage to make three dimensional works of art. *Transfer credit: UC; CSU (C1). (CAN ART 12).*

**ART 406 Sculpture II** – Advanced study and practice in three dimensional form; a continuation of ART 405 in developing mastery of the media of sculpture e.g., wood, metal, plaster, clay, stone, and mixed-media assemblage. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**ART 407 SCULPTURE III: DIRECT METAL (2 or 3)**

**(Credit/No Credit or letter grade.)**

*Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: ART 405.*

Creation of sculptural form in metal, using welding, brazing, and soldering techniques for fabrication of line, plane, found-object and mixed-media compositions. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**ART 408 BRONZE CASTING (1)**

**(Credit/No Credit or letter grade.)**

*Total of sixteen lecture and nine lab hours.*

An intensive introduction to the bronze casting process. Students will be given an overview of objects made of bronze, from earliest tools produced to present-day sculpture and from many different cultures. They will then make a sculpture in clay and take that sculpture through all of the stages involved in converting it into a finished bronze. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**ART 411, 412 CERAMICS I AND II (2 or 3)  
(Credit/No Credit or letter grade.)**

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisites: ART 412 – ART 411. Completion of or concurrent enrollment in ART 301 recommended.

**ART 411 Ceramics I** – Survey of ceramic materials and their function in relation to art values. Basic studio practice in handbuilding processes and glazing of ware. Related study of clay origins and compositions, decorating techniques, the firing of kilns, and glaze composition. *Transfer credit: UC; CSU (C1). (CAN ART 6).*

**ART 412 Ceramics II** – Additional study of ceramic processes and their application in art. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**ART 417 CERAMIC GLAZING TECHNIQUES (2 or 3)  
(Credit/No Credit or letter grade.)**

Three unit sections meet three lecture hours and three lab hours per week plus three studio hours by arrangement per week; two unit sections meet two lecture hours and two lab hours per week plus one studio hour by arrangement per week. Prerequisite: Art 412.

Advanced glazing techniques including special glazes, glaze composition and multi-firing techniques. Projects with emphasis on glaze effects. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**ART 665 SPECIAL TOPICS IN ART (.5 or 1 or 2 or 3)  
(Credit/No Credit or letter grade.)**

One and one half, three, six or nine hours per week plus additional studio hours. *Recommended: Successful completion of a beginning art studio course.*

Advanced or specialized study in studio arts. Designed for students in ceramics, drawing, painting, photography, printmaking, and sculpture, this course provides extended study of a particular media, technique, or artistic problem through selected themes as listed in the class schedule. *May be repeated for credit as topics vary. Transfer credit: UC; CSU.*

**ASTRONOMY (ASTR)****ASTR 100 INTRODUCTION TO ASTRONOMY (3)**

Three lecture hours per week plus one lab hour per week by arrangement.

Survey of modern astronomy, including the study of what mankind understands about the universe and our place in it. Emphasis on how mankind has learned about the planets, stars, galaxies, and their structure and formation. Quasars, pulsars, black holes, and the beginning and the end of the universe are discussed. *Transfer credit: CSU (B1, B3).*

**AUTOMOTIVE TECHNOLOGY  
(AUTO)****TOYOTA TECHNICAL EDUCATION NETWORK**

\*Note: AUTO 730 Japanese Basic Electrical is the required core course for the Toyota Technical Education Network Associate Degree.

**AUTO 706 TOYOTA ENGINES (6.5)**

Lecture/Laboratory total of 160 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of engine design and operation including basic measuring, inspection, diagnosis, and repair. Primary emphasis will be on diagnosis and valve train repair. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 707 TOYOTA TRANSMISSIONS (8.5)**

Lecture/Laboratory total of 200 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of powertrains, including clutches, manual and automatic transmissions and transaxles, and differentials. Primary emphasis will be on testing, diagnosis, and repair. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 725 TOYOTA BRAKES AND CHASSIS (11)**

Lecture/Laboratory total of 270 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of mechanical and hydraulic brake systems, steering and suspension systems, tires, and wheel alignment. Emphasis will be on system operation, diagnosis, adjustment, testing, and repair. This course will prepare the student for the California Brake Adjusters License and Automotive Service Excellence (A.S.E.) Examinations. *Transfer credit: CSU.*

**AUTO 727 TOYOTA AIR CONDITIONING (4)**

Lecture/Laboratory total of 90 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of automotive climate controls and components. Principles of heating and air conditioning and the engine's cooling system will be discussed. The course covers system evacuating, recycling and recharging of the air conditioning system, with emphasis on testing, diagnosis, and repair. *Transfer credit: CSU.*

**AUTO 728 TOYOTA ADVANCED ELECTRICAL (7)**

Lecture/Laboratory total of 180 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of automotive electronics, body electrical, instrumentation, ignition systems, and basic engine computer controls. Primary emphasis will be on testing, diagnosis, and repair. *Transfer credit: CSU.*

**AUTO 729 TOYOTA ENGINE PERFORMANCE (14.5)  
(APPROVED CLEAN AIR COURSE)**

Lecture/Laboratory total of 344 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of ignition systems, fuel systems, emission control, computer control, and driveability diagnostics. Students will receive instruction necessary to take the Automotive Service Excellence examination in the area of Engine Performance. *Transfer credit: CSU.*

**AUTO 730 JAPANESE BASIC ELECTRICAL (8)**

Lecture/Laboratory total of 180 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of electrical fundamentals, automotive batteries, wiring diagrams, starting and charging systems, and lighting systems. Primary emphasis on testing, diagnosis, and repair. This course will prepare the student for the California Lamp Adjusters License. *Transfer credit: CSU.*

**AUTO 743 PRE-DELIVERY SERVICE (.5)**

Lecture/Laboratory total of 16 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of automotive pre-delivery service (PDS) and routine service procedures including locating rattles, noises, radio and mirror installation, lubrication and other basic service procedures. *Transfer credit: CSU.*

**Japanese Automotive Technology**

**AUTO 730 JAPANESE BASIC ELECTRICAL\* (8)**

Lecture/Laboratory total of 180 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of electrical fundamentals, automotive batteries, wiring diagrams, starting and charging systems, and lighting systems. Primary emphasis on testing, diagnosis, and repair. This course will prepare the student for the California Lamp Adjusters License. *Transfer credit: CSU.*

**\*This course is also the required core course for the Japanese Automotive Technology Associate Degree.**

**AUTO 743 PRE-DELIVERY SERVICE (.5)**

Lecture/Laboratory total of 16 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of automotive pre-delivery service (PDS) and routine service procedures including locating rattles, noises, radio and mirror installation, lubrication and other basic service procedures. *Transfer credit: CSU.*

**AUTO 747 JAPANESE AIR CONDITIONING (4)**

Lecture/Laboratory total of 90 hours. Prerequisite: Admission to the Automotive Technology program.

This course involves the basic study of automotive climate controls and components. Principles of heating and air conditioning and the engine's cooling system will be discussed. The course covers system evacuating, recycling and recharging of the air conditioning system, with emphasis on testing, diagnosis, and repair. *Transfer credit: CSU.*

**Automotive Technology Program**

**AUTO 665 SELECTED TOPICS IN AUTOMOTIVE TECHNOLOGY (.5-1.5)**

**(Credit/No Credit.)**

*Eight lecture hours plus lab hours per .5 unit.*

These short courses are designed for automotive professionals who need to meet current Smog Check licensing requirements and prepare for the Automotive Service Excellence (ASE) certification test. *Each topic may be repeated once for credit. Transfer credit: CSU.*

**AUTO 708 AUTOMOTIVE PRINCIPLES LAB (1-2)**

**(Credit/No Credit or letter grade.)**  
*Lecture/Laboratory total of 48 hours.*

Student is encouraged to perform minor maintenance procedures for own vehicle. A general elective for those desiring a basic knowledge of the automobile. *May be repeated for credit on a space available basis a maximum of three times. Transfer credit: CSU.*

**AUTO 710 FUNDAMENTALS OF AUTOMOTIVE MECHANICS (4.5)**

*Lecture/Laboratory total of 96 hours.*

An introduction to the automotive technology program and profession. A survey course of the basic tools and fasteners and related mathematics required in automotive service. This course is recommended for those students desiring entrance into the Automotive Technology Day Program. *Transfer credit: CSU.*

**AUTO 713 AUTOMOTIVE ELECTRICITY AND ELECTRONICS (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to Automotive Technology Program.*

This course involves the study of electrical fundamentals, electrical test equipment, automotive batteries, starting and charging systems, wiring diagrams, lighting circuits, various advanced body electrical circuits and controls. Primary emphasis on diagnosis, testing and repair. *Transfer credit: CSU.*

**AUTO 716 AUTOMOTIVE COOLING/HEATING AND AIR CONDITIONING (5)**

*Lecture/Laboratory total of 120 hours. Prerequisite: Admission to Automotive Technology Program.*

Theory and operation of cooling, heating, and air conditioning systems. Lab practices include maintenance, testing, diagnosis, and repair of these systems. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 721 AUTOMOTIVE STEERING, SUSPENSION AND BRAKES (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to Automotive Technology Program.*

A study of automotive steering, suspension and brakes. Emphasis will be placed on the theory, operation, diagnosis and repair of modern braking systems, steering and suspension systems. Topics include: four-wheel steering, tires and wheels, supplemental inflatable restraints, power steering, power and anti-lock braking systems. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 734 AUTOMOTIVE ENGINE DIAGNOSIS AND REPAIR (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to Automotive Technology Program.*

A detailed study of various engine designs and materials. Lab will include diagnosis, inspection, repair methods, and parts necessary for complete repair. Also, various machines and machining operations will be covered. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 735 AUTOMOTIVE TRANSMISSION AND DRIVE TRAINS DIAGNOSIS AND REPAIR (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to Automotive Technology Program.*

A detailed study of the clutch, standard and automatic transmissions, drive lines and differentials: theory of operation including: friction materials, hydraulics, torque converters, gear trains, planetary gears, and controls as well as gear ratios, torque multiplication, speeds, drive line angles and tooth patterns. *May be repeated once for credit. Transfer credit: CSU.*

**AUTO 751 AUTOMOTIVE ENGINE PERFORMANCE (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to Automotive Technology Program.*

A study of the engine sub-systems responsible for good engine performance, clean air, and fuel economy. Systems to be covered include: ignition, fuel, emission, and computer controls. *Transfer credit: CSU.*

**AUTO 752 ADVANCED ENGINE PERFORMANCE (15)**

*Lecture/Laboratory total of 360 hours. Prerequisite: Admission to the Automotive Technology Program or demonstration of equivalent skills; satisfactory completion of AUTO 751.*

An in-depth study of import and domestic computerized engine controls. Emphasis will be placed on the theory, operation, and testing procedures necessary to accurately diagnose and repair driveability complaints. Students will receive instruction necessary to take the State of California test for obtaining a Qualified Test and Repair Mechanic's License (Smog). *May be repeated once for credit. Transfer credit: CSU.*

**AUTOMOTIVE APPRENTICESHIP PROGRAM/ADVANCED COURSES**

Courses in the AUTO 800 series are part of the Automotive Apprenticeship Program, which is only available to students indentured with a Joint Apprenticeship Council.

Courses listed below that have a 700 series number are designed for advanced students. Professional experience or Journeyman level is recommended for these advanced courses.

**AUTO 741 B.A.R. LEVEL 1 CITATION (.5) (Credit/No Credit.)**

*Total of 8 hours lecture/demonstration.*

Student will receive instruction in how to perform visual and functional inspections, use emission control systems application reference manuals, and what responsibilities each mechanic has to the Smog Check Program. This course satisfies the State requirement for clearing level 1 Citation. *May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

**AUTO 742 B.A.R. LEVEL 2 CITATION (.5) (Credit/No Credit.)**

*Total of 8 hours lecture/demonstration/lab. Prerequisite: Completion of, or concurrent enrollment in AUTO 741.*

Student will receive instruction in how to properly complete a work order; to include estimates, revised estimates, and final invoices. The student will perform visual inspections of all emission control systems on a variety of vehicles. This course satisfies the State requirement for clearing level 2 Citation. *May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

**AUTO 806 FUNDAMENTALS OF AUTOMOTIVE (.5-4)**

*Lecture total of 4 hours per week. Class to be taken in conjunction with AUTO 807.*

An introduction to the automotive profession. A survey course of basic tools and fasteners and related mathematics required in automotive service. Course also covers the function and theory of each of the systems of the automobile. This course available only at San Francisco County Jail in San Bruno. Students can transfer to the automotive program at Skyline College. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**AUTO 807 FUNDAMENTALS OF AUTOMOTIVE LAB  
(.5 – 4.5)**

Laboratory total of 8.5 hours per week. Class to be taken in conjunction with AUTO 806.

Basic lab exercises to correspond with topics covered in lecture sessions in AUTO 806. This course available only at San Francisco County Jail in San Bruno. Students can transfer to the automotive program at Skyline College. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**AUTO 822/769 HEAD AND VALVE SERVICE (2.5)**

Total of 48 class hours. *Recommended: Professional experience.*

In-depth study of all aspects of cylinder head components, diagnosing, disassembly, repair, reassembly, and use of various tools and equipment. *AUTO 822 may be repeated once for credit. Transfer credit: AUTO 769 – CSU.*

**AUTO 823/779 BLOCK SERVICE (2.5)**

Total of 48 class hours. *Prerequisite: See above.*

A study of the proper methods of disassembling, measuring, machining, and reassembling of engine blocks. Various machining equipment, safe working habits, and the handling of waste coolant, oil and oil filters is included. *May be repeated once for credit. Transfer credit: AUTO 779 – CSU.*

**AUTO 830/776 DRIVE LINES AND DIFFERENTIALS  
(2.5)**

Total of 48 class hours. *Prerequisite: See above.*

A study of the principles and operation of drive lines and differentials. Emphasis will be on measuring and correcting drive line angles, diagnosis, and repair of differentials, and preventive maintenance of these components. *May be repeated once for credit. Transfer credit: AUTO 776 – CSU.*

**AUTO 832/777 AUTOMATIC TRANSMISSIONS I (3)**

Total of 48 class hours. *Prerequisite: See above.*

A study of the operating principles of automatic transmissions used on rear wheel drive domestic and import vehicles. Power flow and hydraulic/electrical controls will be studied. Preventive maintenance, diagnosis, and repair procedures are included. *May be repeated once for credit. Transfer credit: AUTO 777 – CSU.*

**AUTO 840/773 AUTOMOTIVE ELECTRICAL I (3)**

Total of 48 class hours. *Prerequisite: See above.*

A study of basic electricity and solid state electronics. Emphasis is placed on the use of analog and digital multimeters required to test electrical circuits and solid state components. Preparation for the State Lamp Test is included. *May be repeated once for credit. Transfer credit: AUTO 773 – CSU.*

**AUTO 842/772 CLEAN AIR CAR I (3)**

Total of 48 lecture hours plus 8 lab hours by arrangement.

*Prerequisite: See above.*

This course is designed to prepare students for the Bureau of Automotive Repair Smog Check licensing exam. Emphasis is placed on smog check rules and regulations, test procedures, and Test Analyzer System (TAS) machine operation. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 772 – CSU.*

**Note:** Any student planning to become a licensed Smog Check Technician should contact the Automotive Department Coordinator at (650) 738-4410 to discuss licensing requirements and course prerequisites mandated by the Bureau of Automotive Repair. It is recommended that this be done prior to enrolling in the Clean Air Car course.

**AUTO 846/771 AUTOMOTIVE ELECTRICAL II (2)**

Total of 36 lecture hours plus 12 lab hours. *Prerequisite: See above.*

*See above.*

An in-depth study of electrical diagnosis and repair. Starting, charging, and other electrical circuits will be discussed. Proper use of test equipment, shop manuals, and wiring diagrams will be included. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 771 – CSU.*

**AUTO 848/775 OSCILLOSCOPES AND EXHAUST GAS ANALYZERS (1.5)**

Total of 24 class hours. *Prerequisite: See above.*

This course will study automotive oscilloscopes and exhaust gas analyzers. Basic diagnostics will be taught using each machine separately and together to teach the most efficient and accurate troubleshooting methods. *May be repeated once for credit. Transfer credit: AUTO 775 – CSU.*

**AUTO 850/790 AUTOMOTIVE BRAKES I (2.5)**

Total of 48 class hours. *Prerequisite: See above.*

A study of automotive braking systems. Emphasis will be placed on the theory of operation, diagnosis, and repair of modern braking systems and their related components. Preparation for the State Brake Test and ASE Certification Test is included. *May be repeated once for credit. Transfer credit: AUTO 790 – CSU.*

**AUTO 851/753 AUTOMOTIVE SERVICE ADVISING (3)**

Total of 48 class hours. *Prerequisite: See above.*

This course involves the basic study of automotive service advising and procedures. Topics include: greeting the customer, writing the initial repair orders, estimating labor charges, revising repair estimates in accordance with California law, conflict resolution, and returning the vehicle to the customer. *Transfer credit: AUTO 753 – CSU.*

## AUTOMOTIVE APPRENTICESHIP PROGRAM/ADVANCED COURSES

### **AUTO 852/791 AUTOMOTIVE CHASSIS II (2)**

Total of 36 lecture hours plus 12 lab hours. Prerequisite: See above.

Study of four wheel alignment and steering geometry, including alignment angle theory, testing, and adjustments, with major emphasis on the diagnosis of alignment related problems. It is recommended that AUTO 792/853, Automotive Chassis I, be taken first. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 791 – CSU.*

### **AUTO 853/792 AUTOMOTIVE CHASSIS I (3)**

Total of 48 class hours. Prerequisite: See above.

Study of mounting, balancing, and repair of wheels and tires. In addition, adjustments and repairs of various steering and suspension systems will be covered. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 792 – CSU.*

### **AUTO 854/754 HIGH PERFORMANCE ENGINES I (3)**

Total of 48 class hours. Prerequisite: See above.

The theory and design of High Performance Engines (Part I). Emphasis is placed on the induction system. Topics discussed include intake and exhaust manifold designs, camshaft design and selection, and cylinder head modifications for maximum efficiency. *May be repeated once for credit. Transfer credit: AUTO 754 – CSU.*

### **AUTO 858/758 AUTOMOTIVE COMPUTER CONTROLS (3)**

Total of 48 lecture hours plus 16 lab hours. Prerequisite: See above.

A study of the various inputs, outputs, and modes of operation common to most computer controlled systems. General diagnosis will be emphasized using multimeters, lab scopes, and scan tools. Students will be introduced to OBD II systems. This course will also assist technicians to prepare for State of California Smog License and the ASE L1 exams. *AUTO 858 may be repeated once for credit; AUTO 758 may be repeated for credit a maximum of three times. Transfer credit: AUTO 758 – CSU.*

### **AUTO 860/786 AIR CONDITIONING I (2.5)**

Total of 48 class hours. Prerequisite: See above.

Theory and operation of cooling, heating, and air conditioning systems. Lab practices include maintenance, testing, diagnosis, and repair of these systems. Preparation for the ASE Certification Test is included. *May be repeated once for credit. Transfer credit: AUTO 786 – CSU.*

### **AUTO 861/761 AUTOMOTIVE BRAKES II (1.5)**

Total of 24 class hours. Prerequisite: AUTO 850/790 with grade of C or better or equivalent.

A study of the various anti-lock brake systems installed on passenger cars and light trucks. Emphasis on the theory of operation, diagnosis, and repair of computer controlled anti-lock brake systems and their related components. *May be repeated for credit a maximum of three*

*times. Transfer credit: AUTO 761 – CSU.*

### **AUTO 864/764 EMISSIONS CONTROL SYSTEMS I (1.5)**

Total of 24 class hours. Prerequisite: See above.

Study of automotive vehicle emissions control systems, including basic theory, design, and operation. This course will help prepare students planning to enroll in the Clean Air Car course. *May be repeated for credit a maximum of three times. Transfer: AUTO 764 – CSU.*

### **AUTO 865/765 IGNITION SYSTEMS I (1.5)**

Total of 24 class hours. Prerequisite: See above.

A study of automotive ignition systems. Emphasis is placed on the theory, operation, and testing of electronic and distributorless ignition systems. It is recommended that this course be completed prior to enrolling in the Clean Air Car course. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 765 – CSU.*

### **AUTO 868/768 ON-BOARD DIAGNOSTICS II (OBD-II) (3)**

Total of 40 lecture hours plus 24 lab hours. Prerequisite: See above.

Tailored for automotive professionals, this course is an in-depth study of generic On-Board Diagnostics II. Content includes history of OBD-II, comparison of OBD-I and OBD-II, J1930 Common Terminology, Flash Programming, Enhanced Monitors, Fuel Trim Strategies, MIL Strategies and Enabling Criteria, Drive Cycles, I/M Readiness flags, and Diagnostic Trouble Codes. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 768 – CSU.*

### **AUTO 870/795 DIESEL FUEL SYSTEMS (3)**

Total of 48 class hours. Prerequisite: See above.

A study of the entire fuel systems used on diesel-powered vehicles (car, truck and marine) including but not limited to fuel tanks, filters, pumps, metering devices and injectors. *May be repeated once for credit. Transfer credit: AUTO 795 – CSU.*

### **AUTO 878/778 MANUAL TRANSMISSIONS I (2)**

Total of 36 lecture hours plus 12 lab hours. Prerequisite: See above.

A detailed study of the clutch assembly, manual transmissions and transaxles. Topics of study include: theory of operation, friction materials, gear trains and ratios, constant velocity joints, drivelines, and differentials. *May be repeated for credit a maximum of three times. Transfer credit: AUTO 778 – CSU.*

### **AUTO 881/781 ELECTRICAL III (3)**

Total of 48 class hours. Prerequisite: See above.

This course will stress applied techniques in schematic reading and diagnosis of various body electrical circuits, including power doors, mirrors, windows, and seats; sun roofs, air bags, and semiconductor logic gates. This course builds on the concepts introduced in Electrical I and II. *May be repeated once for credit. Transfer credit: AUTO 781 – CSU.*



**AUTO 887/787 AUTOMATIC TRANSMISSIONS II (3)**

Total of 48 hours lecture/demonstration. Prerequisite: See above.

A study of the operating principles of the automatic transaxle used on the front wheel drive domestic and import vehicles. Power flow and hydraulic/electrical controls will be studied. Also included will be the final drive gear systems. *May be repeated once for credit. Transfer credit: AUTO 787 – CSU.*

**AUTO 893/793 ENGINE PERFORMANCE (3)**

Total of 48 class hours. Prerequisite: See above.

A study of the engine sub-systems responsible for good engine performance, clean air, and fuel economy. Topics covered include basic engine and ignition system operation and testing using various diagnostic test equipment. This course can be applied towards the education requirements necessary for eligibility to take the B.A.R. Smog Test. *May be repeated once for credit. Transfer credit: AUTO 793 – CSU.*

**BIOLOGY (BIOL)****NOTE TO LIFE SCIENCE MAJORS**

Students planning to major in Biology, Biotechnology, Botany, Zoology, Ecology, Microbiology, Anatomy, Physiology, Forestry, Wildlife Management, Natural Resources, Medicine, Dentistry, Veterinary Medicine, Optometry, and Pharmacy should complete BIOL 215 and 230 (taken in sequence) and CHEM 210, 220, 234, 235, 237, 238; PHYS 210, 220, and the appropriate mathematics prerequisites.

**BIOL 101 MAN IN A BIOLOGICAL WORLD (4)**

Three lecture hours and three lab hours per week. Recommended: Eligibility for ENGL 836.

Study of biology as it relates to humans and their environment, with special emphasis on ecological interrelationships, evolution and genetics, and topics of current importance. Recommended for non-science majors to fulfill laboratory science transfer requirement. *Transfer credit: UC; CSU (B2, B3).*

**BIOL 110 PRINCIPLES OF BIOLOGY (4)**

Three lecture hours and three lab hours per week. Recommended: Eligibility for ENGL 836.

Using natural selection and physiological survival as a unifying theme, this course deals with the basic problems common to all living systems, and compares the functional solution that various organisms have evolved, illuminating the unity in diversity that characterizes life on earth. Recommended for non-science majors to fulfill laboratory science transfer requirement. *Transfer credit: UC; CSU (B2, B3). (CAN BIOL 2).*

**BIOL 111 NATURAL HISTORY OF CALIFORNIA (4)**

Three lecture hours and one three-hour lab period per week with frequent field trips. Recommended: Eligibility for ENGL 836.

Students will investigate the functioning of ecosystems, adaptations of organisms to their environment and natural history of selected organisms. Students will become familiar with natural ecosystems of California, with a primary focus on the San Francisco Bay Area. Laboratory and field investigations will be conducted using the scientific method; critical thinking skills will be emphasized. Recommended for non-science majors to fulfill laboratory science transfer requirements. *Transfer credit: UC; CSU (B2, B3).*

**BIOL 130 HUMAN BIOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A course designed to provide students with an appreciation of the structure, function, and development of their own bodies. Topics include an introduction to science and to scientific methods of investigation, and some elementary chemistry (no previous background necessary) as a basis for understanding human functions such as digestion, circulation, reproduction and other systems. Some diseases and other causes of body malfunction are discussed. *Transfer credit: UC; CSU (B2).*

**BIOL 140 ANIMALS, PEOPLE AND ENVIRONMENT (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

This course will familiarize the student with the methods and importance of behavioral investigation in animals. Emphasis on past and current human-animal relationships, the impact on animal populations and increasing need for wildlife protection. *Transfer credit: UC; CSU (B2).*

**BIOL 145 PLANTS, PEOPLE AND ENVIRONMENT (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A survey of plants emphasizing those aspects of plant biology that have affected the lives of people. Topics include: the success and failure of modern agriculture; the impact of humans on the environment; and the importance of plants in solving critical problems of hunger and conservation of energy. Attention is given to modes of inquiry or ways in which scientists carry out their investigations. *Transfer credit: UC; CSU (B2).*

**BIOL 150 INTRODUCTION TO MARINE BIOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A non-technical introduction to the scientific method used in studies of marine biology. Major emphasis is given to the natural history of marine animals and plants and their relationship with the oceanic environment. *Transfer credit: UC; CSU (B2).*

**BIOL 215 ORGANISMAL BIOLOGY: CORE I (5)**

Three lecture hours and six lab hours per week. Prerequisite: MATH 120 or MATH 123 with a grade of C or better, or appropriate math placement test score and other measures as appropriate, or equivalent. Recommended: Eligibility for ENGL 836.

As part of a two-course core program, BIOL 215 is an introductory survey of organismal form and function. Analysis of fundamental biological functions including nutrition, gas exchange, reproduction, natural selection, and ecology using representative living organisms. Transfer credit: UC; CSU (B2,B3). (BIOL 215 + BIOL 230 = CAN BIOL SEQ A.)

**BIOL 230 INTRODUCTION TO CELL BIOLOGY: CORE II (5)**

Three lecture hours and six lab hours per week. Prerequisite: Completion of BIOL 215; CHEM 210, or equivalent. Recommended: Eligibility for ENGL 836.

As part of a two-course core program, Biology 230 is an introduction to life functions as seen at the cellular level; cellular structure, macromolecular architecture and function, cellular energetics, chemical regulation, photochemical activities, molecular genetics, and genetic engineering. Transfer credit: UC; CSU (B2, B3). (BIOL 215 + BIOL 230 = CAN BIOL SEQ A.)

**BIOL 240 GENERAL MICROBIOLOGY (4)**

Three lecture hours and three lab hours per week. Prerequisite: Successful completion of a college-level laboratory science course. Recommended: Eligibility for ENGL 836.

Morphology, taxonomy, ecology, and physiology of microorganisms, with emphasis on bacteria. Laboratory techniques on culture and identification of bacteria. Recommended for agriculture, biochemistry, nursing, pre-medical and pre-dental, biotechnology engineering, and other life science majors. Transfer credit: UC; CSU (B2, B3). (CAN BIOL 14).

**BIOL 250 HUMAN ANATOMY (4)**

Three lecture hours and three lab hours per week. Recommended: Eligibility for ENGL 836; one college-level biology course.

Designed to familiarize the student with the structure of the human body, including cadaver dissection by students. Primarily intended for students of nursing, physiotherapy, respiratory therapy, hygiene, and physical education. An elective course for pre-dental, pre-medical, and pre-veterinarian students. Recommended for general life science majors, respiratory therapy majors and physical education majors. Transfer credit: UC; CSU (B2, B3). (CAN BIOL 10; BIOL 250 + BIOL 260 = CAN BIOL SEQ B.)

**BIOL 260 INTRODUCTION TO PHYSIOLOGY (5)**

Three lecture hours and six lab hours per week. Prerequisite: CHEM 410, or equivalent. Recommended: Eligibility for ENGL 836; one college-level biology course.

Designed to familiarize the student with the functions of organs and systems of the human body. Includes review of basic processes occurring in cells and application of principles to the study of whole animal systems. Recommended for students majoring in nursing, physiotherapy, respiratory therapy, physical education, psychology, and other related fields. Transfer credit: UC; CSU (B2, B3). (CAN BIOL 12; BIOL 250 + BIOL 260 = CAN BIOL SEQ B.)

**BIOL 365 INTERTIDAL INTERPRETATION (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week plus field trips.

This course is designed to familiarize students with the major life forms of the intertidal zone of the California coast, their taxonomic groupings, common names, basic anatomical and physiological characteristics and their role in the ecosystem. Transfer credit: CSU.

**BIOL 415 INTRODUCTION TO BIOTECHNOLOGY MANUFACTURING (9)**

A total of 96 lecture hours and 144 lab hours plus 32 hours by arrangement. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or ESOL 400, or equivalent; and eligibility for MATH 110 or MATH 111, or equivalent.

An introductory course to prepare students who possess transferable skills from other occupations for entry-level positions in the biotechnology industry. Course instruction will include basic skills in biology, biomanufacturing, chemistry, and an introduction to biotechnology careers. Transfer credit: CSU.

**BIOL 422 FOUNDATIONS OF BIOTECHNOLOGY (1) (Credit/No Credit or letter grade.)**

One lecture hour per week. Recommended: Eligibility for ENGL 836.

Overview of the origin and development of biotechnology and the bioscience industries. Includes cell growth, career opportunities, and medical and food products. Also includes laboratory experience with bioreactors and making products. Transfer credit: CSU.

**BIOL 426 GENETIC ENGINEERING (1) (Credit/No Credit or letter grade.)**

One lecture hour per week. Recommended: Eligibility for ENGL 836.

This course will examine how genes work and how they can be manipulated and cloned. Topics include DNA and protein synthesis, genetic engineering, and DNA fingerprinting. Also includes laboratory experience with DNA analyses: RFLP and PCR. Transfer credit: CSU.

**BIOL 430 INTRODUCTION TO IMMUNOLOGY (1)****(Credit/No Credit or letter grade.)***One lecture hour per week. Recommended: Eligibility for ENGL 836.*

This course will examine the immune system and how it protects us from disease. Topics include vaccine and antiserum production by traditional methods and by genetic engineering. Also includes laboratory experience with laboratory techniques. *Transfer credit: CSU.*

**BIOL 432 FERMENTATION TECHNOLOGY (1)****(Credit/No Credit or letter grade.)***Total of sixteen lecture hours. Recommended: Eligibility for ENGL 836.*

Overview of the origin and development of industrial fermentations. Course will use fermentation of beverages, food ingredients, enzymes, chemicals and pharmaceuticals to demonstrate microbial metabolism.

**BIOL 665 SELECTED TOPICS IN BIOLOGY****(.5 or 1 or 1.5 or 2)****(Credit/No Credit or letter grade.)***Eight lecture hours per .5 unit.*

This course is designed to develop specific skills, techniques or concepts that are appropriate to biology and/or biotechnology. The course will focus on one specific topic; for example, new or leading edge developments in biotechnology. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**BIOL 675 HONORS COLLOQUIUM IN BIOLOGY (1)***One lecture hour per week. Prerequisite: Completion of or concurrent enrollment in any non-Honors biology level 100 or 200 course.*

Readings, discussion, lectures and activities covering selected advanced topics in biology to be determined by the Biology Department and the Honors Program. *May be repeated for credit a maximum of three times, but may not repeat topics successfully completed. Honors credit will be earned for both Biology 675 and the concurrently enrolled course. Transfer credit: UC; CSU.*

**BUSINESS (BUS.)**

**See also listings under Computer Applications & Office Technology and Fashion Merchandising.**

The Business Division of Skyline College offers courses that lead to either a transfer program or a career program with an AA/AS degree and/or certificate of proficiency in a specified field.

**TRANSFER STUDENTS**

For information concerning the transfer requirements of other colleges and universities, students should consult the catalogs of the colleges and universities concerned, or their Skyline College counselor.

**BUS. 100 INTRODUCTION TO BUSINESS (3)***Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

A basic orientation course in business designed to develop an understanding of the role of business in the economy and as an aid in selecting a field of vocational specialization. *Transfer credit: UC; CSU (D3).*

**BUS. 101 HUMAN RELATIONS AT WORK (3)***Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

The application of basic principles in the behavioral sciences to practical problems of personal growth, self-management, and the development of healthy, productive interpersonal relationships, including those typically encountered at work. *Transfer credit: CSU (D3).*

**BUS. 103 INTRODUCTION TO BUSINESS INFORMATION SYSTEMS (3)***Three lecture hours plus one lab hour by arrangement per week. Prerequisite: CAOT 104 or equivalent. Recommended: Eligibility for ENGL 836.*

An introduction to computer systems and software applications and their impact on the business environment. Topics include hardware, software, theory and architecture, computer terminology, Windows, and software applications used as problem solving tools for individual and group projects. *Transfer credit: UC; CSU.*

**BUS. 107 DEALING WITH DIFFICULT PEOPLE (1)****(Credit/No Credit or letter grade.)**

This course provides development of skills needed by students to effectively interact and deal with difficult people, angry or upset clients, customers, co-workers, or significant others. An introduction to the conflict resolution process. *Transfer credit: CSU.*

**BUS. 109 WORKING WITH PEOPLE WORLDWIDE (1)****(Credit/No Credit or letter grade.)**

This course is designed to acquaint students with the differences in business dealings and working environments on an international basis. Emphasis is on understanding culture, society, management styles, and the work ethic in various countries. *Transfer credit: CSU.*

**BUS. 111 CRASH COURSE TO SUCCESS IN ONLINE LEARNING (1)****(Offered online only.)(Credit/No Credit.)***A total of sixteen lecture hours plus four lab hours by arrangement.*

This course provides students with basic knowledge and skills required to become a successful online student. Topics include the characteristics and challenges of online learning, learning styles, the taxonomy of online courses, online learning strategies, technical skills, online test-taking skills, and time and stress management in an online learning environment. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**BUS. 115 BUSINESS MATHEMATICS (1.5-3)**

Three lecture hours per week and one lab hour per week.  
Prerequisite: MATH 811 or equivalent. Recommended:  
Eligibility for ENGL 836.

Introduction to the mathematics applications required in entry level positions in business in accounting, merchandising, banking, and real estate. Introduction to the solution of problems on the ten-key electronic printing calculator. *Transfer credit: CSU.*

**BUS. 120 MATHEMATICAL ANALYSIS FOR BUSINESS (3)**

Three lecture hours per week plus one lab hour per week, by arrangement. Prerequisite: MATH 120 or equivalent. Recommended: Eligibility for ENGL 836.

To give students the mathematical tools they will need to succeed in the core courses in the business curriculum at the state universities. Includes introduction to calculus including applications; probability, including expected monetary value and decision making; mathematics of finance, including amortization. *Transfer credit: UC, CSU (B4).*

**BUS. 123 STATISTICS (3)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: MATH 120 or equivalent. Recommended: BUS. 120 and eligibility for ENGL 836.

Introduction to descriptive techniques and methods of inference. Includes classification of data, measure of central tendency and dispersion, normal curve, hypothesis testing, correlation and regression analysis, trend analysis. Also introduction to probability and probability distributions. *Transfer credit: UC; CSU (B4).*

**BUS. 150 SMALL BUSINESS MANAGEMENT (3)**

Three lecture hours per week. Recommended: Completion of MATH 811; eligibility for ENGL 836.

Examination of the opportunities and hazards of small business operation. Significant areas of vital interest to the prospective independent business person, including legal form of organization, site location, financing, handling of personnel and overall management procedures. For business students who plan to establish or supervise a small business. *Transfer credit: CSU.*

**BUS. 153 PLANNING A BUSINESS STARTUP (2-3) (Credit/No Credit or letter grade.)**

A minimum of sixteen lecture hours per unit.

This course presents practical procedures for planning the opening of a new small business. Topics include determining whether one is a "good fit" for an entrepreneurial career, "profit objectives," constructing capital budgets, realities of finding financing, elementary accrual-basis accounting, profit margin analysis, projecting cash flows and accrual profits, and market research. *Transfer credit: CSU.*

**BUS. 181 PERSONAL POWER AND LEADERSHIP (1.5) (Credit/No Credit or letter grade.)**

Students build confidence, leadership abilities, and prepare for business world challenges. Topics include traits of successful managers, techniques to develop personal power, and career path exploration. *Transfer credit: CSU.*

**BUS. 183 BUILDING HIGH PERFORMING TEAMS (1.5) (Credit/No Credit or letter grade.)**

Students will learn the newest techniques of organizing and leading highly effective work teams and departments. Topics include creating a clear vision and purpose, empowering and involving all members, creating an open and productive environment, meeting deadlines, and more. *Transfer credit: CSU.*

**BUS. 190 RETAILING, E-COMMERCE AND BUYING (3)**

Three lecture hours per week. Recommended: Completion of BUS. 115 or MATH 811; eligibility for ENGL 836.

General overview of retailing, which includes an introduction to buying, pricing, sales promotion, store management and organization, retail calculations, retail salesmanship, and service policies. Topics include computer-generated sales and advertising. *Transfer credit: CSU.*

**BUS. 200 INTRODUCTION TO INTERNATIONAL BUSINESS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Introduction to strategy and management of international business. Topics will include international trade theory and how companies develop competitive advantage in international markets, marketing, production and financial management, the organization of human resources, and management of risk. *Transfer credit: CSU (D3).*

**BUS. 201 BUSINESS LAW (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Origin, development and functions of the law and the legal environment with the objective of promoting a general understanding of legal reasoning. Framework within which the judicial process takes place. Legal problems pertaining to contracts and related topics, sales, and the impact of law on economic enterprise. *Transfer credit: UC; CSU (See counselor for exceptions). (CAN BUS 8).*

**BUS. 205 BUSINESS ETHICS (3)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

An introduction to foundational concepts of business ethics. Students will develop values, cognitive skills in decision making, and gain competence in understanding risks and approaches related to managing ethical issues. Topics include frameworks of business ethics, ethical decision-making process, and implementing business ethics in a global economy. *Transfer credit: CSU.*

**BUS. 210 INTERNATIONAL FINANCE (1.5)**

*A minimum of 24 lecture hours total. Recommended: Eligibility for ENGL 836.*

This course introduces and examines the practical aspects of international trade finance. The course includes topics such as different types of lenders, domestic and foreign government assistance programs for trade assistance, methods of payment, trade financing, and managing risks in international trade finance. *Transfer credit: CSU (D3).*

**BUS. 221 INTERCULTURAL BUSINESS COMMUNICATION (1.5)**

**(Credit/No Credit or letter grade.)**

*Total of 24 lecture hours. Recommended: Eligibility for ENGL 836*

This course introduces and examines the practical aspects of intercultural business communication. The course includes topics in the nature, pattern and comparisons of intercultural business communication, business and social customs, intercultural negotiation practice and strategies, communication in intercultural and international contexts, and region-specific business cultures. *Transfer credit: CSU.*

**BUS. 225 FOUNDATIONS OF GLOBAL E-COMMERCE (1.5)**

**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

This course introduces the fundamentals of electronic commerce. Students will learn how to conduct and manage e-commerce and the major applications, opportunities and limitations in both domestic and international business. Topics include e-payment transactions; legal, taxation and privacy issues; and globalization in e-commerce. *Transfer credit: CSU.*

**BUS. 226 GLOBAL BUSINESS NEGOTIATION (1.5)**

**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours. Recommended: Eligibility for ENGL 836 or equivalent.*

Introduction to the skills necessary to conduct successful negotiations and application of these skills in domestic and international settings. Students will learn the essentials of effective negotiating techniques and explore the elements of cultural diversity that come into play and affect negotiations among international parties. *Transfer credit: CSU.*

**BUS. 227 GLOBAL BUSINESS CONTRACTS (1.5)**

**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Introduction to commercial agreements between parties trading across international borders. Topics include commercial contracts, quality control, compliance with government regulations, protection of intellectual property rights, dispute resolution, negotiations, performance, and contract enforcement. *Transfer credit: CSU.*

**BUS. 230 INTRODUCTION TO INTERNATIONAL MARKETING (1.5)**

**(Credit/No Credit or letter grade.)**

*Total of twenty-four lecture hours. Recommended: Eligibility for ENGL 836.*

This course provides a practical approach to international marketing using an in-depth analysis of the political, social, economic, cultural and legal environments in which international marketing occurs. It provides a set of conceptual and analytical tools to help students apply the "Four P's" – product, promotion, price and place to international marketing. *Transfer credit: CSU.*

**BUS. 240 INTERNATIONAL LOGISTICS AND TRANSPORTATION (1.5)**

**(Credit/No Credit or letter grade.)**

*A total of twenty-four lecture hours plus eight lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Introduction to the practical aspects of international transportation and logistics and their role in international trade. Topics included are international transportation, logistics, customs regulations, documentation, port and facility operations, and inventory management. *Transfer credit: CSU.*

**BUS. 241 DOING BUSINESS IN ASIA (1.5)**

**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Exploration of business strategies in the Asia-Pacific region. Students will learn how and why business strategies are pursued by multinational corporations doing business in Asia. Students will gain a better insight into the business environment and business protocol in Asia. Topics include business environmental analysis, strategy formulation, strategy implementation and control, and profiles of Japan, Korea, China, Singapore and Hong Kong. *Transfer credit: CSU.*

**BUS. 242 DOING BUSINESS IN EUROPE (1.5)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Analysis of the business culture of European countries. Students will learn the major components of the current economic, political and cultural reality of the European nations in order to develop the knowledge and understanding essential to conducting successful business dealings in Europe. *Transfer credit: CSU.*

**BUS. 243 LEGAL ENVIRONMENT OF INTERNATIONAL BUSINESS (1.5)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Introductory course to explore various topics related to the legal implications the financial, economic, cultural and political environment of international business. Through analysis of case students and skill-building activities, students will develop a theoretical, practical approach to doing business as a multinational company in a global environment. *Transfer credit: CSU.*

**BUS. 244 DOING BUSINESS IN LATIN AMERICA (1.5)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

This course covers the practical aspects of doing business in Latin America. Students will gain additional insight into business protocol and tactics of Latin America. Topics include political, economic, cultural and business environments; opportunity analysis; trade agreements; business strategy; and country and regional profiles of Mexico, the Caribbean, Central America, and South America. *Transfer credit: CSU.*

**BUS. 245 INTRODUCTION TO CUSTOMS BROKERAGE (1.5)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836 or equivalent.*

Introduction to the basic regulations, procedures and documentation required in customs brokerage. The course will provide students with basic knowledge and insight into U.S. Customs Brokerage and the Customs Broker examination. Topics include procedures of U.S. customs entry, clearance, documentation, classification, valuation, tariffs, quotas, duty rates, restrictions, prohibitions, and regulations. *Transfer credit: CSU.*

**BUS. 248 ASIAN MANAGEMENT SYSTEMS (3)**  
**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour by arrangement per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

A comparative study of Asian management systems, such as organizational structures, competitive strategies, and cultural influences within Asia and the western world. Students will learn the influence of Confucianism, strategic thinking and traditions on Asian management systems, and practical guidelines for working with Asian counterparts for successful business ventures. *Transfer credit: CSU.*

**BUS. 279 IMPORT/EXPORT MANAGEMENT (1.5)**  
**(Credit/No Credit or letter grade.)**

*Total of twenty-four lecture hours. Recommended: Eligibility for ENGL 836.*

An overview of the practical aspects of import/export procedures with an emphasis on small- to medium-sized companies. The complete international trading transactions will be covered, including sourcing, financing, freight forwarding, payment methods, international commercial terms, and documentation. *Transfer credit: CSU.*

**BUS. 290 INTRODUCTION TO MARKETING STRATEGY (1.5)**

*A minimum of 24 lecture hours. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Examination of how a clear, well-defined marketing strategy influences every aspect of a business and helps it gain competitive advantage. Topics include buyer behavior, segmentation, targeting, positioning, differentiation, and other tools crucial to business success. *Transfer credit: CSU.*

**BUS. 291 MARKETING TACTICS (1.5)**

*A minimum of 24 lecture hours. Prerequisite: BUS. 290. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Introduction to current marketing tactics used to attract and retain customers. Topics include product ideas and product lifecycles, setting prices, choosing distribution channels, tools of marketing promotion, and business tactics in a global age. *Transfer credit: CSU.*

**BUS. 292 INTRODUCTION TO MARKETING PROMOTIONS (1.5)**

*A minimum of 24 lecture hours. Prerequisite: BUS. 290. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Introduction to the methods of marketing promotion and how companies use them to communicate with target customers and audiences. Topics include advertising, direct marketing, sales promotion, public relations, and personal selling. Students learn how to prepare a unified, high-impact promotional campaign about a company or product. *Transfer credit: CSU.*

**BUS. 293 INTERNET MARKETING STRATEGIES (1.5)**

*A minimum of 24 lecture hours. Prerequisite: BUS. 290. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

An introduction to Internet marketing strategies. Explanation of the steps to integrate the Internet into the overall business plan of a small company and how to plan an effective business website. Topics include Internet technologies, developing an e-commerce strategy, what to consider before designing a website, and what to expect from going online. *Transfer credit: CSU.*

**BUS. 352 INTRODUCTION TO INSURANCE (1)  
(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours.*

An introduction to the modern property/casualty insurance system, including insurance products and services distribution, insurance company departments, reinsurance, large property and high liability values/limits, civil laws, tort, contract, basic commercial and personal ISO insurance contracts, and risk management. *Transfer credit: CSU.*

**BUS. 353 PROPERTY & LIABILITY INSURANCE  
PRINCIPLES (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent, and BUS. 352.*

A comprehensive study of property and liability insurance divided into three segments: 1) insurance fundamentals, types of insurers, insurance institutions, insurance regulation, and financial performance measurement; 2) insurance operations, marketing, underwriting, and claims; and 3) insurance contracts, loss exposure, and risk management. *Transfer credit: CSU.*

**BUS. 400 BUSINESS ENGLISH (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

A comprehensive review of English as used by employers. Business-oriented materials are used; areas covered include grammar, punctuation, capitalization, spelling and vocabulary. Designed for anyone who must communicate in writing in a business environment. *Transfer credit: CSU.*

**BUS. 401 BUSINESS COMMUNICATIONS (3)**

*Three lecture hours per week. Prerequisites: Completion of or enrollment in BUS. 400 or one college English course.*

Development of writing skills for actual business situations. Covers such topics as analyzing one's audience and goals; organizing correspondence to get results; writing clearly, concisely and forcefully; revising and editing; and dictating techniques. Provides practical experiences in the kind of clear writing today's employers are seeking. Recommended for business majors and for anyone whose job includes writing letters, memos and reports. *Transfer credit: CSU.*

**BUS. 411 INTRODUCTION TO TECHNICAL  
COMMUNICATION I (3)**

*Three lecture hours per week plus two lab hours per week by arrangement. Prerequisite: Eligibility for ENGL 100 or equivalent; and CAOT 104 or CAOT 214, or equivalent.*

Overview of technical, professional and workplace writing. Emphasis on finding and evaluating information, creating well crafted, user-oriented documents, and using suitable applications to make information available in appropriate formats. Ethics of technical writing and writing in a multicultural context. *Transfer credit: CSU.*

**BUS. 443 LAW OFFICE PROCEDURES (1-3)**

*A total of sixteen lecture hours plus twenty-four lab hours by arrangement per unit. Prerequisites: CAOT 212 or 214 and BUS. 400 or equivalent skills. Recommended: Eligibility for ENGL 836.*

Intensive training in procedures applicable to secretarial duties in law offices. Emphasis on legal terminology, legal documents and correspondence, dictation, and transcription. Also listed as LEGL 443. May be repeated for credit up to a maximum of 4 units. *Transfer credit: CSU.*

**BUS. 476 INTRODUCTION TO MEDICAL OFFICE  
MANAGEMENT (3)**

*Three lecture hours per week plus a total of 24 lab hours by arrangement.*

An introductory course designed to provide students with an overview of medical office procedures. Students will learn how to manage patients in emergency situations; receive, register and schedule patients; organize and sustain medical records; medical billing; health insurance; business operations; human resource functions; and financial management. *Transfer credit: CSU.*

**BUS. 485 MEDICAL TERMINOLOGY (3)**

*Three lecture hours per week. Recommended: Completion of or concurrent enrollment in one college English course.*

Designed to give students a basic background in medical terminology as used by medical transcriptionists, court reporters, law related occupations, and allied health occupations. The prefixes, roots, and suffixes of commonly used medical words are presented. Proper names of anatomical structures and their relationship to each other are covered by body system. Also listed as HSCI 484. *Transfer credit: CSU.*

**BUS. 486 MEDICAL TRANSCRIPTION (1-4)**

*One lecture hour and three lab hours per week plus four lab hours per week by arrangement. Prerequisites: Concurrent enrollment in BUS. 485; ability to type 50 net wpm. Recommended: ENGL 836 or equivalent.*

Intensive training in medical transcription that includes doctor-dictated history and physicals, surgical reports, operative procedures, x-ray, pathology, and nuclear medicine reports. May be repeated twice for credit. *Transfer credit: CSU.*

**BUS. 487 MEDICAL TRANSCRIBER INTERNSHIP  
(1-4)**

*Fifty-one hours per unit. Prerequisites: BUS. 485 and 486 or equivalent.*

On-the-job training in a hospital or medical office in transcribing actual doctor dictation from cassettes. Individual conferences with instructor. *May be repeated twice for credit. Transfer credit: CSU.*

**BUS. 489 MEDICAL CODING ICD-9 (3)**

*Three lecture hours per week plus a total of 24 lab hours by arrangement. Prerequisite: Completion of BUS. 485 or equivalent.*

A course covering ICD-9 coding, a national classification of coding that encompasses diseases, ailments, injuries and disorders for all the major and minor body systems. This course includes, but is not limited to, hospital inpatient, outpatient and ambulatory care coding emphasizing specific and correct procedures to accurately achieve maximum reimbursement. *Transfer credit: CSU.*

**BUS. 491 MEDICAL CODING CPT (3)**

*Three lecture hours per week plus a total of 24 lab hours by arrangement. Prerequisite: Completion of, or concurrent enrollment in, BUS. 489 or equivalent.*

A course covering CPT coding, a national classification of coding that encompasses evaluation management, surgical, and primary care procedures performed in a medical office. The course includes, but is not limited to, hospital inpatient, outpatient, and ambulatory care coding emphasizing specific and correct procedures to accurately achieve maximum reimbursement with the coordination of ICD-9 codes. *Transfer credit: CSU.*

**BUS. 499 COMPUTERIZED MEDICAL BILLING AND INFORMATION MANAGEMENT (3)**

*Three lecture hours per week plus a total of 48 lab hours by arrangement. Prerequisite: Completion of, or concurrent enrollment in, BUS. 491 or equivalent.*

An integrated, computerized approach to develop knowledge and skills for accurate processing of medical billing and information management for a medical office. Topics include: data entry, billing/collection procedures, processing patient and insurance information, scheduling appointments, processing insurance claims, report generation, and composing and editing medical documents. *May be repeated once for credit. Transfer credit: CSU.*

**BUS. 520 NORTH SAN MATEO COUNTY LEADERSHIP FORUM (1.5)**

**(Credit/No Credit or letter grade.)**

*A total of 24 lecture hours.*

A twelve-week leadership development course co-sponsored by the Chambers of Commerce in North San Mateo County, including: Brisbane, Half Moon Bay, Millbrae, Pacifica, San Bruno and South San Francisco. The course provides students with the opportunity for interaction with experts and decision makers within the

county to learn key operations of industry, government, education and community-based organizations. *Transfer credit: CSU.*

**BUS. 665 SELECTED TOPICS IN BUSINESS  
(.5 or 1 or 1.5)**

**(Credit/No Credit or letter grade.)**

*A minimum of eight lecture hours for each .5 unit.*

This course is designed to develop specific skills that are utilized in business settings.

The course will focus on one specific topic; for example, a specific software package, telephone techniques, time management, human relations skills, small business management, etc. *May be repeated as topics vary. Transfer credit: CSU.*

**BUS. 670 BUSINESS WORK EXPERIENCE (1-4)**

**(Credit/No Credit.)**

*Three to four meetings with instructor. Seventy-five to three hundred hours per semester on-the-job. Prerequisite: Employment in a college approved job directly related to the student's CAOT major.*

Students receive on-the-job training in an office environment under the primary supervision of a business employer. Course should be taken within the last two semesters of student's certificate or AS program completion. For a detailed description of Vocational Cooperative Education, see the Cooperative Education section of this Catalog. For further information about Computer Applications & Office Technology majors, please contact your counselor or the coordinator of the CAOT Program. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAREER AND PERSONAL DEVELOPMENT (CRER)**

These courses offer students the opportunity to gain knowledge about themselves and their behavior and to develop techniques for successful educational, career and personal planning.

**CRER 100 HOW TO SUCCEED IN COLLEGE (1)**

**(Credit/No Credit.)**

This course will provide students with an opportunity to explore their attitudes toward learning and college life. Class activities will include evaluation of individual learning styles and instruction in effective ways of coping with school-related anxiety. Class exercises will help students learn assertiveness and time management skills to enhance their educational experience. Study skills will be included when applicable. *Transfer credit: CSU.*



**CRER 111 DECISION MAKING (.5 or 1)  
(Credit/No Credit.)**

This course is designed to provide the student with an introduction to the decision making process which stresses the significance of clearly defined values, critical thinking, the importance of gathering and evaluating information, identifying alternatives, and learning about personal risk-taking. *Transfer credit: CSU (E1).*

**CRER 132 JOB SEARCH (.5 or 1)  
(Credit/No Credit.)**

A course designed to develop practical job search skills to increase the student's options and opportunities for locating immediate and appropriate job sites. Emphasis will be placed on developing the self-knowledge and skills necessary to write a traditional resume, participate in a job interview, and develop a plan of action for employment in the local job market. *Transfer credit: CSU (E1).*

**CRER 135 SKILLS/SELF-ASSESSMENT (.5 or 1)  
(Credit/No Credit.)**

This course will assist students in assessing their present skills, abilities and preferences and in applying them to decisions regarding future goals and aspirations. Class activities will include a number of self-assessment exercises in which the student will draw from his/her life's experiences to arrive at individualized information necessary for personal, academic and career choices. *Transfer credit: CSU (E1).*

**CRER 136 CAREER PLANNING (.5 – 1)  
(Credit/No Credit.)**

This course will assist students in the on-going process of career planning. Class activities will include assessing individual preferences in work environments, people environments, lifestyles, geography and interests. They will provide students with opportunities to use information regarding personal values and functional skills in career planning strategies. *Transfer credit: CSU (E1).*

**CRER 137 LIFE AND CAREER PLANNING (3)  
(Credit/No Credit or letter grade.)**

*Recommended: Eligibility for ENGL 836.*

This course is designed for the student who is undecided about an occupation. It provides a comprehensive approach to life and career planning. Vocational interest tests, various insights into his/her abilities, interests, and personality. Occupational trends and ways of learning more about specific careers will be explored. Individual conferences are available to students as well as use of the Career Center. *Transfer credit: CSU (E1).*

**Note:** *This course covers material similar to that of CRER 132, 135 and 136 combined.*

**CRER 139 CAREERS IN TEACHING (.5)  
(Credit/No Credit.)**

*A total of eight lecture hours.*

This course provides information regarding requirements to become an elementary or middle/high school teacher or a community college/university professor. Topics include transfer opportunities, financial aid and online resources. *Transfer credit: CSU.*

**CRER 140 PEER COUNSELING (1 or 2 or 3)  
(Credit/No Credit.)**

*Recommended: Eligibility for ENGL 836 or ESOL 400.*

Prepares students to serve as informational resources to peers. Emphasis on training in basic counseling, assessment, provision of information and referral. Helps students consider their own potential in the "helping professions." Opportunity for supervised field experience. *May be repeated for credit up to a maximum of 3 units. Transfer credit: CSU.*

**CRER 410 COLLEGE AND CAREER ORIENTATION  
(.5 or 1 or 2)**

**(Credit/No Credit.)**

The student is acquainted with college life in general and with the campus facilities and activities of Skyline College in particular. Students will be assisted in developing a sound educational plan. Study skills assessment, time management, personal and social adjustment, and interest and aptitude assessment are some of the topics included. *Transfer credit: CSU.*

**CRER 650 GUIDANCE SEMINAR GROUP (.5 or 1 or 2)  
(Credit/No Credit or letter grade.)**

Designed to help students in understanding and dealing with their personal, social, professional, and cross-cultural concerns. Topics and course descriptions may differ each semester and will be designated in the current class schedule. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CRER 665 LIFE STYLES HEALTH ISSUES  
(.5 or 1 or 1.5 or 2)**

**(Credit/No Credit or letter grade.)**

*A minimum of eight lecture hours per .5 unit.*

Explores contemporary topics or lifestyles as they relate to the health of individuals or society. *May be repeated for credit up to a maximum of 6 units. Transfer credit: CSU (E1).*

**CHEMISTRY (CHEM)****CHEM 112 CHEMISTRY IN ACTION (4)**

Three lecture hours and three laboratory hours per week.

An introduction to chemistry and laboratory investigation for non-science majors. The course will focus on chemicals and reactions common in everyday life, medicine, industry, and in the body. Concepts relating to the nature and interactions of atoms, ions and molecules will be presented. Students will learn how to use scientific methods to investigate questions about how chemical systems work. Students will also learn how to use and evaluate information presented on product labels, in advertisement, and available through the Internet. *Transfer credit: UC; CSU (B1, B3).*

**CHEM 192 INTRODUCTORY CHEMISTRY (4)  
(Credit/No Credit or letter grade.)**

Three lecture hours and three laboratory hours per week. *Prerequisite: MATH 110 or equivalent. Recommended: Eligibility for ENGL 836.*

An introductory course in Chemistry designed to prepare students for General Chemistry I (CHEM 210). Provides an introduction to fundamental concepts in chemistry with an emphasis on the application of mathematical problem-solving methods to chemistry. Lecture topics will include the basic structure of atoms, the combination of elements in chemical compounds, the metric system and measurement, significant figures, using dimensional analysis and algebra to solve chemical problems, describing chemical reactions using balanced equations, and stoichiometry. In the laboratory, the student will be introduced to the use of common laboratory equipment and techniques. *Transfer credit: UC; CSU. (CAN CHEM 6).*

**CHEM 210 GENERAL CHEMISTRY I (5)**

Three lecture hours and six laboratory hours per week. *Prerequisites: Satisfactory completion (grade of C or better) of CHEM 192, or equivalent; and satisfactory completion (grade of C or better) of MATH 120, or appropriate placement test scores and other measures as appropriate, or equivalent.*

The first semester of a two-semester sequence with laboratory intended for science, engineering and pre-professional majors. Includes a detailed study of atomic and molecular structures, stoichiometric calculations, solutions, thermochemistry, gas laws, physical states, atomic electron orbital theor, and chemical bonding. The course also includes laboratory study of these concepts, experimental chemistry techniques, and the analysis and interpretation of experimental findings. *Transfer credit: UC; CSU (B1, B3). (CAN CHEM 2; CHEM 210 + 220 = CAN CHEM SEQ A).*

**CHEM 220 GENERAL CHEMISTRY II (5)**

Three lecture hours and six laboratory hours per week. *Prerequisite: Satisfactory completion (grade of C or better) of CHEM 210, or equivalent.*

The second semester of a two-semester sequence with laboratory intended for science, engineering and pre-professional majors. Includes a study of acid-base chemistry, equilibrium, kinetics, thermodynamics, electrochemistry, descriptive chemistry, and nuclear chemistry. The course also includes laboratory study of these concepts, experimental chemistry techniques, and the analysis and interpretation of experimental findings. *Transfer credit: UC; CSU (B1, B3). (CAN CHEM 4; CHEM 210 + 220 = CAN CHEM SEQ A).*

**CHEM 234 ORGANIC CHEMISTRY I (3)**

Three lecture hours per week. *Prerequisite: CHEM 220 with grade of "C" or better. To be taken concurrently with CHEM 237, Organic Chemistry I Laboratory.*

Nomenclature, structure, reactions and reaction mechanisms of organic compounds, with emphasis on alkanes, alkenes, alkynes, and alkyl halides. Structural isomerism and stereo isomerism. Infrared and nuclear magnetic resonance spectroscopy is an integral part of the course with emphasis on structural analysis. *Transfer credit: UC; CSU (B1).*

**CHEM 235 ORGANIC CHEMISTRY II (3)**

Three lecture hours per week. *Prerequisite: CHEM 234 and 237 with grades of "C" or better. To be taken concurrently with CHEM 238, Organic Chemistry II Laboratory.*

Nomenclature, structure, reactions and reaction mechanisms of aromatic compounds, alcohols, ethers, carbonyl and acyl groups, amines, carbohydrates, lipids, amino acids and proteins. *Transfer credit: UC; CSU (B1).*

**CHEM 237 ORGANIC CHEMISTRY LAB I (2)**

Six laboratory hours per week. *Prerequisite: CHEM 234; the two classes may be taken concurrently.*

Laboratory designed to accompany CHEM 234. *Transfer credit: UC; CSU (B3).*

**CHEM 238 ORGANIC CHEMISTRY LAB II (2)**

Six laboratory hours per week. *Prerequisite: CHEM 235; the two classes may be taken concurrently.*

Laboratory designed to accompany CHEM 235. *Transfer credit: UC; CSU (B3).*

**CHEM 410 CHEMISTRY FOR HEALTH SCIENCES (4)**

Three lecture hours and three laboratory hours per week. Prerequisite: Satisfactory completion (grade of C or better) of MATH 110, or appropriate placement test scores and other measures as appropriate, or equivalent. Recommended: Eligibility for ENGL 836, or equivalent.

Survey of the principles of general, organic and biochemistry. The physical and chemical properties of inorganic, organic and biomolecules will be studied. The course will include a study of equilibrium in chemical systems with special emphasis on chemical processes in the body. The laboratory component of the course introduces qualitative and quantitative techniques of chemical study and manipulations with inorganic, organic and biochemical reactions. Designed for Health Science majors (e.g., respiratory therapy, nursing). Not intended for students majoring in biology, chemistry, physics, engineering, or pre-professional programs such as medicine, dentistry or pharmacy. Transfer credit: CSU (B1, B3).

**CHINESE (CHIN)**

Language Lab and Listening Requirement: Students enrolled in foreign language courses are required to make use of the language lab as prescribed by each department. Imitation, response, and independent practice are integral features of the study of a foreign language at the College.

**CHIN 111, 112 ELEMENTARY CHINESE I and II (3, 3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: CHIN 112 – CHIN 111 or equivalent.

A two-semester sequence covering the same course material as a university-level first semester Mandarin Chinese course. Instruction and practice in understanding, speaking, reading, and writing. Transfer credit: UC; CSU.

**CHIN 121 ADVANCED ELEMENTARY CHINESE I (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: CHIN 112 or equivalent.

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills: listening, speaking, reading and writing. Content-appropriate social and cultural information will be presented to promote the students' understanding of the Mandarin Chinese-speaking world. Transfer credit: CSU.

**CHIN 122 ADVANCED ELEMENTARY CHINESE II (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: CHIN 121 or equivalent.

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills: listening, speaking, reading and writing. Content-appropriate social and cultural information will be presented to promote the students' understanding of the Mandarin Chinese-speaking world. Transfer credit: CSU.

**COMPUTER APPLICATIONS AND  
OFFICE TECHNOLOGY (CAOT)**

See also listings under Computer Science and Telecommunications & Network Information Technology.

**CAOT 100 BEGINNING COMPUTER  
KEYBOARDING (1.5)**

(Credit/No Credit.)

A minimum of 24 lecture hours plus 16 lab hours by arrangement.

An introductory typing course for students who want to learn how to type and develop skill using the computer keyboard. Emphasis is on developing correct techniques and basic keyboarding skills. No typing applications or formatting will be taught. May be repeated once for credit. Transfer credit: CSU.

**CAOT 101 COMPUTER KEYBOARDING SKILL BUILDING (1.5-3)**

(Credit/No Credit.)

A minimum of 24 to 48 lecture hours plus 16 to 32 lab hours by arrangement. Prerequisite: CAOT 100 or equivalent; ability to type without looking at the keyboard.

This course is designed to improve a student's ability to type rapidly and accurately for sustained periods of time without looking at the keyboard. Students may also use the course to improve typing speed and accuracy. May be repeated for credit up to a maximum of 6 units. (Open entry.) Transfer credit: CSU.

**CAOT 104 INTRODUCTION TO COMPUTERS WITH  
WINDOWS I (1.5)**

(Credit/No Credit or letter grade.)

A minimum of 24 lecture hours plus 8 lab hours by arrangement. Recommended: Eligibility for ENGL 836.

Through hands-on experience, students will be introduced to the PC-compatible computers, the Windows operating system, word processing, spreadsheets, and other business-oriented applications. In a lecture/demonstration format, students will gain a basic knowledge of hardware-software interaction. May be repeated once for credit. Transfer credit: CSU.

**CAOT 105 INTRODUCTION TO COMPUTERS WITH WINDOWS II (1)****(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 8 lab hours. Prerequisite: CAOT 104 or equivalent experience.*

Students will acquire skills to become independent computer users. Information will be provided on configuring and purchasing Windows computers. Topics covered include operating systems, hardware, and some DOS. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 200 INTRODUCTION TO MS OFFICE SUITE (2)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 32 lecture hours plus 22 lab hours by arrangement. Prerequisite: CAOT 104 or equivalent.*

Students receive introductory, hands-on exposure to the four Microsoft Office Suite applications: word processing (Word), spreadsheets (Excel), databases (Access), and presentation graphics (PowerPoint). A cursory preview and discussion on techniques for integrating (sharing) information between applications is given at the end of the course. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 201 INTEGRATION OF MS OFFICE APPLICATIONS (1)****(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 10 lab hours by arrangement. Prerequisite: CAOT 200 or equivalent.*

Students will learn how to integrate the four Microsoft Office applications (Word, Excel, Access and PowerPoint) by inserting documents, linking information, and embedding objects using exercises and case studies. Microsoft Office's Internet features are also covered, and students will learn how to convert documents to HTML and create Web presentations. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 212 WORD PROCESSING I: WORDPERFECT (1)****(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 16 lab hours by arrangement. Prerequisite: Knowledge of the computer keyboard or completion of a typing class.*

Using a hands-on approach, students will use a computer and word processing software to learn the theories and practical applications of the current version of WordPerfect to create, edit, format, manage and enhance documents using customized features. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 213 WORD PROCESSING II: WORDPERFECT (2)****(Credit/No Credit or letter grade.)**

*A minimum of 32 lecture hours plus 32 lab hours by arrangement. Prerequisite: CAOT 212 or 214.*

Using a hands-on approach, students will expand their word processing knowledge and skills by learning theories and practical applications of the current version of WordPerfect to focus on advanced applications such as multi-page documents, merges, tables, graphics, macros and styles. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 214 WORD PROCESSING I: WORD (1)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 16 lab hours by arrangement. Prerequisite: Knowledge of the computer keyboard or completion of a typing class.*

Using a hands-on approach, students will use a computer and word processing software to learn the theories and practical applications of the current version of Word to create, edit, format, manage and enhance documents using customized features. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 215 WORD PROCESSING II: WORD (2)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 32 lecture hours plus 32 lab hours by arrangement. Prerequisite: CAOT 212 or 214.*

Using a hands-on approach, students will expand their word processing knowledge and skills by learning theories and practical applications of the current version of Word to focus on advanced applications such as multi-page documents, merges, tables, graphics, macros and styles. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 217 WORD PROCESSING III (1-3)**  
**(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 16 lab hours by arrangement per unit. Prerequisite: CAOT 213 or 215 or equivalent.*

Using a hands-on approach, students become proficient with the advanced features of word processing. In-depth coverage of tables, outlines, merges, style sheets and templates, macros, desktop publishing features, Web documents, online forms, and applications integration. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 221 DESKTOP PUBLISHING: MICROSOFT PUBLISHER (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: Successful completion of CAOT 214 or CAOT 200, or equivalent.

Using Microsoft Publisher, students will learn to create professional-looking brochures, newsletters, flyers, certificates, menus, business cards, stationery, and more. The course will include guidelines for combining text and art work effectively to create eye-catching documents for personal and business use. Pre-designed Publisher templates will also be used. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 222 BUSINESS PRESENTATIONS I: POWERPOINT (1)****(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 104 or equivalent.

Students will learn to identify elements that make a business presentation effective and will use the Microsoft PowerPoint program to create their own computer-generated business presentations. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 223 BUSINESS PRESENTATIONS II: POWERPOINT (1)****(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 222.

Students will cover advanced presentation concepts to enhance proficiency in embedding visuals and sound clips; edit templates and modify color schemes to create PowerPoint presentations that will be converted to an HTML format and uploaded to a Web page. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 225 SPREADSHEETS I (1)****(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Recommended: CAOT 104 or equivalent.

An introduction to Microsoft Excel software, which is used to build, format and print spreadsheets. Topics include the creation of charts and the use of basic functions and formulas. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 226 SPREADSHEETS II (2)****(Credit/No Credit or letter grade.)**

A minimum of 32 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 225 or equivalent.

Students will advance their knowledge of spreadsheets using Microsoft software by learning how to design, enhance, link and consolidate worksheets, as well as apply statistical and financial function design.

Additional topics include advanced printing techniques and database management features. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 230 DATABASE APPLICATIONS I (1)****(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 104 or equivalent. Recommended: Eligibility for ENGL 836.

Learn to use Windows database management software package, Microsoft Access, on a PC with a hands-on introduction to database administrative tasks: data input, storage, retrieval, editing and reporting. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 231 DATABASE APPLICATIONS II (2)****(Credit/No Credit or letter grade.)**

A minimum of 32 lecture hours plus 32 lab hours by arrangement. Prerequisite: CAOT 230.

An advanced database course for the student who wants to become professionally competent in database management software to perform advanced administrative tasks using Microsoft Access for business and personal data-handling tasks; emphasis on relational and multiple database design, advanced storage, retrieval, queries, reporting, SQL and Visual Basic for Access. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 301 MAXIMIZING YOUR EMPLOYMENT POTENTIAL (1)****(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement.

This course assists students in compiling a professional portfolio (resumes, application letters, work samples, etc.), which can be used to obtain employment and qualify for promotions; Additional job-seeking strategies will be covered, including Internet use to explore employment resources, professional networking, interviewing techniques, and goal setting. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 320 GRAPHIC DESIGN FOR COMPUTER USERS (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours. Prerequisite: CAOT 212 or 214 or 220 or equivalent.

Students learn graphic design concepts that are essential for creating attractive and effective computer-generated documents such as newsletters, brochures, and flyers. Lecture class includes computer assignments completed outside of class. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 400 INTERNET I (1.5)**  
**(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours. Pre requisite: CAOT 104 or equivalent computer experience.

An introduction to the Internet, including efficient searching techniques, email features, file compression, file transfer protocol (FTP) software, discussion groups, and virus scanning programs. Course is designed for Internet beginners and those students preparing to take an online course. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 403 HTML & WEB AUTHORIZING APPLICATIONS I (1.5)**  
**(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: Completion of, or concurrent enrollment in, either CAOT 104, CAOT 212 or CAOT 214, or equivalent.

An introductory course using web authoring software and a hands-on approach to designing web pages that will consist of: text in various sizes and colors, hyperlinks, mailtos, lists, background color/patterns, interlaced/transparent graphics, tables, and frames with the current version of HTML. Principles of color, line, and design for screen presentations will be included. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 404 HTML & WEB AUTHORIZING APPLICATIONS II (1.5)**  
**(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 403 or equivalent.

An intermediate hands-on course to increase proficiency with web authoring software while using the most current version of HTML. Consideration of the most recent specifications for use of text, graphics, tables, frames, layout, positioning, media and interaction. Introduction to advanced features of HTML. Attention to website design, development, maintenance, dynamic and universal interface. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 405 HTML & WEB AUTHORIZING APPLICATIONS III (1)**  
**(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 404 or equivalent. Recommended: CAOT 411 or equivalent.

A project-based course combining established core skills in HTML, web graphics, and dynamic media (Flash, audio and video) with development skills in layout, presentation, hosting management, and developer/client relations. *May be repeated once for credit. Transfer credit: CSU.*

**CAOT 408 DIGITAL AUDIO AND VIDEO (2)**  
**(Credit/No Credit or letter grade.)**

A minimum of 32 lecture hours plus 24 lab hours by arrangement. Prerequisite: CAOT 104 or equivalent. Recommended: CAOT 400 or equivalent.

Students learn how to create and prepare digital audio and video for web page inclusion using the most current software, including Adobe Audition audio editor and Premiere video editor. Areas of focus include digital media concepts, capture and conversion techniques from analog to digital and digital to digital, editing tool skills and effects, video web and DVD media publication formats, including QuickTime, Windows Media and RealMedia. *May be repeated once for credit. Transfer Credit: CSU.*

**CAOT 410 PHOTOSHOP BASICS (1)**  
**(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 104 or equivalent.

Students will learn to create images using Photoshop's basic drawing and selection tools. Students will also learn how to convert their own photographs and graphics to digital format and then edit. Use of digital cameras and scanners included. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 411 PHOTOSHOP FOR THE WEB (1)**  
**(Credit/No Credit or letter grade.)**

A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisites: CAOT 403 and CAOT 410, or equivalent.

This course provides a practical, hands-on approach to intermediate techniques for creating graphics for use on the web. Topics include background images, image maps, rollovers, actions, filters, masks, and channels. This course will continue to explore the use of various graphic tools using graphics application software for image production and manipulation. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 412 FLASH I (1.5)**  
**(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 403 or equivalent.

In this course students will learn to create and publish Flash animation for the web. Areas of focus include the Flash interface, drawing tools, grouping, creating graphic symbols, keyframes, frame-by-frame animation, layers, tweening, and buttons. By the completion of the course students will publish a basic Flash movie that includes ActionScript buttons. *Also listed as COMP 412. May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 413 FLASH II (1.5)****(Credit/No Credit or letter grade.)***A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 412 or equivalent.*

In this course students will go beyond the basics and learn more advanced features of Flash. Features covered include masking, movie clips, multiple timelines, sound control, pull down menus, preloaders, and ActionScript. At the completion of the course students will create a complex Flash movie for the web. Also listed as COMP 413. May be repeated twice for credit. Transfer credit: CSU.

**CAOT 415 WEBSITE DESIGN AND MANAGEMENT (2)****(Credit/No Credit or letter grade.)***A minimum of 32 lecture hours plus 16 lab hours by arrangement. Prerequisites: CAOT 404 and CAOT 411.*

Students examine color, layout, typography, and interactivity to understand how best to present information in several media. Consideration of user interface in setting up website plans, directory structures and website management to achieve maximum efficiency and accessibility is the focus of this culminating course. **Note:** This is the final course in the basic Web Developer program and should be taken at the end of the core sequence. May be repeated once for credit. Transfer credit: CSU.

**CAOT 420 JAVASCRIPT (1.5)****(Credit/No Credit or letter grade.)***A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 404 or equivalent.*

In-depth examination of the most commonly used web scripting languages and scripting protocols. Scripting elements, procedures and techniques will be studied and applied with the abilities of the non-programmer in mind. Refer to class schedule for specific languages and protocols covered. Also listed as COMP 423. May be repeated twice for credit. Transfer credit: CSU.

**CAOT 421 XML (1.5)****(Credit/No Credit or letter grade.)***A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 420 or equivalent.*

In-depth examination of Extensible Markup Language (XML). Complete coverage of DTD's, namespaces, schemas, Cascading Style Sheets, XSLT, and programming with the XML DOM. Also listed as COMP 424. May be repeated twice for credit. Transfer credit: CSU.

**CAOT 422 CGI/PERL (1.5)****(Credit/No Credit or letter grade.)***A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 421 or equivalent.*

Using the Perl programming language, develop and deploy web applications such as customer surveys and forms using CGI scripts. Students will enter the realm of server-side scripting with easy to handle hands-on exer-

cises and case projects. This course moves the student still creating flat webpages to the next step of dynamic web development. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**CAOT 425 WEB DESIGN PRINCIPLES (1.5)****(Credit/No Credit or letter grade.)***A minimum of 24 lecture hours plus 24 lab hours by arrangement. Prerequisites: CAOT 404 or equivalent and CAOT 411 or equivalent.*

This web design course focuses on organizing information and analyzing and critiquing published sites by applying organizational concepts of chunking, hierarchy, relations and functions. Students will learn to identify visual logic in web page design such as visual hierarchy, contrasting, balance, consistency, web page dimensions, length, and design grids. May be repeated once for credit. Transfer credit: CSU.

**CAOT 427 COLLABORATION AND WEB PRODUCTION I (1.5)***A minimum of 8 lecture hours plus 48 lab hours. Prerequisite: CAOT 415 or equivalent.*

Examination and evaluation of collaborative techniques in the production of websites. Working in teams, students will apply collaboration theories and skills in a class-length development project. Students will consider a wide range of issues including project objectives, interpersonal skills, skills evaluation, budgets, and more. May be repeated twice for credit. Transfer credit: CSU.

**CAOT 430 PHP/MYSQL I (1)****(Credit/No Credit or letter grade.)***A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 404 or equivalent. Recommended: CAOT 230 or equivalent.*

Students will utilize PHP with the MySQL database to create data-driven websites. In this course students learn to prepare and package client data for writing to the database. Topics include form layout techniques, data validation, and web security issues. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**CAOT 431 PHP/MYSQL II (1)****(Credit/No Credit or letter grade.)***A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 430 or equivalent.*

Students will utilize PHP with the MySQL database to create data-driven websites. Move to accessing information from a database developing user-centered websites. Topics include static webpage element layout techniques, dynamic data insertion, and master/detail page development. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**CAOT 432 PHP/MYSQL III (1)  
(Credit/No Credit or letter grade.)**

*A minimum of 16 lecture hours plus 8 lab hours by arrangement. Prerequisite: CAOT 431 or equivalent.*

Students will utilize PHP with the MySQL database to create data-driven websites. Enables users to update database information via web interfaces. This course completes the circle of web database development. Topics include form/database integration, data update techniques, and advanced web database techniques. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**CAOT 480 NETWORK FUNDAMENTALS (LAN) (3)**

*Three class hours plus one hour by arrangement per week.*

*Cisco Academy Course – CCNA 1*

An introductory course in networking specific to local area networks (LAN). Topics will include LAN hardware, software, topology, transmission medium, wide area network connectivity, diagnostic tools, system administration, and vendor specific LAN products. Class is complemented with hands-on experience in constructing a local area network. Course is patterned after Cisco training guidelines. *Also listed as TCOM 480. Transfer credit: CSU.*

**CAOT 490 TECHNICAL OVERVIEW OF THE  
INTERNET (3)**

*Three class hours and one hour by arrangement per week.*

A technical overview of the Internet. This course is intended for students who want to learn about the Internet system architecture, language and vocabulary. Some lectures will be demonstrated on the Internet. Homework assignments may require the student having access on the Internet. *Also listed as TCOM 490. Transfer credit: CSU.*

**CAOT 665 SELECTED COMPUTER TOPICS  
(.5 or 1 or 1.5 or 2)**

**(Credit/No Credit.)**

*A minimum of 8 lecture hours plus a minimum of 4 lab hours by arrangement for each .5 unit.*

Short course used to introduce, develop or review computer topics or applications. The course will focus on a specific topic: the introduction of basic computer skills, introduction of applications packages, upgrades of software packages, or a particular segment of a semester-length course. *May be repeated for credit as topics vary. Transfer credit: CSU.*

**COMPUTER SCIENCE (COMP)**

**See also listings under Computer Applications & Office Technology and Telecommunications & Network Information Technology.**

**COMP 118 INTRODUCTION TO OBJECT-ORIENTED  
PROGRAM DESIGN (4)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours and three lab hours per week. Recommended: Completion of MATH 110 with a grade of C or better, or equivalent; and eligibility for ENGL 836 or equivalent.*

Introduction to computing systems concepts necessary for program coding, compilation and execution; problem-solving techniques; object-oriented analysis and design; program coding, testing and documentation. Students will use the Java language to explore algorithm development, data types, flow of control, classes, objects, methods, vectors, and event-driven programming. *Transfer credit: UC; CSU.*

**COMP 155 COMPUTER PROGRAMMING VISUAL  
BASIC (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours and one and one-half lab hours per week. Prerequisite: MATH 110 or equivalent. Recommended: Eligibility for ENGL 836.*

An introduction to computer programming using the high level language VISUAL BASIC. Emphasis is on structured programming techniques and general problem solving skills in both numerical and non-numerical applications. Students will be able to formulate, represent, and solve problems using the computer. Students will run programs on IBM PC's using the college's microcomputer laboratory. *May be repeated once for credit. Transfer credit: UC; CSU.*

**COMP 156 INTERMEDIATE PROGRAMMING  
IN VISUAL BASIC (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours and one and one-half lab hours per week. Prerequisite: COMP 155 or equivalent.*

An intermediate course in computer programming using the high level language VISUAL BASIC. Emphasis is on user friendly interfaces, structural programming techniques, and general problem solving skills in both numerical and non-numerical applications. Students will be able to formulate, represent and solve problems using the computer. *Transfer credit: UC; CSU.*



**COMP 190 INTRODUCTION TO C PROGRAMMING (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and one and one-half lab hours per week. Prerequisite: MATH 110 or equivalent. Recommended: MATH 120 or equivalent; and eligibility for ENGL 836.

This course provides an introduction to computer science using the C programming language. Students will gain an understanding of the fundamentals of the C language and will examine and use basic algorithms for problem solving. Programming design and problem solving on a computer will be implemented through use of the C language. This course is recommended for students who plan to transfer and major in computer science and those interested in learning the C programming language. Transfer credit: UC; CSU.

**COMP 250 PROGRAMMING METHODS I: C++ (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and three lab hours by arrangement per week. Prerequisite: COMP 118 with a grade of C or better or equivalent academic or professional programming experience, and MATH 120 with a grade of C or Credit or better, or equivalent. Recommended: Eligibility for ENGL 836 or equivalent.

Introduction to software engineering using the C++ programming language for CS majors and computer professionals. Includes language fundamentals, classes, control structures, functions/libraries, templates, recursion, sorting, searching, pointers, strings, vectors, and class construction. Transfer credit: UC; CSU.

**COMP 252 PROGRAMMING METHODS II: C++ (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and three lab hours by arrangement per week. Prerequisite: COMP 250 with a grade of C or Credit or better, or one full year of C professional programming experience, or equivalent.

Continuation of Programming Methods I: C++ for Computer Science majors and computer professionals. Topics include advanced class design (inheritance and polymorphism), data abstraction, templates, container classes, pointers and dynamic memory allocation, linked lists, stacks, queues, trees, recursion, graphs, and sorting/searching algorithms. Emphasizes object-oriented features of C++. Transfer credit: UC; CSU.

**COMP 284 PROGRAMMING METHODS I: JAVA (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and three lab hours by arrangement per week. Prerequisites: COMP 118 and MATH 120 with a grade of C or Credit or better, or equivalent. Recommended: Eligibility for ENGL 836 or equivalent.

Introduction to computer science and web-based programming using the object-oriented Java language for Computer Science majors and computer professionals. Includes Java language fundamentals, classes, control

structures, methods, libraries/API packages, recursion, arrays, strings, vectors, searching, sorting, and exception handling. Transfer credit: UC; CSU.

**COMP 286 PROGRAMMING METHODS II: JAVA (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours and three lab hours by arrangement per week. Prerequisite: COMP 284 with a grade of C or Credit or better, or equivalent.

Advanced data structures and programming techniques for Computer Science majors and computer professionals. Object-oriented approach to a variety of data structures, including vectors, stacks, queues, linked lists, trees, bags, sets, and graphs. Includes recursion, sorting and searching topics, such as Big O notation and hash tables. Transfer credit: UC; CSU.

**COMP 312 INSTALLING/USING LINUX AS YOUR  
PC OS (1.5)****(Credit/No Credit or letter grade.)**

A total of 24 lecture hours plus eight lab hours by arrangement.

A first course on installing and using Linux as the operating system running on an Intel-compatible PC or workstation computer. Topics include creating installation media, installing Linux, Linux file system concepts, using the graphical desktop interface, beginning shell (command line) usage, updating the system, and configuring access to common network services. After successful completion of this course, students will be confident installing and using common Linux distributions (e.g., Red Hat, Fedora, SUSE, Ubuntu) on a home or work PC. Also listed as TCOM 312. May be repeated once for credit. Transfer credit: CSU.

**COMP 313 WORKING IN A LINUX SHELL  
ENVIRONMENT (1.5)****(Credit/No Credit or letter grade.)**

A total of 24 lecture hours plus eight lab hours by arrangement. Recommended: Satisfactory completion (grade of C or better) of COMP/TCOM 312, or equivalent experience using a Linux desktop system.

A course on using the Linux shell (command line) environment. Topics include comparing the Linux graphical desktop environment and the shell environment, shell commands for file system usage, shell features for productivity and customization (history, completion, aliases, environment files), advanced shell features (regular expressions, redirection, pipelines), introduction to shell scripts and shell commands for process management and remote system access. After successful completion of this course, students will be confident using the bash-shell environment found on common Linux distributions (e.g., Red Hat, Fedora, SUSE, Ubuntu). Also listed as TCOM 313. May be repeated once for credit. Transfer credit: CSU.

**COMP 314 MANAGING A LINUX SYSTEM (1.5)  
(Credit/No Credit or letter grade.)**

*A total of 24 lecture hours plus eight lab hours by arrangement. Prerequisite: Satisfactory completion (grade of C or better) of COMP/TCOM 312, or equivalent experience installing or using a Linux system, or equivalent.*

An intermediate course on administering a Linux system. Designed for individuals who have installed Linux but who now want a hands-on exposure to key concepts, issues and capabilities for managing a Linux system. Topics include installing from alternate media sources (network installs), managing disk devices (defining partitions, creating file systems, and mounting/un-mounting file systems), creating multi-boot systems and boot loader menus, using run levels including trouble-shooting with single user mode, and maintaining system software including installing from source code and recompiling kernels. The focus of this course is on developing expertise for managing a given Linux system (as opposed to managing services provided to other systems). After successful completion of this course, students will be confident in managing a system with a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as TCOM 314. May be repeated once for credit. Transfer credit: CSU.*

**COMP 315 MANAGING LINUX-BASED INTERNET SERVICES (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: COMP/TCOM 314 or equivalent experience installing and managing a Linux system, and TCOM 480 or equivalent experience using local area networks, or equivalent. Recommended: COMP/TCOM 313 or equivalent experience using the Linux bash-shell.*

An intermediate course on managing Linux-based Internet services. Designed for individuals who have experience installing and managing Linux systems, but now want a hands-on exposure to the concepts, issues and capabilities for providing public Internet services based on Linux servers. Topics include selecting server functionality during a Linux installation, configuring name services (DNS) for a custom domain name, hosting Web pages and configuring management of Web pages, providing secure Web page connections, providing remote access, providing email services, connecting to databases for dynamic Web page hosting, and installing from packages vs. source code. This course focuses on administering Linux-based Internet servers that provide common services found on the public Internet. After successful completion of this course, students will be confident in providing Internet services using a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as TCOM 315. May be repeated once for credit. Transfer credit: CSU.*

**COMP 316 MANAGING LINUX-BASED INTRA-NET (ENTERPRISE) SERVICES (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: COMP/TCOM 314 or equivalent experience installing and managing a Linux system, and TCOM 480 or equivalent experience managing a local area network, or equivalent. Recommended: COMP/TCOM 313 or equivalent experience using the Linux bash-shell.*

An intermediate course on managing Linux-based servers in a large company (intra-net or enterprise) environment. Designed for individuals who have experience installing and managing Linux systems, but now want a hands-on exposure to the concepts, issues and capabilities for providing network services typically found inside a company intra-net. Topics include selecting server functionality during a Linux installation, configuring private name services (DNS), configuring dynamic IP addressing (DHCP), providing file shares with traditional Unix NFS services or cross-platform (Windows) Samba services, managing centralized log-in resources with NIS or LDAP, controlling Internet access through proxy servers, providing security with private certificate authorities, RADIUS servers and secure tunnels, and tools to help manage deployment of client systems (PXE, diskless, private repositories). This course focuses on administering Linux-based network resources found within a company or enterprise network. After successful completion of this course, students will be confident in providing intra-net services using a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as TCOM 316. May be repeated once for credit. Transfer credit: CSU.*

**COMP 355 INTRODUCTION TO ORACLE – SQL (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week and three lab hours per week by arrangement. Prerequisite: Completion of MATH 110 with a grade of C or Credit or better, or equivalent. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

An extensive introduction to data server technology. The course covers the concepts of both relational and object relational databases and the powerful SQL programming language. Students learn to create and maintain database objects and to store, retrieve and manipulate data. Students will learn to write SQL and SQL\*Plus script files using the iSQL\*Plus tool to generate report-like output. Demonstrations and hands-on practice reinforce the fundamental concepts. This course is the first level of certification for the Oracle Certified Professional track. *Transfer credit: CSU.*

**COMP 356 FUNDAMENTALS OF DATABASE****ADMINISTRATION I (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week and three lab hours per week by arrangement. Prerequisite: COMP 355 with a grade of C or Credit or better, or equivalent.

Utilizing SQL, this course is designed to give students a firm foundation in basic database tasks. Students will learn to design, create and maintain the latest Oracle database. Successful completion of COMP 355 and COMP 356 constitutes an Oracle Certified Associate program. Transfer credit: CSU.

**COMP 357 FUNDAMENTALS OF DATABASE****ADMINISTRATION II (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week and three lab hours per week by arrangement. Prerequisite: COMP 356 with a grade of C or Credit or better, or equivalent.

Advanced concepts to maintain an Oracle database, including planning and implementing backup and recovery strategies, trends and problems associated with business networking, and the architecture of the Oracle client/server network. Transfer credit: CSU.

**COMP 378 PROGRAMMING IN PERL (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week and three lab hours per week by arrangement. Recommended: Completion of COMP 118, COMP 250 or COMP 284 with a grade of C or Credit or better, or equivalent.

Programming in the Windows and UNIX environment using PERL to create utility programs. Included is the design, creation, debugging and execution of programs written in the PERL programming language. Transfer: CSU.

**COMP 412 FLASH I (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 403 or equivalent.

In this course students will learn to create and publish Flash animation for the web. Areas of focus include the Flash interface, drawing tools, grouping, creating graphic symbols, keyframes, frame-by-frame animation, layers, tweening, and buttons. By the completion of the course students will publish a basic Flash movie that includes ActionScript buttons. Also listed as CAOT 412. May be repeated once for credit. Transfer credit: CSU.

**COMP 413 FLASH II (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT/COMP 412 or equivalent.

In this course students will go beyond the basics and learn the advanced features of Flash. Features covered include masking, movie clips, multiple time lines, sound control, pull-down menus, preloaders, and ActionScript. At the completion of the course students will create a complex Flash movie for the web. Also listed as CAOT 413. May be repeated once for credit. Transfer credit: CSU.

**COMP 423 JAVASCRIPT (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 404 or equivalent.

In-depth examination of the most commonly used web scripting languages and scripting protocols. Scripting elements, procedures and techniques will be studied and applied with the abilities of the non-programmer in mind. Refer to class schedule for specific languages and protocols covered. Also listed as CAOT 420. May be repeated once for credit. Transfer credit: CSU.

**COMP 424 XML (1.5)****(Credit/No Credit or letter grade.)**

A minimum of 24 lecture hours plus 16 lab hours by arrangement. Prerequisite: CAOT 420 or COMP 423, or equivalent.

In-depth examination of Extensible Markup Language (XML). Complete coverage of DTD's, namespaces, schemas, Cascading Style Sheets, XSLT, and programming with the XML DOM. Also listed as CAOT 421. May be repeated once for credit. Transfer credit: CSU.

**COMP 451 PC CONFIGURATION AND REPAIR (6)**

Five lecture hours and three lab hours per week plus one hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of CAOT 105 or equivalent, and satisfactory completion (grade of C or better) of or concurrent enrollment in ELEC 110 or TCOM 405, or equivalent training or experience.

This course provides preparation for A+ certification. A hands-on technical course designed to provide an in-depth understanding of PC hardware and software from an installation and repair outlook. Materials covered will include beginning and advanced software, hardware components and configuration, operating systems and how they control the PC. Includes direct hands-on experience with the tools and skills required for entry-level employment. Also listed as TCOM 451. Transfer credit: CSU.

**COMP 481 NETWORK SYSTEMS ADMINISTRATION (3)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 480, or equivalent training or experience.

An application-based course in Network Administration specific to LAN's. Coverage includes the functions and concepts of a wide area network, Microsoft server, designing LAN user accounts and their network administration. Hands-on experience provided in setting up and troubleshooting servers, workstations, network and peripheral devices. Course is patterned after Microsoft networking guidelines. Also listed as TCOM 481. Transfer credit: CSU.

**COMP 484 ADVANCED ROUTING CONCEPTS AND APPLICATIONS (3)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 482, or equivalent training or experience. Recommended: Satisfactory completion (grade of C or better) of TCOM 483, or equivalent training or experience.

Cisco Academy Course – CCNA 3 & 4

An advanced course in routing concepts and configurations on large internetworks. Students will configure and manage routers by implementing advanced features and common routing protocols such as EIGRP and OSPF. Includes instructor-directed hands-on activities. This course is patterned after Cisco Router training guidelines. Also listed as TCOM 484. Transfer credit: CSU.

**COMP 486 NETWORK SECURITY (3)**

Three lecture hours and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 482, or equivalent training or experience.

This course introduces students to network security using firewall and VPN (virtual private network) technology. Students will be exposed to the theory and application of both firewall and VPN network architecture. Students will have the opportunity for hands-on practice to administer security policy and VPN configuration using Checkpoint software. Also listed as TCOM 486. Transfer credit CSU.

**COMP 487 ADVANCED NETWORK SECURITY (3)**

Three lecture hours per week plus three lab hours by arrangement per week. Recommended: Completion of COMP/TCOM 486, or equivalent training or experience.

An advanced network security course. Topics include: design and administration of content security, virtual private networks, high availability, load balancing, and other advance security topics using industry standard software. Also listed as TCOM 487. Also listed as TCOM 487. May be repeated once for credit. Transfer credit: CSU.

**COMP 665 SELECTED TOPICS IN COMPUTER SCIENCE (.5-2)**

**(Credit/No Credit or letter grade.)**

A minimum of eight lecture hours per one-half unit. Recommended: MATH 120 with a grade of C or better, or equivalent; and eligibility for ENGL 836 or equivalent.

Exploration of selected contemporary topics or themes in Computer Science. Sample topics include new programming languages, operating systems, net-centric computing, problem-solving and program design methodologies, software engineering processes, graphical user interface design, information management, and contemporary issues in Computer Science. May be repeated for credit as topics vary. Transfer credit: UC; CSU.

**COOPERATIVE EDUCATION (COOP)****COOP 670 VOCATIONAL COOPERATIVE EDUCATION (1-4)**

**(Credit/No Credit.) (VA Institutional Rates.)**

Variable work station hours. Prerequisite: Permission of the Cooperative Education Office, concurrent enrollment in a planned vocational program, and employment in a college approved job directly related to the student's academic major.

Students may receive credit for work experience related to their major field or to their established career goal. Seminars and individual conferences are scheduled at convenient times during the semester for the instructor and the student to establish learning objectives related to the student's employment. Students are given appropriate assignments related to the stated objectives and graded in accordance with the college's established grading system. As an alternative, related instruction classes meeting one hour per week, usually in the evening, are available for those students who prefer or need a more structured learning process. Students must be enrolled in a minimum of seven units (including the Cooperative Education course) to earn Cooperative Education credit. One unit of credit for each 75 hours worked per semester, with a maximum of four units per semester, may be earned by students with jobs related to their academic or occupational majors or goals. A maximum of 16 units of college credit may be earned in parallel Cooperative Education. Transfer credit: CSU.

**COOP 671 GENERAL COOPERATIVE  
EDUCATION (1-3)****(Credit/No Credit.)***Variable work station hours.*

Designed for the student who does not have a job that relates to a specific occupational goal or college major. Under the direction of the college coordinator, students focus on career awareness and development of desirable employment habits and attitudes. Each student must establish measurable learning objectives appropriate for his/her job. Students may be eligible for up to three units of credit per semester. One unit of credit may be earned for each 75 hours of paid work (approximately five hours per week) or 60 hours of volunteer work per semester. Students must be enrolled in a minimum of seven units (including the Cooperative Education course) to earn Cooperative Education credit. *May be repeated for credit up to a maximum of 6 units. Transfer credit: CSU.*

**COSMETOLOGY (COSM)****COSM 665 SELECTED TOPICS IN COSMETOLOGY (.5  
or 1 or 1.5)****(Credit/No Credit.)***A minimum of 8 lecture hours for each .5 unit.*

Short courses designed for Cosmetology, Esthetician and Spa professionals who are interested in increasing or developing new skills, for the lay person who is interested in acquiring knowledge or skills related to self-enhancement, and for those interested in exploring career opportunities in the Cosmetology, Esthetician or Spa fields. *Each topic may be repeated for credit a maximum of three times.*

**COSM 700 COSMETOLOGY CONCEPTS AND  
PRACTICE I (.5-10)**

*Five lecture hours and 35 lab hours per week for eight weeks for day students and five lecture hours and 19 lab hours per week for sixteen weeks for evening students.*

Basic manipulative skills in hair design, permanent waving, hair coloring, hair cutting, and manicuring/pedicuring. *May be repeated for credit a maximum of three times.*

**COSM 710 COSMETOLOGY CONCEPTS AND  
PRACTICE II (.5-8)**

*Five lecture hours and 35 lab hours per week for eight weeks. Prerequisite: Completion of COSM 700 with a grade of C or better.*

Basic manipulative skills in facials, arching/waxing, and make-up. *May be repeated for credit a maximum of three times.*

**COSM 720 COSMETOLOGY CONCEPTS AND  
PRACTICE III (.5-10)**

*Five lecture hours and 35 lab hours per week for eight weeks for day students and five lecture hours and 19 lab hours per week for sixteen weeks for evening students. Prerequisite: Completion of COSM 700 with a grade of C or better.*

Basic manipulative skills in chemical straightening, hair analysis, hair lightening, conditioners and advanced hair coloring and styling techniques, and advanced permanent waving. *May be repeated for credit a maximum of three times.*

**COSM 730 COSMETOLOGY CONCEPTS AND  
PRACTICE IV (.5-8)**

*Five lecture hours and 35 lab hours per week for eight weeks. Prerequisite: Completion of COSM 700 with a grade of C or better.*

Develop manipulative skills in nail wraps, tips and sculptured nails. Introduce and develop manipulative skills in thermal pressing and curling, fingerwaving and scientific scalp treatments. *May be repeated for credit a maximum of three times.*

**COSM 740 COSMETOLOGY CONCEPTS AND  
PRACTICE V (.5-10)**

*Five lecture hours and 35 lab hours per week for eight weeks for day students and five lecture hours and 19 lab hours per week for sixteen weeks for evening students. Prerequisite: Completion of COSM 700, 710, 720, and 730 with a grade of C or better.*

California State Board review. Advanced salon preparation. Emphasizes salon environment in relationship to skill and techniques. *May be repeated for credit a maximum of three times.*

**COSM 750 COSMETOLOGY BRUSH-UP (1-19)**

*Nine lecture hours and thirty-one lab hours per week. Lab and theory hours by arrangement. Prerequisite: Cosmetology license.*

To satisfy supplemental or out-of-state training requirements. Basic and advanced instruction in beauty salon processes with emphasis on performance and efficiency. (Open entry.) *May be repeated for credit a maximum of three times.*

**COSM 754 MANICURING (1-10)**

*Lecture/Lab total of 400 hours.*

The art of caring for the hands and nails. Includes instruction in sculpture nails, application of nail tips and nail art. Four hundred hours training in preparation for licensure by the California State Board of Cosmetology in the field of manicuring. *May be repeated for credit a maximum of three times.*

**COSM 760 COSMETOLOGY INSTRUCTOR PREPARATION (1-5)**

A minimum of 16 lecture hours and 16 lab hours for each unit; a maximum of 80 lecture hours and 80 lab hours to earn five units. Prerequisite: Valid California Cosmetologist's license and a minimum of one year's full-time practical experience.

Designed for experienced, licensed cosmetologists interested in teaching cosmetology courses in the community college system. The focus is on teaching methodologies and techniques that emphasize theoretical and practical subject matter for Cosmetology students. May be repeated for credit up to a maximum of 20 units.

**COSM 775 ESTHETICIAN (1-8)**

Twenty class hours per week (5 lecture, 15 lab.)

Designed to develop skills and knowledge in skin care. Upon successful completion of the 600 hour course the student will be eligible to apply for Esthetician examination at the California State Board of Cosmetology. May be repeated once for credit.

**COSM 782 ADVANCED COSMETOLOGY CONCEPTS (2)**

(Offered in Evening only.)

Two lecture hours and 3 lab hours per week for one-half semester. Prerequisite: Valid California Cosmetology license or actively enrolled in Skyline Cosmetology program.

Emphasis is placed on advanced methods, techniques and application of hair fashion, design and coordination. May be repeated for credit a maximum of three times.

**COSM 784 SALON PRACTICE (.5-1.5)**

Forty-eight lab hours per unit. Prerequisite: Must be currently enrolled in Cosmetology 710, 720, 730 or 740.

Offers additional salon practice to all students enrolled in the current day program. May be repeated for credit a maximum of three times.

**COSM 785 SPA TECHNICIAN TRAINING (1-5) (Credit/No Credit or letter grade.)**

Six lecture hours and six lab hours per week.

Thorough study of wellness services available in day and destination spa businesses. Focus is on health, fitness, and stress management. Students will develop skill in spa treatments, product knowledge, customer relations, business operations, and the job search. May be repeated once for credit.

**COUNSELING (COUN)****COUN 100 COLLEGE SUCCESS (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week.

An overview of the concepts and significance of factors that contribute to college success. Focus on understanding the college/university systems, goal setting, educational planning, health maintenance, stress management, learning styles, study skills, college resources, relationships, and cultural diversity. Transfer credit: UC; CSU (E1).

**COUN 104 TRANSFER POWER (.5) (Credit/No Credit.)**

A total of eight lecture hours.

Learn about what it takes to transfer to any California State University, University of California, or Independent College. Find out about Guaranteed Transfer Programs, online resources, and financial aid. This course will help students discover great transfer opportunities, take the right courses, and select the best university for their individual needs. Transfer credit: CSU.

**COUN 105 UP YOUR SELF-ESTEEM (.5) (Credit/No Credit or letter grade.)**

A total of eight lecture hours.

Examination of basic tenets of self-esteem focusing on factors of values, cognition, and life events that shape ones' self-esteem. Transfer credit: CSU.

**COUN 106 ANXIETY MANAGEMENT (.5) (Credit/No Credit or letter grade.)**

A total of eight lecture hours.

Examination of the physiological, emotional and mental components of anxiety. The long-term effects of anxiety on one's physical health will be explored. Transfer credit: CSU.

**COUN 107 COPING WITH DEPRESSION (.5) (Credit/No Credit or letter grade.)**

A total of eight lecture hours.

Medical, biological and social factors contributing to depression are explored. Scope of treatment options from self-help to medication are examined. Transfer credit: CSU.

**COUN 108 ANGER MANAGEMENT (.5) (Credit/No Credit or letter grade.)**

A total of eight lecture hours.

Examination of anger management techniques designed to develop specific skills in controlling this emotion. The long-term effects of anger on one's physical and emotional health will be explored. Transfer credit: CSU.

## DATA PROCESSING

See listings under Computer Applications & Office Technology and Computer Science.

## DEVELOPMENTAL SKILLS (DSKL)

### DSKL 811 DIFFERENTIAL LEARNING SKILLS ASSESSMENT (.5)

**(Credit/No Credit.)**

*A total of eight lecture hours: four scheduled class hours and four hours per student by arrangement, or eight hours by arrangement only. Prerequisite: Completion of, or concurrent enrollment in, DSKL 821; or registration with the Disabled Students Program and Services.*

Assessment to determine specific learning profile and academic skill levels. Students will receive information demonstrating the relationship of learning profile to academic performance and presence or absence of significant learning differences. Based upon assessment data, eligible students will receive recommendations for ADA academic accommodations and individualized learning strategies. *May be repeated once for credit. (Units do not count toward the Associate Degree.)*

### DSKL 817 ASSISTIVE COMPUTER ACCESS (.5-3)

**(Credit/No Credit.)**

*Twenty-four lab hours per .5 unit.*

Designed primarily for students with disabilities, this course provides training in the use of computer access technologies that enhance a student's ability to access and use microcomputers. Students will use the technology as a tool to complete assignments from concurrent subject area courses. No previous computer experience is required. *(Open entry.) May be repeated for credit up to a maximum of 3 units. (Units do not count toward the Associate Degree.)*

### DSKL 820 COMPUTER-BASED COGNITIVE RETRAINING (.5)

**(Credit/No Credit.)**

*A minimum of 24 lab hours.*

Designed primarily for students recovering from an acquired brain injury/impairment such as head trauma or stroke, this course uses computer-based applications to provide cognitive retraining. Areas addressed include the application of memory, problem-solving, critical thinking, logic, and organizational skills to daily activities and functioning. No previous computer experience is required. *May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

### DSKL 821 DEVELOPMENT OF SELF-ADVOCACY SKILLS: PERSONAL EMPOWERMENT FOR STUDENTS WITH DISABILITIES (.5)

**(Credit/No Credit.)**

*Two lecture hours per week for four weeks for a total of eight lecture hours.*

Exploration of self-advocacy strategies for students eligible for ADA academic accommodations. Prepares students to advocate effectively for implementation of accommodations requests both inside and outside the classroom. Includes introduction to development of informational, intra/interpersonal skills, neurology of learning disabilities/differences, rights and responsibilities, procedures and related issues. Students will participate in small group activities, including role-play. *(Units do not count toward the Associate Degree.)*

### DSKL 825 ASSISTIVE COMPUTER TECHNOLOGY (1)

**(Credit/No Credit.)**

*A total of 16 lecture hours plus 16 lab hours by arrangement.*

Designed primarily for students with disabilities, this course provides training in the use of computer-based assistive technology that supports students' learning styles and/or physical needs. Students will use the assistive technology as a tool to complete assignments from concurrent subject area classes. No previous computer experience is required *(Open entry.) May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

## EARLY CHILDHOOD EDUCATION (ECE.)

### ECE. 201 CHILD DEVELOPMENT (3)

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

In-depth exploration of areas and issues of major importance in the field of child development. Focuses on personality, intellectual, social, and physical factors. Theoretical concepts, practical application, and current research are covered. *Also listed as PSYC 201. Transfer credit: UC; CSU (D3, E1).*

### ECE. 210 EARLY CHILDHOOD EDUCATION PRINCIPLES (3)

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

Overview of the history, nature, and goals of Early Childhood Education. Exploration of various program models in ECE, current issues, and long-range trends. Qualifications and training required for teachers of young children. *Transfer credit: CSU.*

## EARLY CHILDHOOD EDUCATION

### **ECE. 211 EARLY CHILDHOOD EDUCATION CURRICULUM (1-3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

Selection and management of activities for young children that provide quality learning experiences. Appreciation of the value of children's play. Development of appropriate curriculum evaluation methods. *Transfer credit: CSU.*

### **ECE. 212 CHILD, FAMILY, AND COMMUNITY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

Patterns of family living in a democratic society and the role and interaction of members; varying factors affecting family life: racial, cultural, economic, social, urban and suburban; home-nursery relationships; community resources: health, welfare, education, counseling, guidance, and recreation. Designed with a crosscultural approach to the child, family and community. Also listed as FCS 212. *Transfer credit: UC; CSU.*

### **ECE. 214 CHILD-PARENT RELATIONS (3)**

*Three lecture hours per week.*

Emotional, social, intellectual and physical development of children with an emphasis on a multicultural approach to parent-child relations, diversity of family systems in today's society, and how these influence the developing child. *Also listed as FCS 213. Transfer credit: CSU (E1).*

### **ECE. 223 INFANT/TODDLER DEVELOPMENT (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Focus on the major developmental trends, abilities and influences of behavior during the first three years of life. Emphasis is placed on social, emotional and physical milestones, early learning and brain development, and understanding behavior and temperaments. *Transfer credit: CSU.*

### **ECE. 225 INFANT/TODDLER ENVIRONMENTS (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Design, maintenance and evaluation of quality Early Childhood environments for children 0-3 years of age are covered. Accreditation standards established for infants and toddlers, including accreditation standards as established by the National Association for the Education of Young Children for infant/toddler programs, are included. *Transfer credit: CSU.*

### **ECE. 240 EARLY CHILDHOOD EDUCATION ADMINISTRATION: BUSINESS/LEGAL (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836 or ENGL 846 or equivalent, plus the 12 ECE core units.*

An overview of the business aspects of caring for children in early childhood settings and its social, political and economic implications. Included are the legal and regulatory requirements for early childhood settings, laws relating to child care, and facets of business and fiscal management. This course is open to all students but is specifically designed for those needing to meet state licensing requirements for ECE Program Directors. *Transfer credit: CSU.*

### **ECE. 241 EARLY CHILDHOOD EDUCATION ADMINISTRATION: HUMAN RELATIONS (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836 or ENGL 846 or equivalent, plus the 12 ECE core units.*

Focus on the human relations components of operating an early childhood setting and the social, political and economic implications for ECE professionals and parents. Other topics include staffing, supervision, licenses and/or credentials for staff, assessment and evaluation, state and federal regulations governing employment, issues in ECE, and parent involvement. This course is open to all students but is specifically designed for those needing to meet state licensing requirements for ECE Program Directors. *Transfer credit: CSU.*

### **ECE. 242 ADULT SUPERVISION IN ECE/CD CLASSROOMS (2)**

**(Credit/No Credit or letter grade.)**

*A minimum of 32 lecture hours. Recommended: Eligibility for ENGL 836 and READ 836 or ENGL 846 or equivalent.*

A study of the methods and principles of supervising student teachers, assistant teachers, parents, and volunteers in ECE education settings. Emphasis is on the role of classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff. Although this course is open to all students, it is specifically designed for those needing to meet state licensing requirements for ECE Masters Teachers, Site Directors, and Program Directors. *Transfer credit: CSU.*



**ECE. 260 CHILDREN WITH SPECIAL NEEDS (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

An overview of the issues related to children with special needs. Special needs refer to physical, sensory, communicative and behavioral disabilities. Additional topics include a historical perspective, current laws and legislation, inclusion practices in early childhood education settings, and appropriate community resources. *Transfer credit: CSU.*

**ECE. 262 INTRODUCTION TO FAMILY  
SUPPORT: BUILDING RESPECTFUL  
PARTNERSHIPS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

An overview of family support programs within early childhood education. Included will be a historical perspective, family support principles and effective communication guides between families, child care providers, teachers and community agencies. This course is one of two (with ECE. 264) for a specialization for Master Teacher on the Child Development Permit matrix. *Transfer credit: CSU.*

**ECE. 264 THE LIFE CYCLE OF THE FAMILY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

An overview of the life cycle of the family. The course bridges individual and family development with cultural and social perspectives. Emphasis is on the diversity within contemporary families and the establishment of family support programs. This course is one of two (with ECE. 262) for a specialization for Master Teacher on the Child Development Permit matrix. *Transfer credit: CSU.*

**ECE. 270 INTRODUCTION TO INFANT/TODDLER  
CHILD CARE (3)**

Three lecture hours per week.

This course will focus on caring for infants and toddlers in group child care settings. Topics will include: social-emotional growth and development, routines and environments, language development, physical development, cognitive development, and caring for infants and toddlers in the context of family and culture. *Transfer credit: CSU.*

**ECE. 272 CULTURAL DIVERSITY IN EARLY  
CHILDHOOD EDUCATION (3)**

Three lecture hours per week.

In-depth exploration of cultural diversity in early childhood settings. Focus on developing skills needed to provide culturally sensitive care to young children from a variety of family backgrounds. Topics will include cultural diversity, gender differences, disability, gay and lesbian families, bilingualism. *Transfer credit: CSU.*

**ECE. 273 SUPPORTING YOUNG BILINGUAL  
LEARNERS (1)**

(Credit/No Credit or letter grade.)

A total of 16 lecture hours. Recommended: Satisfactory completion of ECE./PSYC 201 and ECE. 211, or equivalent.

Focus on practical and research-based strategies for supporting dual language learners in developing a strong literacy base in both English and their home languages. Students will learn about evidence-based strategies that can enhance children's sense of identity and self-esteem; factors shown through research to influence the quality of children's learning experiences and therefore their future academic success. *Transfer credit: CSU.*

**ECE. 275 CHILDREN'S LANGUAGE AND LITERACY  
DEVELOPMENT (3)**

Three lecture hours per week.

This course explores the influences of children's literature in language acquisition, emotional development, and literacy learning. Analysis of the teacher's role in promoting creativity and self expression through verbal and symbolic language. *Transfer credit: CSU.*

**ECE. 311 CHILDREN'S NUTRITION (1)**

A total of 16 lecture hours. Recommended: Eligibility for ENGL 836.

This course is designed to assist the parents of young children to develop an understanding of how nutrition contributes to mental and physical growth. The student will learn ways to teach these principles to young children. Simple food preparation techniques and an examination of current literature. Also listed as FCS 311. *Transfer credit: CSU.*

**ECE. 333 OBSERVATIONAL SKILLS (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

An overview of the methods and in-depth practice of observational skills in ECE settings. Students experience the observation of children, teachers and programs using the following tools: the State Department of Education's Desired Results and Environmental Rating Scale (ECERS) and the National Association for the Education of Young Children (NAEYC) Accreditation self-study. *Transfer credit: CSU.*

**ECE. 335 HANDLING BEHAVIOR (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

Designed to give teachers, caregivers and parents an overview of the complexity of children's behavior. Theories and trends concerning child guidance will be covered to assist adults in developing appropriate strategies related to interacting with children and fostering prosocial behavior. *Transfer credit: CSU.*

**ECE. 366 PRACTICUM IN EARLY CHILDHOOD EDUCATION (3)**

One lecture hour and six lab hours per week. Prerequisite: ECE. 201, ECE. 210, ECE. 211 and ECE. 212. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

A supervised field experience course focusing on the methods and principles of teaching in early childhood settings. Emphasis is on the role of the teacher in a developmentally appropriate setting. This course allows students to gain practical, verifiable experience working with young children under the supervision of an experienced teacher. Students will be placed in approved ECE sites. *Transfer credit: CSU.*

**ECE. 665 SELECTED TOPICS IN EARLY CHILDHOOD EDUCATION (.5 or 1 or 1.5 or 2)**

**(Credit/No Credit or letter grade.)**

Eight lecture hours per .5 unit.

This course is designed to develop specific skills that are utilized in Early Childhood Education environments. The course will focus on one specific topic; for example, multicultural curriculum, techniques to foster sense of community, selecting a preschool, handling behavior problems, working with parents, etc. *May be repeated for credit as topics vary. Transfer credit: CSU.*

**EARTH SCIENCES**

Course descriptions for earth science courses may be found elsewhere in this Catalog under the appropriate discipline. Courses offered by the College include: Geology 100, 105, 180, 210, 611, and Oceanography 100, 101.

**ECONOMICS (ECON)****ECON 100 PRINCIPLES OF MACROECONOMICS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and MATH 110.

Analysis of the economic system and its problems. Theory of the determination of the level of output; the behavior of prices; monetary theory and institutions; government stabilization policies; economic growth. *Transfer credit: UC; CSU (D3). (CAN ECON 2).*

**ECON 102 PRINCIPLES OF MICROECONOMICS (3)**

Three lecture hours per week. Prerequisite: ECON 100. Recommended: Eligibility for ENGL 836 and MATH 110.

Analysis of the economic system and its problems. The functioning of the market and the pricing of products under competitive and non-competitive conditions; wages and labor unions; international trade; comparison of economic systems. *Transfer credit: UC; CSU (D3). (CAN ECON 4).*

**ECON 310 POLITICAL ECONOMY OF ASIA (3)**  
**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.

A comparative study of the political economy of Asian countries, including political systems, economic growth, distribution of income, and international diplomatic and economic relationships. Students will learn the impact of European and U.S. colonialism, post-colonial political and economic developments, including market reforms in socialist countries, to understand both development in relations among Asian nations and their relationship to the U.S. economy and foreign policy. *Transfer credit: CSU (D3).*

**EDUCATION (EDUC)****EDUC 100 INTRODUCTION TO EDUCATION (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Survey of the American education system including review of the development of schools, assessment of issues facing schools, the profession, and society, and an opportunity for students to decide the career potential of education. *Transfer credit: CSU (D3).*

**ELECTRONICS TECHNOLOGY (ELEC)****ELEC 110 FUNDAMENTALS OF ELECTRONICS (3)**

Two lecture hours and three lab hours per week plus one hour by arrangement per week.

Activity based introduction to the fundamentals of DC and AC electrical/electronic circuits. Course covers the basic mathematical laws, terminologies, testing and measuring of simple circuits. Laboratory exercises will emphasize the use of tools, electrical test instruments and measuring devices. *Transfer credit: CSU.*

## EMERGENCY MEDICAL CARE (EMC.)

### EMC. 410 EMERGENCY MEDICAL TECHNICIAN B (7)

A total of 80 lecture hours and 96 lab hours, plus 3 hours per week by arrangement which will include a minimum of 8 hours in a local Emergency Department and 12 hours riding with a local ambulance company. Prerequisite: Completion of EMC. 425 or a valid Healthcare Provider CPR card.

The first phase of training in the Emergency Medical Technician Career Structure. Covers all techniques of emergency medical care presently considered within the responsibilities of the Emergency Medical Technician, as well as all operational aspects of the job the EMT will be expected to perform. Meets state and national certification requirements for EMT-B.

### EMC. 415 EMERGENCY MEDICAL TECHNICIAN I – REFRESHER (1.5-2)

Prerequisite: California EMT I certificate that is current or has not been expired for more than four years.

A three or four day course that provides EMT's with the opportunity to renew their EMT I certificate. The three-day course provides 24 hours of Continuing Education Units. The four-day course provides the necessary written and skills testing. May be repeated for credit as necessary to meet certification requirements.

### EMC. 425 CPR: HEALTH CARE PROVIDER (.5) (Credit/No Credit.)

Total of eight lecture hours.

This course will qualify students for CPR certification for health care providers. Includes instruction pertinent to adult, child and infant CPR. May be repeated for credit a maximum of three times. Transfer credit: CSU.

### EMC. 665 SELECTED TOPICS IN EMERGENCY MEDICAL CARE (.5 or 1 or 1.5 or 2)

Eight lecture hours per .5 unit.

This course is designed to review and update specific topics fundamental to the practice of an Emergency Medical Technician or paramedic. Some of these topics may be taken for continuing education units. May be repeated for credit as topics vary.

## ENGLISH (ENGL)

Reading courses are listed under READING.

Literature courses are listed under LITERATURE.

Courses for non-native speakers of English are listed under ENGLISH FOR SPEAKERS OF OTHER LANGUAGES.

Students are encouraged to take the English/Reading placement tests prior to initial placement in courses. English/Reading placement tests are given to students to assist the counselor and the division in guiding them to the appropriate English course. Proper placement in English/Reading assures that students will begin their college studies in courses where they will have the best chance of success. Initial placement in classes is recommended on the basis of test scores. The tests are given on announced dates throughout the year. Students who transfer to Skyline College and have taken a college English course equivalent to ENGL 100 Composition or ENGL 836 Writing Development at another institution need not take the test.

English faculty may, when appropriate, modify placement recommendations on the basis of the student's writing performance.

Students should enroll in the course(s) recommended by their placement scores.

Course numbering has changed for several English Composition and Reading courses. If you took courses that satisfy a prerequisite to an English or Reading course under the old numbering system, it will satisfy that prerequisite even though the numbering has changed. The new and old numbers are listed below:

| OLD NUMBER | NEW NUMBER |
|------------|------------|
| ENGL 801   | ENGL 826   |
| ENGL 800   | ENGL 836   |
| READ 801   | READ 826   |
| READ 802   | READ 836   |

The English/Reading sequences from the lowest to the highest level are listed below:

| English Courses      | Reading Courses |
|----------------------|-----------------|
| ENGL 826             | READ 826        |
| ENGL 836 or          |                 |
| ENGL 846 or ESOL 400 | READ 836        |
| ENGL 100 or ENGL 105 | READ 420        |
| ENGL 110 or ENGL 165 |                 |

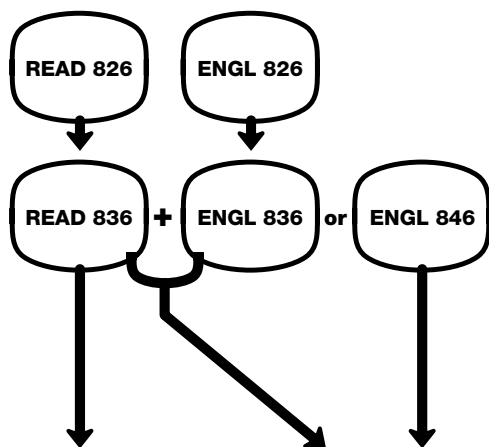
## English/Reading Course Sequence

Start

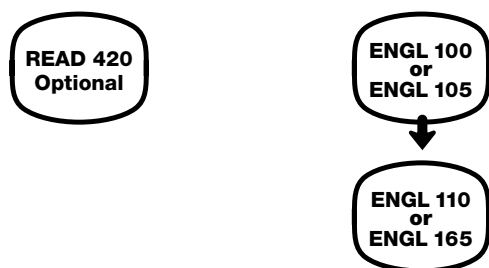
Placement Test

*indicates appropriate level in this sequence of courses*

### NON-TRANSFERABLE COURSES



### TRANSFERABLE COURSES



### ENGL 100 COMPOSITION (3)

Three lecture hours per week plus one lab hour per week by arrangement. *WRITING PREREQUISITE:* ENGL 836 or ENGL 846, or ESOL 400 with a grade of C or better, or eligibility for ENGL 100 on approved college placement tests and other measures as necessary. *READING PREREQUISITE:* READ 836 with Credit or a grade of C or better, or ENGL 846 with a grade of C or better, or ESOL 400 with a grade of C or better, or eligibility for 400-level Reading courses on approved college reading placement test, and other measures as necessary.

Designed to help the student recognize and critically evaluate important ideas in short and book length texts, and express facts and thought logically and gracefully in clear and correct prose. Students will write critical expository essays dealing with a variety of ideas at a skill level appropriate to a transfer level college course. *Transfer credit:* UC; CSU (A2, A3). (CAN ENGL 2).

### ENGL 104 APPLIED ENGLISH SKILLS FOR CULTURAL PRODUCTION (1-3)

(Credit/No Credit or letter grade.)

16 lecture hours per unit plus one hour by arrangement per week. *Recommended:* Eligibility for ENGL 836 or equivalent.

Designed for students who want to develop critical thinking skills in the writing and production of a Pilipino Cultural Night (PCN). Students will research other PCN's, read and evaluate them for content and composition, and will work collaboratively to write a script to celebrate the Filipino and Filipino America experience. *May be repeated for credit up to 9 units. Transfer credit:* CSU.

### ENGL 105 INTENSIVE COMPOSITION (4)

Five lecture hours per week plus one lab hour per week by arrangement. *WRITING PREREQUISITE:* ENGL 836 or ENGL 846, or ESOL 400 with a grade of C or better, or eligibility for ENGL 100 on approved college placement tests and other measures as necessary. *READING PREREQUISITE:* READ 836 with Credit or a grade of C or better, or ESOL 400 with a grade of C or better, or eligibility for 400-level Reading courses on approved college reading placement test, and other measures as necessary.

Designed to help the student recognize and critically evaluate important ideas in short and book length texts and express facts and thought logically and gracefully in clear and correct prose. Extra class hours are devoted to specific reading and writing problems. Students will write critical expository essays dealing with a variety of ideas at a skill level appropriate to a transfer level college course with intensive instruction in the three major components of effective writing: sentence, paragraph, and essay. Course transfers as ENGL 100 to other institutions and is taken in lieu of ENGL 100 by students needing additional writing practice. *Transfer credit:* UC; CSU (A2, 3). (CAN ENGL 2).

### ENGL 110 COMPOSITION, LITERATURE AND CRITICAL THINKING (3)

Three lecture hours per week plus one lab hour per week by arrangement. *Prerequisite:* ENGL 100 or 105 with a grade of C or better.

Course is designed to introduce students to the major imaginative genres of poetry, drama, and fiction from diverse cultural sources and literary critical perspectives.. Students will write analytical essays, employing methods of literary analysis and demonstrating critical thinking skills appropriate to a college-level writing class. *Transfer credit:* UC; CSU (A2, A3, C2). (CAN ENGL 4).

**ENGL 161, 162 CREATIVE WRITING I AND II (3, 3)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: ENGL 161: Eligibility for ENGL 100 or ENGL 105, or equivalent. ENGL 162: Completion of ENGL 161.

The craft of writing short stories, sketches, poetry, short dramas, and other literary forms for both personal enjoyment and professional training. During the Spring Semester, class members may volunteer to work on the college's literary magazine. Transfer credit: ENGL 161 – UC; CSU (C2) (CAN ENGL 6); ENGL 162 – UC; CSU.

**ENGL 165 CRITICAL THINKING AND ADVANCED COMPOSITION (3)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: ENGL 100 or ENGL 105 with grade of C or better.

Through investigative learning in conjunction with non-fiction prose, students will explore multiple points of view on controversial issues, using critical thinking, reading and writing skills to discuss and manipulate ideas in a progression of argumentative essays more advance than English 100. Transfer credit: UC; CSU (A3)

**ENGL 166 WOMEN ON WRITING (.5)  
(Credit/No Credit or letter grade.)**

A total of eight lecture hours.

Exploration of diverse women's experience as portrayed in a variety of genres. Students will read, hear from and discuss women authors who write in such modes as the novel, short story, poetry, drama, film, news reporting and editorial comment, memoir, biography, and historical fiction. Course participants will examine and celebrate women's voices in contemporary writing. Also listed as LIT. 166. May be repeated for credit up to a maximum of 3 units. Transfer credit: UC; CSU.

**ENGL 650 ENGLISH SUPPLEMENT FOR TRIO STUDENTS (.5-3)**

(Credit/No Credit.)

One and one-half to nine hours per week by arrangement.

Individual instruction in reading and writing skills for TRIO/STAARS students based on TRIO English instructor's assessment of each student's reading and writing skills. Students are assigned a personal tutor/mentor based in The Learning Center. (Open entry.) May be repeated for credit up to a maximum of 6 units. (Units do not count toward the Associate Degree.)

**ENGL 819 ENGLISH DEVELOPMENT (3)**

A minimum of 48 lecture hours.

This course prepares students to read and write at the college level. Practice and instruction focus on reading college-level texts and writing college-level, text-based essays. Topics include thesis construction, organization, development, and sentence skills. Students will complete in-class and outside writing assignments, application in

digital video production, individual conferences, and tutoring. Note: This course does not replace any course in Skyline College's required course sequence based on placement testing. (Units do not apply to the Associate Degree.)

**ENGL 826 BASIC WRITING SKILLS (3)**

Five lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for READ 826 and ENGL 826 by appropriate scores on college placement tests and other measures as necessary. Corequisite: READ 826 if indicated by college reading placement test.

A course in basic writing focusing on paragraph and essay organization, sentence skills, and text-based writing. Students will write essays in and out of class and complete assignments to strengthen sentence skills and writing/reading strategies. ENGL 826 prepares students for ENGL 836. (Units do not count toward the Associate Degree.)

**ENGL 836 WRITING DEVELOPMENT (3)**

Three lecture hours per week plus on lab hour per week by arrangement. WRITING PREREQUISITE: Completion of ENGL 826 or ESOL 840 or 841/842 with a grade of C or better, or appropriate scores on approved college placement test and other measures as necessary. READING PREREQUISITE: READ 826 with Credit or a grade of C or better, or eligibility for READ 836 on approved college reading placement test, or other measures as necessary.

An introduction to college composition that prepares students to write essays at the college level, focusing on thesis construction, organization, development, sentence skills, reading, and text-based writing. Students will be assigned in-class and outside writing assignments and exercises, as well as attend individual conferences, and tutoring. ENGL 836 prepares students for ENGL 100/105.

**ENGL 846 READING AND WRITING CONNECTIONS (5)**

Five lecture hours per week plus one lab hour per week by arrangement. WRITING PREREQUISITE: Completion of ENGL 826, ESOL 840 or ESOL 841/842 with a grade of C or better, or eligibility for ENGL 836, ENGL 846 or ESOL 400 on approved college placement test and multiple measures. READING PREREQUISITE: Completion of READ 826, ESOL 840 or ESOL 841/842 with Credit or a grade of C or better, or eligibility for READ 836, ENGL 846 or ESOL 400 on approved reading placement test and multiple measures.

This course integrates ENGL 836 and READ 836, satisfying both requirements. It introduces students to college level reading and writing, covering thesis construction, organization, development, sentence skills, text-based writing, and effective reading strategies to improve comprehension, analysis, and vocabulary. ENGL 846 prepares students for ENGL 100/105.

**ENGL 875 ENGLISH GRAMMAR (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week.

Review of English grammar with emphasis on practicing standard English skills and correctness for use in academic papers. Appropriate for all levels of English. *May be repeated once for credit. (Units do not count toward the Associate Degree.)*

**ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)**

A new numbering system has been created for the English courses for **English for Speakers of Other Languages: ESOL 810, 820, 830, and 840**. The equivalent of the day courses are being offered as two courses during the evening/summer program (e.g., ESOL 810 = ESOL 811 + 812). The course content for the evening/summer courses does not dictate in which half the student enrolls first; however, the student must complete both courses before enrolling in the next level.

**ESOL 400 ENGLISH COMPOSITION FOR NONNATIVE SPEAKERS (5)**

Five lecture hours per week plus one lab hour per week by arrangement. Prerequisite: Completion of ESOL 840, or 841 and 842, or ESOL 864 and 874, or equivalent; or appropriate skill level as indicated by ESL placement test and other measures as necessary.

For advanced nonnative speakers of English who have completed ESOL 840, or 841 and 842, or 864 and 874, or equivalent, but need more intensive work in critical reading and composition before attempting ENGL 100 or 105. Transfer credit: UC; CSU.

**ESOL 655 ENGLISH AS A SECOND LANGUAGE SUPPLEMENT (.5-3)**

(Credit/No Credit.)

One and one-half to nine hours per week by arrangement. Recommended: Concurrent enrollment in an ESOL course.

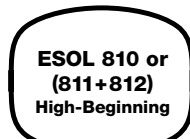
Provides assistance for ESL students in communication skills, including reading, writing, listening and speaking. The lab allows students to drop in and follow self-paced curriculum, or to choose the instructional methods they prefer: one-on-one tutoring, software, English practice groups, faculty-taught workshops, or phone-in/online tutoring when available. (Open entry.) May be repeated for credit up to a maximum of 6 units. (Units do not count toward the Associate Degree.)

**ESOL Program Sequence and Supplemental Courses**

Start

**Placement Test**

indicates appropriate level in this sequence of courses



**TRANSFERABLE COURSES**



**Supplemental ESOL Courses**  
*non-transferable, not part of sequence*

**ESOL 801 Basic Conversational English**

Recommended for 810 level students who need basic conversation skills.

**ESOL 802 Pre-Intermediate Conversational English**

Recommended for 820 level students who want to increase fluency.

**ESOL 655 ESL Lab Supplement**

All levels. Students study grammar, listening, reading, and pronunciation with computers, tutors, and media.

**ESOL 855 Accent Reduction**

Open to all levels, recommended for intermediate or higher.

**ESOL 875 Advanced Grammar and Editing for ESL**

Recommended for 400 and 100 level students who need advanced grammar review.

**ESOL 890 Reading & Composition Practice for ESL**

Recommended for 400 and 100 level students who need more preparation for composition courses.

Both ENGL 100 and ESOL 400 are transferable to UC/CSU. As of Spring 2007, ESOL 400 no longer satisfies Area 2 transfer requirements.

**ESOL 800 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES – NOVICE (1-6)****(Credit/No Credit.)**

*A minimum of 24 lecture hours and 8 lab hours by arrangement per unit.*

Entry-level course for non-native speakers of English who need to learn the basic skills of studying in the U.S. educational system, living in a U.S. community, and communicating in standard English as it is used in the United States. The course provides practice in reading, writing, grammar, listening and speaking. It is the preparatory level for the subsequent five-level sequence of ESOL courses. *May be repeated for credit up to a maximum of 6 units. (Units do not count toward the Associate Degree.)*

**ESOL 801 BASIC CONVERSATIONAL ENGLISH (2)****(Credit/No Credit or letter grade.)**

*Two lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ESOL 810, or equivalent.*

A practical course in the English language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech in standard spoken English with sufficient grammar to give flexibility to the spoken language. Introduction to American culture. *(Units do not count toward the Associate Degree.)*

**ESOL 802 PRE-INTERMEDIATE CONVERSATIONAL ENGLISH (2)****(Credit/No Credit or letter grade.)**

*Two lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ESOL 820, or equivalent.*

A practical course in the English language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech in standard spoken English with sufficient grammar to give flexibility to the spoken language. Continued analysis and exposure to American culture. *May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

**ESOL 810 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES I (6)****(Credit/No Credit or letter grade.)**

*Nine lecture hours per week plus one lab hour per week by arrangement. Recommended: Appropriate skill level of ESOL 810 or 811, as indicated by ESL placement test and other measures as necessary.*

For high-beginning students who need to develop fluency in the structures of English and who place in ESOL 810 by examination. Emphasis is on reading, basic grammatical structure acquisition, aural comprehension, oral production, and writing. *(Units do not count toward the Associate Degree.)*

**ESOL 811 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES I (1st HALF) (3)****(Credit/No Credit or letter grade.)**

*Four lecture hours and one lab hour per week. Recommended: Appropriate skill level as indicated by ESL placement test and other measures as necessary.*

Designed to be taken before or after ESOL 812, this course is for beginning non-native speakers of English who need to develop fluency in the basic structures of English and who place in ESOL 810 by examination. Emphasis is on reading, grammatical structure acquisition, oral interaction, and writing. This course is equivalent to the first half of ESOL 810. *(Units do not count toward the Associate Degree.)*

**ESOL 812 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES I (2nd HALF) (3)****(Credit/No Credit or letter grade.)**

*Four lecture hours and one lab hour per week. Recommended: Appropriate skill level as indicated by ESL placement test and other measures as necessary.*

Designed to be taken before or after ESOL 811, this course is for beginning non-native speakers of English who need to develop fluency in the basic structures of English and who place in ESOL 810 by examination. Emphasis is on reading, grammatical structure acquisition, oral interaction, and writing. This course is equivalent to the second half of ESOL 810. *(Units do not count toward the Associate Degree.)*

**ESOL 820 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES II (6)****(Credit/No Credit or letter grade.)**

*Nine lecture hours and one lab hour by arrangement per week. Recommended: Satisfactory completion of ESOL 810, or 811 and 812, or 861 and 871, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

For pre-intermediate students who have taken ESOL 810, or 811 and 812, or 861 and 871, or who place into ESOL 820 by examination. Emphasis on reading, basic grammatical structure acquisition, aural comprehension, oral production, and writing. *(Units do not count toward the Associate Degree.)*

**ESOL 821 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES II (1st HALF) (3)****(Credit/No Credit or letter grade.)**

Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 810 or both 811 and 812, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

Designed to be taken before or after ESOL 822, this course is for intermediate students who have studied the grammatical structures, basic reading skills, and elements of writing in ESOL 810, or 811 and 812. Emphasis on developing reading competence and oral and written fluency in the more complex structures of English. This course is equivalent to the first half of ESOL 820. (Units do not count toward the Associate Degree.)

**ESOL 822 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES II (2nd HALF) (3)****(Credit/No Credit or letter grade.)**

Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 810 or both 811 and 812, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

Designed to be taken before or after ESOL 821, this course is for intermediate students who have studied the grammatical structures, basic reading skills, and elements of writing in ESOL 810, or 811 and 812. Emphasis on developing reading competence and oral and written fluency in the more complex structures of English. This course is equivalent to the second half of ESOL 820. (Units do not count toward the Associate Degree.)

**ESOL 823 LISTENING FOR WRITING, INTERMEDIATE (3)****(Credit/No Credit.)**

Three lectures hours and one lab hour by arrangement per week. Recommended: Satisfactory completion of ESOL 810 or both 811 and 812, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

For intermediate non-native speakers of English to take either as a supplement to the core class ESOL 820 or by itself, this course is for listening and writing development. It provides practice in listening to lectures, taking simple notes, and writing grammatical English sentences and coherent paragraphs so that student will be ready for essay writing as they proceed through the ESOL program to ESOL 840 and ENGL 400. *May be repeated once for credit.* (Units do not count toward the Associate Degree.)

**ESOL 824 READING FOR CONVERSATION, INTERMEDIATE (3)****(Credit/No Credit.)**

Three lecture hours and one lab hour by arrangement per week. Recommended: Satisfactory completion of ESOL 810 or both 811 and 812, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

For intermediate non-native speakers of English to take either as a supplement to the core class ESOL 820 or by itself. This course focuses on developing students' understanding of written English through class discussions of texts rich in cultural content familiar to most Americans. The readings will be selected from a variety of easier-to-read genres of American classics, for example, children's literature. *May be repeated once for credit.* (Units do not count toward the Associate Degree.)

**ESOL 830 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES III (6)****(Credit/No Credit or letter grade.)**

Nine lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 820, or 821 and 822, or 862 and 872, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

For intermediate students who have studied the grammatical structures in ESOL 820, or 821 and 822, or 862 and 872, or equivalent, and have acquired conversational fluency and basic reading and writing skills. Emphasis is on critical reading, sentence combining, oral exchange, and paragraph writing. (Units do not count toward the Associate Degree.)

**ESOL 831 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES III (1st HALF) (3)****(Credit/No Credit or letter grade.)**

Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 820 or both 821 and 822, or appropriate skill level as indicated by ESL placement test and other measures as necessary.

Designed to be taken before or after ESOL 832, this course is for advanced students who have studied the grammatical structures in ESOL 820, or 821 and 822, and have acquired conversational fluency and basic reading and writing skills. Emphasis is on critical reading, sentence combining, oral exchange, and paragraph writing. This course is equivalent to the first half of ESOL 830. (Units do not count toward the Associate Degree.)



**ESOL 832 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES III (2nd HALF) (3)****(Credit/No Credit or letter grade.)**

*Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 820 or both 821 and 822, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

Designed to be taken before or after ESOL 831, this course is for advanced students who have studied the grammatical structures in ESOL 820, or 821 and 822, and have acquired conversational fluency and basic reading and writing skills. Emphasis is on critical reading, sentence combining, oral exchange, and paragraph writing. This course is equivalent to the second half of ESOL 830. (Units do not count toward the Associate Degree.)

**ESOL 840 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES IV (6)****(Credit/No Credit or letter grade.)**

*Nine lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 830, or 831 and 832, or 863 and 873, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

For high-intermediate students who have studied the grammatical structures, reading skills, and elements of paragraph writing in ESOL 830, or 831 and 832, or 863 and 873, or equivalent. Emphasis is on thematic reading, discussion, and writing from paragraphs to essays, supplemented by exercises in proofreading. (Units do not count toward the Associate Degree.)

**ESOL 841 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES IV (1st HALF) (3)****(Credit/No Credit or letter grade.)**

*Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 830 or both 831 and 832, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

Designed to be taken before or after ESOL 842, this course is for advanced students who have studied the grammatical structures, reading skills, and elements of paragraph writing in ESOL 830, or 831 and 832. Emphasis is on thematic reading, discussion, and writing from paragraphs to essays, supplemented by exercises in proofreading. This course is equivalent to the first half of ESOL 840. (Units do not count toward the Associate Degree.)

**ESOL 842 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES IV (2nd HALF) (3)****(Credit/No Credit or letter grade.)**

*Four lecture hours and one lab hour per week. Recommended: Satisfactory completion of ESOL 830 or both 831 and 832, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

Designed to be taken before or after ESOL 841, this course is for advanced students who have studied the

grammatical structures, reading skills, and elements of paragraph writing in ESOL 830, or 831 and 832. Emphasis is on thematic reading, discussion, and writing from paragraphs to essays, supplemented by exercises in proofreading. This course is equivalent to the second half of ESOL 840. (Units do not count toward the Associate Degree.)

**ESOL 843 LISTENING FOR WRITING, ADVANCED (3)****(Credit/No Credit.)**

*Three lecture hours and one lab hour by arrangement per week. Recommended: Satisfactory completion of ESOL 830 or both 831 and 832, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

For advanced non-native speakers of English to take either as a supplement to the core class ESOL 840 or by itself, this course is for listening and writing development. It provides practice in listening to lectures, note taking, and research reporting. It reviews the elements of paragraph and essay writing, supplemented by exercise in proofreading so that students will be ready for essay writing in ESOL 400. May be repeated once for credit. (Units do not count toward the Associate Degree.)

**ESOL 844 READING FOR CONVERSATION, ADVANCED (3)****(Credit/No Credit.)**

*Three lecture hours and one lab hour by arrangement per week. Recommended: Satisfactory completion of ESOL 830 or both 831 and 832, or appropriate skill level as indicated by ESL placement test and other measures as necessary.*

For advanced non-native speakers of English to take either as a supplement to the core class ESOL 840 or by itself. This course focuses on developing students' further understanding of written English through class discussions of more complex texts rich in cultural content familiar to most Americans. The readings will be selected from a variety of genres of American classics. May be repeated once for credit. (Units do not count toward the Associate Degree.)

**ESOL 851 HIGH-BEGINNING ESL LISTENING AND SPEAKING (3)****(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Appropriate skill level of ESOL 810, or 811, as indicated by ESL placement test and other measures as necessary.*

Development of listening comprehension and oral proficiency of standard spoken English at the high-beginning level. Listening focuses on comprehension of verbal instructions, vocabulary in context, and ideas in sentences, monologues, and dialogues. Speaking focuses on clear pronunciation of common words and phrases and development of fluency in conversation. (Units do not count toward the Associate Degree.)

**ESOL 852 PRE-INTERMEDIATE ESL LISTENING AND SPEAKING (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus on lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 810, or both 811 and 812, or ESOL 851, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to complete or enroll concurrently in ESOL 862 and ESOL 872.

Development of listening comprehension and oral proficiency of standard spoken English at the pre-intermediate level. Listening focuses on comprehension of modified spoken English, vocabulary in context, and ideas in monologues and discussions. Speaking focuses on clear pronunciation of common words and phrases, continued development of fluency in conversation, and proficiency in initiating, sustaining, and ending oral communication in a variety of contexts. ESOL 852, when taken with ESOL 862 and ESOL 872, is equivalent to ESOL 820. (Units do not count toward the Associate Degree.)

**ESOL 853 INTERMEDIATE ESL LISTENING AND SPEAKING (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 820, or both 821 and 822, or ESOL 852, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to complete or enroll concurrently in ESOL 863 and ESOL 873.

Development of listening comprehension and oral proficiency of standard spoken English at the intermediate level. Listening focuses on note-taking and aural comprehension of standard spoken English using information from media, discussion, and academic contexts. Speaking focuses on English fluency, proficiency, and strategies for discussion and personal interaction. ESOL 853, when taken with ESOL 863 and ESOL 873, is equivalent to ESOL 830. (Units do not count toward the Associate Degree.)

**ESOL 854 HIGH-INTERMEDIATE ESL LISTENING AND SPEAKING (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 830, or 831 and 832, or ESOL 853, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to complete or enroll concurrently in ESOL 864 and ESOL 874.

Development of listening comprehension and oral proficiency of standard spoken English at the high-intermediate level. Listening focuses on note-taking and aural comprehension of standard spoken English in academic situations, media, and discussion. Speaking focuses on fluency of English speech, proficiency in clarifying and restating, and strategies for facilitating discussion. ESOL 854, when taken with ESOL 864 and ESOL 874, is equivalent to ESOL 840. May be repeated twice for credit. (Units do not count toward the Associate Degree.)

**ESOL 855 ACCENT REDUCTION (3)****(Credit/No Credit or letter grade.)**

Three lecture hours and one lab hour by arrangement per week.

For all non-native speakers who need to improve their spoken English. The course will cover the English sound system in general, but the particular focus will be on increasing individual listening comprehension and improving individual student production of standard English as it is spoken in the United States. May be repeated once for credit. (Units do not count toward the Associate Degree.)

**ESOL 861 HIGH-BEGINNING ESL READING AND WRITING (4)****(Credit/No Credit or letter grade.)**

Four lecture hours per week plus one lab hour per week by arrangement. Recommended: Appropriate skill level of ESOL 810, or 811, as indicated by ESL placement test and other measures as necessary.

Development of reading and writing skills at the high-beginning level of English acquisition. Reading strategies, fluency, vocabulary, comprehension, and sentence and short paragraph writing. (Units do not count toward the Associate Degree.)

**ESOL 862 PRE-INTERMEDIATE ESL READING AND WRITING (4)****(Credit/No Credit or letter grade.)**

Four lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 810, or ESOL 811 and 812, or ESOL 861, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to complete or enroll concurrently in ESOL 852 and ESOL 872.

Development of reading and writing skills at the pre-intermediate level of English acquisition. Reading strategies, fluency, vocabulary, comprehension, and short paragraph writing. ESOL 862, when taken with ESOL 852 and ESOL 872, is equivalent to ESOL 820. (Units do not count toward the Associate Degree.)

**ESOL 863 INTERMEDIATE ESL READING AND WRITING (4)****(Credit/No Credit or letter grade.)**

Four lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 820, or ESOL 821 and 822, or ESOL 862, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to enroll concurrently in ESOL 853 and ESOL 873.

Development of reading and writing skills at the intermediate level of English acquisition. Reading strategies, fluency, vocabulary, comprehension, and paragraph writing. ESOL 863, when taken with ESOL 853 and ESOL 873, is equivalent to ESOL 830. (Units do not count toward the Associate Degree.)

**ESOL 864 HIGH-INTERMEDIATE ESL READING AND WRITING (4)****(Credit/No Credit or letter grade.)**

Four lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 830, or ESOL 831 and 832, or ESOL 863, or appropriate skill level as indicated by ESL placement test and other measures as necessary. Students are strongly advised to enroll concurrently in ESOL 854 and ESOL 874.

Development of reading and writing skills at the high-intermediate level of English acquisition. Reading strategies, fluency, vocabulary, comprehension, paragraph and essay writing. ESOL 864, when taken with ESOL 854 and ESOL 874, is equivalent to ESOL 840. May be repeated twice for credit. (Units do not count toward the Associate Degree.)

**ESOL 871 HIGH-BEGINNING ESL GRAMMAR (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Appropriate skill level as indicated by ESL placement test and other measures as necessary.

Development of sentence variety and grammatical and mechanical accuracy of standard spoken and written English at the high-beginning level. (Units do not count toward the Associate Degree.)

**ESOL 872 PRE-INTERMEDIATE ESL GRAMMAR (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 810, or ESOL 811 and 812, or ESOL 871, or appropriate skill level as indicated by ESL placement test and other measures as necessary, or equivalent.

Development of sentence variety and grammatical and mechanical accuracy of standard spoken and written English at the pre-intermediate level. (Units do not count toward the Associate Degree.)

**ESOL 873 INTERMEDIATE ESL GRAMMAR (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 820, or ESOL 821 and 822, or ESOL 872, or appropriate skill level as indicated by ESL placement test and other measures as necessary, or equivalent.

Development of sentence variety and grammatical and mechanical accuracy of standard spoken and written English at the intermediate level. (Units do not count toward the Associate Degree.)

**ESOL 874 HIGH-INTERMEDIATE ESL GRAMMAR (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Satisfactory completion of ESOL 830, or ESOL 831 and 832, or ESOL 873, or appropriate skill level as indicated by ESL placement test and other measures as necessary, or equivalent.

Development of sentence variety and grammatical and mechanical accuracy of standard spoken and written English at the high-intermediate level. (Units do not count toward the Associate Degree.)

**ESOL 875 ADVANCED ESL GRAMMAR AND EDITING (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ESOL 400, or completion of ESOL 840, or ESOL 841 and 842, or ESOL 874, or appropriate skill level as indicated by ESL placement test and other measures as necessary, or equivalent.

Non-native English speaking students will review complex grammar and language structures applicable to academic writing, as well as strategies for editing their own writing. This course assumes advanced study of English as a Second Language and the ability to read, write, and use English language structures appropriate to the level of ESOL 400. May be repeated once for credit. (Units do not count toward the Associate Degree.)

**ESOL 890 READING AND COMPOSITION PRACTICE FOR ESL (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ESOL 400, or appropriate skill level as indicated by ESL placement test and other measures as necessary, or equivalent.

For advanced non-native speakers of English who are eligible for ESOL 400 or its equivalent and who need more focused work in grammar, writing and editing before attempting ESOL 400, ENGL 100 or ENGL 105. May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)

## FAMILY AND CONSUMER SCIENCES (FCS)

### FCS 113 TEXTILES (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Study of natural and chemical fibers; yarns and cloth construction, weaving, finishing, dyeing. Study of purchase, use and care of textiles. Federal legislation, cost and labeling as related to consumer use. Student will examine the various characteristics of fibers and fabrics, including health and comfort levels on the body. Also listed as FASH 113. Transfer credit: UC; CSU (C1).

### FCS 117 CREATING A PERSONAL IMAGE (3)

Three lecture hours per week.

A course designed to aid the student in adapting a fashion appearance appropriate for professional and personal care. Concepts in awareness of personal coloring, figure considerations, hair styling, and use of makeup. Wardrobe planning and selection, accessorizing, and shopping strategies will be emphasized. Specific material for both men and women will be presented. Also listed as FASH 117. Transfer credit: CSU.

### FCS 119 CLOTHING, CULTURE AND SOCIETY (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Study of bodily adornment in terms of cultural, ethnic, historical, sociological, psychological, and economic considerations. Comparison will be made of various cultures and subcultures. Fashion trends and merchandising techniques as they affect the consumer will also be discussed. Student will examine the importance of clothing as an expression of individual and group identity. Also listed as FASH 119. Transfer credit: CSU (C1).

### FCS 212 CHILD, FAMILY AND COMMUNITY (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Patterns of family living in a changing society and the role and interaction of members; varying factors affecting family life – racial, cultural, economic, social, urban and suburban; home-nursery relationships; community resources – health, welfare, education, counseling, guidance, recreation and religion. Designed with a cross-cultural approach to the child, family, and community. Also listed as ECE. 212. Transfer credit: UC; CSU (D3).

### FCS 213 CHILD-PARENT RELATIONS (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Emotional, social, intellectual and physical development of children with an emphasis on a multicultural approach to parent-child relations, diversity of family systems in today's society, and how these influence the developing child. Also listed as ECE. 214. Transfer credit: CSU (E1).

### FCS 310 NUTRITION (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Basic concepts of nutrition. Role of nutrients in maintenance of life processes; utilization of food by the body; hunger and appetite; personal nutritional evaluation. Special emphasis given to nutrition education and community, national and world nutrition problems. Transfer credit: UC; CSU (E1). (CAN FCS 2).

### FCS 311 CHILDREN'S NUTRITION (1)

Three lecture hours per week for six weeks. Recommended: Eligibility for ENGL 836.

This course is designed to assist parents of young children to develop an understanding of how nutrition contributes to mental and physical growth. The student will learn ways to teach these principles to young children. There will be simple food preparation techniques, and an examination of current literature. Also listed as ECE. 311. Transfer credit: CSU.

### FCS 313 HOLISTIC PERSPECTIVE IN NUTRITION (1)

Three lecture hours per week for six weeks. Recommended: Eligibility for ENGL 836.

This course will provide an overview of both traditional and holistic principles of nutrition, including nutrients and their use in preventing nutritional deficiencies and maintaining health. Included in the course will be a critical analysis of nutritional programs such as food combining, vegetarian, and macrobiotics. Attention will also be given to the effects of environment, mind, and emotions on nutrition. Transfer credit: CSU (E1).

### FCS 665 SELECTED TOPICS IN FAMILY AND CONSUMER SCIENCES (.5 or 1 or 1.5)

(Credit/No Credit or letter grade.)

Eight lecture hours per .5 unit.

Discussion and evaluation of current topics, trends and issues in the field of family and consumer sciences. New concepts include review of research and application of findings. The course will focus on one of the following topics related to nutrition and child-family studies issues: nutrition and aging, nutrition and sports training, nutrition and weight control, nutrition and pregnancy/ lactation, nutrition and HIV/AIDS, nutrition, foods and world culture, and survey/ trends and issues in family and consumer sciences. May be repeated for credit as topics vary. Transfer credit: CSU.

## FASHION MERCHANDISING (FASH)

### FASH 113 TEXTILES (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Study of natural and chemical fibers; yarns and cloth construction, weaving, finishing, dyeing. Study of purchase, use and care of textiles. Federal legislation, cost and labeling as related to consumer use. Student will examine the various characteristics of fibers and fabrics, including health and comfort level on the body. Also listed as FCS 113. Transfer credit: UC; CSU (C1).

### FASH 117 CREATING A PERSONAL IMAGE (3)

Three lecture hours per week.

A course designed to aid the student in adapting a fashion appearance appropriate for professional and personal care. Concepts in awareness of personal coloring, figure considerations, hair styling, and use of makeup. Wardrobe planning and selection, accessorizing, and shopping strategies will be emphasized. Specific material for both men and women will be presented. Also listed as FCS 117. Transfer credit: CSU.

### FASH 119 CLOTHING, CULTURE AND SOCIETY (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Study of bodily adornment in terms of cultural, ethnic, historical, sociological, psychological and economic considerations. Comparison will be made of various cultures and subcultures. Fashion trends and merchandising techniques as they affect the consumer will also be discussed. Student will examine the importance of clothing as an expression of individual and group identity. Also listed as FCS 119. Transfer credit: CSU (C1).

### FASH 151 FASHION MERCHANDISING (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Through lectures, guest speakers and field trips the student will have the opportunity to explore a variety of aspects of the ready-to-wear and couture industry. Production cost, promotion and advertising techniques will be studied in relation to large and small manufacture and retail operations. Personal requirements to help prepare students for employment in the field of fashion merchandising are given for guidance value. Transfer credit: CSU.

### FASH 152 VISUAL MERCHANDISING (3)

Three lecture hours per week.

Designed to provide the basic techniques needed for the visual presentation of merchandise. The student will be involved in the study of interior displays, the art of dramatizing the display, store windows, and their coordination with sales promotion. (Fall Semester only.) Transfer credit: CSU.

### FASH 153 APPAREL AND HOME FASHION ANALYSIS (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Designed to provide information regarding the types and construction features of fashion apparel (including product knowledge of children's, men's and women's apparel) and accessories necessary for fashion buying, consumer information, and the interpretation of this information. This course includes study of textile and non-textile merchandising, fashion lines, and forecasting for home fashions. Transfer credit: CSU.

### FASH 156 FASHION SHOWS AND SPECIAL EVENTS (3)

(Spring Semester only.)

Three lecture hours per week.

Designed to provide the basic techniques needed for the visual presentation of merchandise through production of fashion shows and special events. The student will be involved in the observation and production of various types of shows and promotions. Transfer credit: CSU.

### FASH 160 BUSINESS OF IMAGE CONSULTING (2)

Three lecture hours per week. Prerequisite: FASH 117 or equivalent.

This course will acquaint students with the principles and practices of the image consulting industry. Setting up and marketing a business; developing a professional knowledge base and resources; working with clientele; setting fees and keeping business records. Students will gain "how-to" experience through lectures, field trips and individual and group projects. Transfer credit: CSU.

### FASH 665 SELECTED TOPICS IN FASHION (.5 or 1 or 1.5)

(Credit/No Credit or letter grade.)

Eight lecture hours per .5 unit.

Designed to enhance interest and develop skills in the business of fashion. The course will focus on one of the following specific topics: principles in color, basics of visual display, business of modeling, fashion as a cultural experience, fashion survey. May be repeated for credit as topics vary. Transfer credit: CSU.

## FILIPINO (FILI)

Language Lab and Listening Requirement: Students enrolled in foreign language courses are required to make use of the language lab as prescribed by each department. Imitation, response, and independent practice are integral features of the study of a foreign language at the College.

### FILI 110 ELEMENTARY FILIPINO (5)

*Five lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or ESOL 400, or equivalent.*

Beginner's course in Filipino grammar, composition and reading. Practice in speaking and understanding Filipino. Introduction to the history, grammar, sentence structure, idioms, and cultural aspects naturally intertwined with the language; introductions to honorifics, formal second person singular form, the respect particles, and everyday greetings and formularies indicating politeness and respect for the persons addressed. This course is conducted primarily in Filipino. *Transfer credit: UC; CSU (C2).*

### FILI 111, 112 ELEMENTARY FILIPINO I and II (3, 3) (formerly TAGA 111, 112)

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. FILI 111 – Recommended: Eligibility for ENGL 836 or ESOL 400, or equivalent. FILI 112 – Prerequisite: FILI 111 or equivalent.*

A basic course sequence for native and non-native students. The student will acquire a basic ability to speak, read and write in Filipino at the elementary level and will learn about the customs, culture and history of the Filipino world. *Transfer credit: UC; CSU (C2).*

### FILI 121 ADVANCED ELEMENTARY FILIPINO I(3) (formerly TAGA 121)

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Prerequisites: FILI 112 or equivalent.*

The first course in a two-semester sequence covering the second year of Filipino. Continues the oral and written skills studied and practiced in FILI 112 and continues to develop the foundation in structure and vocabulary needed for basic communication. Emphasis is on the active use of language and also on culture, customs and history of the Filipino world. *Transfer credit: UC; CSU.*

### FILI 122 ADVANCED ELEMENTARY FILIPINO II (3) (formerly TAGA 122)

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Prerequisites: Successful completion of FILI 121 or equivalent.*

The second course in a two-semester sequence covering the second year of Filipino. Continues the oral and

written skills studied and practiced in FILI 112 and continues to develop the foundation in structure and vocabulary needed for advanced elementary communication. Emphasis is on the active use of language and also on culture, customs and history of the Filipino world. *Transfer credit: UC; CSU.*

## FILM (FILM)

### FILM 370 FILM PRODUCTION (3) (Credit/No Credit or letter grade.)

*Four to six hours per week plus additional lab hours by arrangement.*

A basic course in the techniques of film production, including operation of motion picture cameras, meters, lenses and related equipment, scripting for film, editing for pictorial continuity. Emphasis on production crew functions. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1).*

### FILM 375 SCRIPTWRITING FOR TELEVISION AND FILM (3)

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Formats and techniques of writing for film and television, including the study and analysis of professional scripts. Scripting assignments will include news features, public service announcements, commercials, dramatic shorts, and documentary and information films. *Transfer credit: CSU.*

### FILM 380 BASIC VIDEO PRODUCTION (3) (Credit/No Credit or letter grade.)

*Two lecture and three lab hours per week.*

Course introduces students to basic video field production, including an orientation to studio production. It incorporates elements of producing, directing, lighting, sound recording, working on a production crew, preparing video titles and graphics, video editing and field production with camcorders. Two video projects are required. *May be repeated once for credit. Transfer credit: CSU.*

### FILM 385 INTERMEDIATE FILM/VIDEO WORKSHOP (2)

**(Credit/No Credit or letter grade.)**

*Two lecture hours plus two lab hours per week. Prerequisite: FILM 370 or 380. Recommended: FILM 375.*

Students learn advanced camera, lighting and editing techniques as they work on individual projects or collaborate with other students on short film or video projects. They will produce short works based on scripts they have written, or scripts written by students in Film 375. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**FILM 440 FILM STUDY AND APPRECIATION (3)**

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

A critical look at film history and culture from silent and classical Hollywood to Japanese and European films. Students learn to critique classical, modern and avant-garde films and to analyze the structure of cinematic language, i.e., motifs, metaphors, narrative cause-effect devices and oppositions. Students develop a visual and ideological understanding of film. Transfer credit: UC; CSU (C2).

**FILM 450 GREAT FILM DIRECTORS (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

A study of great film directors using the "auteur" approach to film criticism. Students will study in depth the films of great directors such as Hitchcock, Altman and Kubrick using signature themes and visual style to compare and contrast their works. Thematic evolution and historical connections will also be examined. Transfer credit: UC; CSU.

**GEOGRAPHY (GEOG)**

**GEOG 110 CULTURAL GEOGRAPHY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Introduction to cultural geography with a survey of major world cultural patterns, resources, population, and the changing relationships of human groups and the physical environment. Transfer credit: UC; CSU (D3). (CAN GEOG 4).

**GEOG 150 WORLD REGIONAL GEOGRAPHY (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A basic survey of geographic regions of the world. The location of physical and cultural regions such as mountain ranges, climatic regions, population centers, urban-economic concentrations, and political divisions. There will be an emphasis on historical influences and future trends in the changing world. Transfer credit: UC; CSU (D3).

**GEOG 301 INTRODUCTION TO MAP READING  
FOR GIS (1)**

**(Credit/No Credit or letter grade.)**

A total of 32 class hours. Recommended: Eligibility for ENGL 836; and skill in using Windows operating system and internet, such as found in CAOT 104 and CAOT 400, or equivalent.

This course focuses on map reading skills and introduces the many uses of geographic information systems

software. Emphasis on cartographic techniques from paper maps to computer generated maps. Transfer credit: CSU.

**GEOG 302 INTRODUCTION TO GIS AND ARC VIEW (1)  
(Credit/No Credit or letter grade.)**

A total of 32 class hours. Prerequisite: GEOG 301. Recommended: Skill in using Windows operating system and internet, such as found in CAOT 104 and CAOT 400, or equivalent.

This course introduces and provides hands-on instruction in ArcView geographic information systems software. Focus is on the functionality of GIS as an effective tool for modeling and analyzing complex spatial relationships. Transfer credit: CSU.

**GEOG 303 GIS APPLICATIONS (1)  
(Credit/No Credit or letter grade.)**

A total of 32 class hours. Prerequisite: GEOG 302. Recommended: Skill in using Windows operating system and internet, such as found in CAOT 104 and CAOT 400, or equivalent.

Applications of ArcView GIS software. Emphasis is placed on training in use of technology and software in order to provide students with skills and a conceptual basis on which to build further expertise in GIS. Students will complete projects in an area of their choice. Transfer credit: CSU.

**GEOLOGY (GEOL)**

**GEOL 100 SURVEY OF GEOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Introduction to the origin of rocks and minerals; the processes which have been important throughout geologic time, both on and beneath the surface, in giving the earth its present form; and the principles of scientific investigation that are used in interpreting geologic features. A brief sketch of the geological history of the earth and evolution of its animal and plant inhabitants. Not open to students who have taken or are taking GEOL 210. Transfer credit: UC; CSU (B1).

**GEOL 105 ENVIRONMENTAL EARTH SCIENCE (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Investigation of environmental earth science topics including aspects of weather and climate, ground and surface water, geologic processes and land forms, recovery and utilization of natural resources, air and water pollution, and energy. Emphasis on understanding and avoiding the dangers of natural hazards such as storms, floods, earthquakes, and landslides. Transfer credit: UC; CSU (B1).

**GEOL 180 GEOLOGY OF CALIFORNIA (3)**

Three lecture hours per week. Prerequisite: Eligibility for ENGL 836.

An overview of the general principles of geology with examples from the great diversity of local and regional features found in California. Comparisons to other parts of the world are made, demonstrating that the Golden State contains a microcosm of global geologic evolution. Emphasis on the significant interaction of geology and life in California from the Gold Rush through the Great Earthquake to today. Transfer credit: UC; CSU (B1).

**GEOL 210 GENERAL GEOLOGY (4)**

Three lecture hours and three laboratory hours per week. Field trips by arrangement. Recommended: Eligibility for ENGL 836. Introduction to the nature and structure of the materials composing the earth and of the various processes which shape the earth's surface. Recommended for non-science majors to fulfill laboratory science transfer requirement. Transfer credit: UC; CSU (B1, 3). (CAN GEOL 2).

**GEOL 611 FIELD GEOLOGY I (1)  
(Credit/No Credit.)**

Field trips by arrangement. Prerequisite: Completion of or concurrent enrollment in GEOL 100 or GEOL 210, or equivalent.

Supervised field investigation of selected geologic phenomena. Local field trips and/or weekend excursions to areas of geologic interest (i.e., Lassen Volcanic National Park, Yosemite National Park, Pinnacles National Monument). May be repeated once for credit. Transfer credit: UC; CSU.

**HEALTH SCIENCE (HSCI)****HSCI 100 GENERAL HEALTH EDUCATION (3)**

Three lecture hours per week.

A study of factors which influence personal health. Attention given to the value of good health practices; examination of self and lifestyle for disease risk; and preventive measures for heart disease and cancer. Topics include stress, mental health, sexual reproductive health, sex roles and living with others, nutrition, exercise and weight control. Transfer credit: UC; CSU (E1).

**HSCI 130 HUMAN SEXUALITY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

This course provides an overview of human sexual behavior and attitudes. Topics include: sex research, sexual anatomy and response patterns, sexual development and learning, gender identity, conception control, sexual variations and lifestyles, homosexuality, sexual problems and enrichment, relationships and intimacy. Transfer credit: UC; CSU (E1).

**HSCI 150 DEATH AND DYING (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Course is designed to increase the knowledge, the understanding, and the coping with the problems of death and dying. Transfer credit: CSU (E1).

**HSCI 405 EMERGENCY CARE FOR FIRST RESPONDERS (3)**

Three class hours per week.

Develops manipulative and problem solving skills necessary for the initial evaluation and stabilization of victims of emergency illness or trauma. Designed for persons who are interested in a career as a first responder to medical emergencies. Upon completion, student receives CPR and First Responder certificates.

**HSCI 420 EKG TECHNOLOGY (3)  
(Credit/No Credit or letter grade.)**

Three class hours per week and one eight-hour day per week in an EKG Department. Prerequisite: A valid Health Care Provider CPR Card.

Review of cardiovascular anatomy and physiology with emphasis on electro physiology. Interpretation of the normal and abnormal electrocardiogram. Laboratory and clinical site practice running a 12 lead EKG.

**HSCI 435 PHARMACY TECHNICIAN TRAINING (11)**

A total of 189 lecture hours plus two hours per week by arrangement. Recommended: Completion of ENGL 826 and READ 826 with grades of C or better, or equivalent; completion of MATH 811 with a grade of C or better, or equivalent; and completion of or concurrent enrollment in CAOT 100, or the ability to word process at 20 wpm.

Introductory course in Pharmacy Technician Training. Topics include pharmacy practices and settings, duties of pharmacy technicians, laws and regulations, medical terms and calculations, drug identification, storage and dispensing, and drug packaging and labeling. Transfer credit: CSU.

**HSCI 436 PHARMACY TECHNICIAN TRAINING  
CLINICAL EXTERNSHIP (1.5)**

(Credit/No Credit.)

A total of 96 clinical hours plus two hours per week by arrangement. Prerequisite: Completion of HSCI 435 with a grade of C or better, or equivalent; and negative result to an 8-12 panel drug screen test.

Introductory training in a clinical pharmacy setting. Training may be completed in a hospital or retail pharmacy. Students will perform the duties and functions of a pharmacy technician under the supervision of a licensed pharmacist or registered pharmacy technician. May be repeated once for credit. Transfer credit: CSU.



**HSCI 484 MEDICAL TERMINOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Designed to give students a basic background in medical terminology as used by medical transcriptionists, court reporters, law related occupations, and allied health occupations. The prefixes, roots, and suffixes of commonly used medical words are presented. Proper names of anatomical structures and their relationship to each other are covered by body system. Also listed as BUS. 485. Transfer credit: CSU.

**HSCI 665 LIFE STYLES – HEALTH ISSUES**

(.5 or 1 or 1.5 or 2)

(Credit/No Credit or letter grade.)

Eight lecture hours per .5 unit. Prerequisite: Eligibility for ENGL 836 or ESOL 400, or demonstration of equivalent competency.

Explores contemporary topics or life styles as they relate to the health of individuals or society. May be repeated for credit as topics vary. Transfer credit: CSU (E1).

**HISTORY (HIST)****HIST 100 HISTORY OF WESTERN CIVILIZATION I (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Cultural, political, and economic survey of Western history from the beginnings in the Near East to 1660. Emphasis on the intellectual, artistic, and institutional foundations of Western civilization. Transfer credit: UC; CSU (C2). (CAN HIST 2; HIST 100 + HIST 101 = CAN HIST SEQ A).

**HIST 101 HISTORY OF WESTERN CIVILIZATION II (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Western civilization from 1660 to the present, with particular emphasis on European cultural, social, and political development in the 19th and 20th centuries. Transfer credit: UC; CSU (C2). (CAN HIST 4; HIST 100 + HIST 101 = CAN HIST SEQ A).

**HIST 104 WORLD CIVILIZATIONS I (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

A global and historical survey of civilizations from ancient times to 1500. Focus on Asia/Pacific Islands, Africa, Europe, the Americas, and the Middle East. Emphasis on the origins and development of diverse cultures, political systems, major religions, noted empires, artistic/intellectual achievements, and technological breakthroughs. Transfer credit: UC; CSU (C2, D3).

**HIST 106 WORLD CIVILIZATIONS II (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

A global and historical survey course of world civilizations from 1500 to the present. Focus on Asia/Pacific Islands, Africa, Europe, the Americas, and the Middle East. Emphasis on the origins of global interdependence, revolutions and nationalist movements, the global economy, cultural and religious issues, technological advancements, and current social issues. Transfer credit: UC; CSU (C2, D3).

**HIST 108 SURVEY OF AMERICAN HISTORY (3)**

Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

A single semester survey that stresses major social, political, and cultural developments in the history of the United States. The course examines selected events, personalities and trends from the colonial period to the present. Transfer credit: UC; CSU (D1).

**HIST 109 EUROPE SINCE 1945 (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

Analysis of Europe from the end of WWII through the present. Topics include postwar reconstruction, the Cold War, new social movements, cultural differences, the fall of communism, ethnic cleansing, and European unity. Transfer credit: CSU (C2).

**HIST 201 UNITED STATES HISTORY I (3)**

Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

U.S. history to the mid-19th century, emphasizing the development of U.S. political, social, economic and cultural foundations. Transfer credit: UC; CSU (D1). (CAN HIST 8; HIST 201 + HIST 202 = CAN HIST SEQ B).

**HIST 202 UNITED STATES HISTORY II (3)**

Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

U.S. History from Reconstruction to the present. Transfer credit: UC; CSU (D1). (CAN HIST 10; HIST 201 + HIST 202 = CAN HIST SEQ B).

**HIST 203 THE UNITED STATES SINCE 1945 (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

United States history since 1945. Focus on the principal political, social, economic, and cultural challenges and achievements in American life. Transfer credit: UC; CSU (C2, D3).

**HIST 235 HISTORY OF ETHNIC GROUPS IN THE UNITED STATES (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.*

A survey of the social, economic and political history of ethnic groups in the United States, with particular emphasis on minority communities. In addition to examining the histories of individual ethnic communities, the course will explore the historical relationships between different groups. *Transfer credit: UC; CSU (D1).*

**HIST 240 HISTORY OF ETHNIC GROUPS IN CALIFORNIA (3)***Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 836.*

A survey of the social, economic and political history of ethnic groups in California, with particular emphasis on minority communities. In addition to examining the histories of individual ethnic communities, the course will explore the historical relationships between different groups. *Transfer credit: UC; CSU (D2a).*

**HIST 244 AFRICAN AMERICAN HISTORY (3)***Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.*

A history of the African-American community, beginning with an introduction to West African society and continuing through colonial times to the present. *Transfer credit: UC; CSU (D1).*

**HIST 248 WOMEN AND THE AMERICAN EXPERIENCE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.*

This course will examine the experience of women in the United States from the colonial era to the present. Exploration of the diverse ways in which women have lived, worked and contributed to the social, cultural, political and economic development of the United States. *Transfer: UC; CSU (C2, D3).*

**HIST 300 HISTORY OF SAN FRANCISCO (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

The history of San Francisco from its discovery to the present focusing on how it became a prominent U.S. city. Major topics include geography, native populations, European discovery, gold rush, multicultural aspects, social life, politics, natural disasters, crime and punishment, neighborhoods, historical landmarks, parks, transportation, architecture, and international events. *Transfer credit: CSU (D3).*

**HIST 310 CALIFORNIA HISTORY (3)***Three lecture hours per week. Partially satisfies American History and Institutions requirement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.*

A study of contemporary California with inquiry into how and why its political, economic, social and cultural qualities have developed. Includes examination of the native Californian, Spanish and American Periods; the institutions, functions and interrelations of federal, state and local politics; California's membership in the Pacific community; and the environment. *Transfer credit: UC; CSU (D2a).*

**HIST 420 SURVEY OF LATIN AMERICAN HISTORY (3)***Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

A comparative, chronological survey of South and Central American history including geography, indigenous peoples, early contact with Europeans, conquest, and struggle for independence. Development of modern Latin American nations, cultural uniqueness, economics, politics, society, and current problems will be explored. *Transfer credit: UC; CSU (C2).*

**HIST 430 EARLY ASIAN CIVILIZATIONS (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105 or equivalent.*

A historical and cultural survey of East Asia, South Asia, Southeast Asia, and the Philippines from the origins to the 18th Century. Emphasis will be on a critical evaluation of the main social, political, economic, cultural, intellectual and historical trends that have shaped the Asian countries. *Transfer credit: UC; CSU (C2, D3).*

**HIST 432 MODERN ASIAN CIVILIZATIONS (3)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

A historical and cultural survey of East Asia, South Asia, Southeast Asia, the Middle East, and the Philippines from the 17th century to the present. Emphasis will be on a critical evaluation of the main social, political, economic, cultural, intellectual and historical trends that have shaped the Asian countries. A study of the various modern Asian civilizations is encouraged as a means of acquiring a broad comparative perspective. *Transfer credit: CSU (D3).*

**HIST 435 HISTORY OF THE PHILIPPINES (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105 or equivalent.*

A historical and cultural survey of the Philippines from its origins to the present. Emphasis will be on a critical evaluation of the main social, political, economic, cultural, intellectual and historical trends that have shaped the Philippines. *Transfer credit: UC; CSU (C2, D3).*

**HIST 461 GREAT CITIES OF THE WORLD:  
PARIS, MADRID AND ISTANBUL (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An in-depth analysis of the great cities of the world with an emphasis on the more important political, economic, social, artistic and cultural aspects. Cities to be studied are Paris, Madrid and Istanbul. *Transfer credit: CSU (C2).*

**HIST 462 GREAT CITIES OF THE WORLD:  
LONDON, CAIRO, AND ROME (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An in-depth analysis of the great cities of the world with an emphasis on the more important political, economic, social, artistic and cultural aspects. Cities to be studied are London, Cairo and Rome. *Transfer credit: CSU (C2).*

**HIST 463 GREAT CITIES OF THE WORLD:  
FLORENCE, TOKYO AND JERUSALEM (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An in-depth analysis of the great cities of the world with an emphasis on the more important political, economic, social, artistic, and cultural aspects. Cities to be studied are Florence, Tokyo and Jerusalem. *Transfer credit: CSU (C2).*

**HIST 464 GREAT CITIES OF THE WORLD:  
NEW YORK, BEIJING, AND GRANADA (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An in-depth analysis of the great cities of the world with an emphasis on the more important political, economic, social, artistic and cultural aspects. Cities to be studied are New York, Beijing and Granada. *Transfer credit: CSU (C2).*

## HOME ECONOMICS

See listings under Family and Consumer Sciences.

## HUMANITIES (HUM.)

**HUM. 106 THE AWAKENING OF INDIVIDUALITY (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

An interdisciplinary exploration of individuality and self-reliance aimed at creating greater self-awareness and critical thinking. Various concepts of individuality are explored along with an examination of trends which destroy it. Creative alternatives aimed at increasing individuality are developed. Partially fulfills general education requirements in the Humanities. *Transfer credit: CSU (C2).*

**HUM. 115 INTRODUCTION TO THE ARTS – LIVE! (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week plus attendance of six to eight events. Recommended: Eligibility for ENGL 836.

A broad survey of the arts including music, dance, theater, films, and visual arts with an emphasis on developing arts appreciation both in theory and through attendance and critiques of live performances and exhibits. Partially satisfies the general education requirement in the area of the Humanities. *Transfer credit: UC; CSU (C2).*

**HUM. 116 CHILDREN'S ARTS APPRECIATION (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

General survey of art forms for children with an emphasis on arts appreciation. Children's literature, music, art, dance, theater, and film will be discussed and analyzed. Opportunities for exploring children's arts in the Bay Area will be identified. Partially fulfills the general education requirement in the Humanities. *Transfer credit: CSU (C2).*

**HUM. 117 THE ARTS, THE SENSES AND  
THE IMAGINATION (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Exploration and development of skills necessary for arts appreciation. Promotes growth in the areas of sensory awareness, perception, discrimination, interpretation of meaning in works of art, and the importance of the arts in society. Areas of study selected from film, music, poetry, fiction, architecture, painting, drawing, dance, drama, and domestic arts. Partially satisfies general education requirement in the area of the humanities for the Associate Degree. *Transfer credit: CSU (C1).*

## INTERIOR DESIGN (INTD)

### INTD 110 ENVIRONMENTAL DESIGN (3)

*Three lecture hours per week.*

Detailed studies of the home's interior environment. Selection and arrangement of furnishing; principles and elements of design as they relate to the selection and coordination of the home furnishings and accessories. *Transfer credit: CSU (C1).*

### INTD 120 DESIGNING INTERIORS FOR MULTICULTURAL POPULATIONS (3)

*Three lecture hours per week.*

Detailed studies of the home's interior environment with an emphasis on the influences of Asian and Latin American cultures, as well as other cultures, on Western interior design; the cultural preferences of members of these cultures living in a Western society will be emphasized. *Transfer credit: CSU (C1).*

## ITALIAN (ITAL)

**Language Lab and Listening Requirement:** Students enrolled in foreign language courses are required to make use of the language lab as prescribed by each department. Imitation, response, and independent practice are integral features of the study of a foreign language at the College.

### ITAL 111, 112 ELEMENTARY ITALIAN I and II (3, 3) (Credit/No Credit or letter grade.)

*Three lecture hours and one lab hour per week. ITAL 111 – Recommended: Eligibility for ENGL 836 or ESOL 400, or equivalent. ITAL 112 – Prerequisite: ITAL 111 or equivalent.*

A two-semester sequence covering the same course material as a university-level first semester Italian course. Introduction to the understanding, speaking, reading, and writing of Italian. Includes fundamentals of grammar. *Transfer credit: UC; CSU (C2). (ITAL 111 + ITAL 112 = CAN ITAL 2).*

### ITAL 121, 122 ADVANCED ELEMENTARY ITALIAN I and II (3, 3)

**(Credit/No Credit or letter grade.)**

*Three lecture hours and one lab hour per week. Prerequisite: ITAL 121 – ITAL 112 or equivalent; ITAL 122 – ITAL 121.*

A two-semester sequence covering the same course material as a university-level second semester Italian course. Continued study of spoken language with increased emphasis on reading and writing Italian. *Transfer credit: UC; CSU (C2). (ITAL 121 + ITAL 122 = CAN ITAL 4).*

## JAPANESE (JAPN)

**Language Lab and Listening Requirement:** Students enrolled in foreign language courses are required to make use of the language lab as prescribed by each department. Imitation, response, and independent practice are integral features of the study of a foreign language at the College.

### JAPN 111, 112 ELEMENTARY JAPANESE I and II (3, 3) (Credit/No Credit or letter grade.)

*Three lecture hours and one lab hour per week. JAPN 111 – Recommended: Eligibility for ENGL 836 or ESOL 400, or equivalent. JAPN 112 – Prerequisite: JAPN 111 or equivalent.*

A two-semester sequence covering the same course material as a university level first semester Japanese course. The student will acquire the ability to speak, read, and write in the Japanese language at an elementary level and understand the Japanese culture at a basic level. *Transfer credit: UC; CSU (C2).*

### JAPN 115 BASIC BUSINESS JAPANESE (3) (Credit/No Credit or letter grade.)

*Three lecture hours and one lab hour by arrangement per week.*

Designed to help students learn Japanese for business purposes. Students will acquire relevant vocabulary, phrases and expressions, and will improve listening comprehension. The learner, regardless of language level in Japanese, will become familiar with questions and responses commonly heard in Japanese business contexts. *Transfer credit: CSU.*

## JOURNALISM (JOUR)

### JOUR 110 MASS MEDIA AND SOCIETY (3)

*Three lecture hours per week. Prerequisite: Eligibility for ENGL 836 or ESOL 400, or equivalent.*

A general-interest survey course which provides a historical and theoretical perspective through which to assess the impact the mass media – newspapers, magazines, the Internet, radio, television, film, advertising, and public relations – have had on society. Students will learn about the rights and responsibilities of the media, as well as the way in which economic, ethical and legal concerns influence media decisions. The course trains students to become discerning media consumers in this information-saturated age. *Transfer credit: UC; CSU (D3). (CAN JOUR 4).*

**JOUR 120 NEWSWRITING (3)**

Three lecture hours and one lab hour per week. Prerequisite: Eligibility for ENGL 100 or ENGL 105, or equivalent.

Techniques for news gathering, judging news values, and writing various journalistic styles (news stories, editorials, features, columns, sports for print and electronic media). Designed for students interested in professional preparation in print and electronic journalism. Transfer credit: UC; CSU. (CAN JOUR 2).

**JOUR 300 NEWSPAPER STAFF (3)**

Three lecture hours and three lab hours by arrangement per week. Prerequisite: Eligibility for ENGL 836, or ENGL 846, or ESOL 400, or equivalent. Recommended: Completion of or concurrent enrollment in JOUR 120.

Production of the college newspaper. Discussion and criticism by staff of the publication. Students will get practical experience in writing as preparation for future print and electronic media work. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**JOUR 301 ONLINE NEWSPAPER STAFF (3)**

Three lecture hours and three lab hours by arrangement per week. Prerequisite: Eligibility for ENGL 836, or ENGL 846, or ESOL 400, or equivalent. Recommended: Completion of or concurrent enrollment in JOUR 120.

Production of the online version of the college newspaper. Discussion and criticism by staff of the publication. Students will get practical experience in writing for an online publication, including using digital photography, video and audio clips for story enhancement. The course prepares students for future print and electronic media work. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**LEARNING SKILLS (LSKL)****LSKL 100 STRATEGIES FOR ACADEMIC SUCCESS (2)**

Two lecture hours per week.

Course will increase student's success in college by improving and/or developing those skills necessary for college study. Topics in the course include: goals clarification, time planning, test-taking, communication skills, study techniques, critical thinking, question-asking skills, library use, memory techniques and personal issues related to pursuing college goals. Transfer credit: CSU.

**LSKL 110 DIRECTED EXPERIENCE IN TUTORING**

(.5-3)

(Credit/No Credit.)

One lecture hour per week plus a minimum of three lab hours per week by arrangement. Prerequisite: Minimum grade of B in subject to be tutored and letter of recommendation from instructor in the subject area to be tutored.

This course enables students to serve as tutors and provide academic assistance to other students (learners or tutees). Student tutors help tutee study partners to: 1) understand the concepts of specific courses and 2) apply effective study skills. (Open entry.) Transfer credit: CSU.

**LSKL 800 SUPERVISED GRADUATE TUTORING (.5-3) (Credit/No Credit.)**

A minimum of 24 lab hours by arrangement per .5 unit. Corequisite: Concurrent enrollment in another course for which the student needs academic support in order to succeed.

Students who need supplementary instruction in the course from which they were referred receive academic support to reinforce course content and bolster academic skills. Under the supervision of qualified faculty members in the Learning Center, graduate tutors will provide individual and/or group instruction to improve learning in areas of assessed need. (Open entry.) May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)

**LSKL 801 APPLIED STUDY SKILLS ASSISTANCE**

(.5-3)

(Credit/No Credit.)

One lecture hour and 1-6 lab hours by arrangement per week.

This course assists students to develop the study skills necessary for successful college work. Under the supervision of the instructor and working with tutors, students will learn a variety of study techniques directed toward specific fields of study. These techniques include note taking, communication skills, outline preparation, etc. (Open entry.) May be repeated for credit up to a maximum of 6 units. (Units do not count toward the Associate Degree.)

**LSKL 803 SUPERVISED PEER TUTORING (.5-3)**

(Credit/No Credit.)

A minimum of 24 lab hours by arrangement per .5 unit. Corequisite: Enrollment in a course for which academic support is needed in order for the student to succeed.

Students who need supplementary instruction in the course from which they were referred will receive academic support to reinforce course content and bolster academic skills. Under the supervision of qualified faculty in the Learning Center, peer tutors will provide individual and/or group instruction to improve learning in areas of assessed need. (Open entry.) May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)

**LSKL 820 COMPUTER-BASED INDEPENDENT STUDY (.5-3)  
(Credit/No Credit.)**

*A minimum of 24 lab hours by arrangement per .5 unit. Corequisite: Concurrent enrollment in a course in which the student needs assistance.*

An individualized independent study course using computers in the Learning Center as learning assistance tools to master concepts, conduct online research, prepare college papers, or demonstrate learning through class presentations. Individualized assistance is provided by staff to meet specific student learning needs in conjunction with the requirements of the college course requiring academic assistance. (*Open entry*). *May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

**LSKL 830 THE SENTENCE (.5)  
(Credit/No Credit.)**

*A total of eight lecture hours.*

A supplemental course that focuses on the fundamentals of sentence structure so that students can write clearer, more grammatically correct sentences. Students will be able to apply the concepts learned in this course to their writing in any class. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**LSKL 831 EDITING AND PROOFREADING (.5)  
(Credit/No Credit.)**

*A total of eight lecture hours.*

A supplemental course that focuses on teaching students to become stronger editors and proofreaders of their own writing. Students will work on error identification and strengthening skills in grammar, sentence structure, word choice, punctuation and mechanics. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**LSKL 832 SENTENCE COMBINING (.5)  
(Credit/No Credit.)**

*A total of eight lecture hours.*

A supplemental course that focuses on providing students firm grounding in sentence-combining skills. Students will increase the clarity and sophistication of their writing by creating more complex and better-developed sentences. Course covers verbals, appositives, and adjective clauses. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**LSKL 833 MULTI-INTELLIGENT LEARNING STRATEGIES FOR READING AND WRITING (.5)**

**(Credit/No Credit.)**

*A total of eight lecture hours.*

A supplemental course that focuses on teaching students about the theory of multiple intelligences so they can identify their own strongest intelligence systems and sample a variety of strategies to improve reading and writing difficulties. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**LSKL 853 WRITING AND READING ASSISTANCE LAB (.5-3)**

**(Credit/No Credit.)**

*One and one half to nine hours per week of computer lab instruction.*

Provides assistance in reading strategies and all stages of the writing process to students enrolled in any college course. Open daily, the lab allows students flexible drop-in hours and flexibility in instructional methods: one-to-one tutoring, writing and reading software, English practice groups, faculty-taught workshops, and online tutoring. (*Open entry*). *May be repeated for credit up to a maximum of 9 units. (Units do not count toward the Associate Degree.)*

**LIBRARY (LSCI)****LSCI 100 INTRODUCTION TO INFORMATION RESEARCH (1)**

**(Offered online only.)**

**(Credit/No Credit or letter grade.)**

*One hour per week of individualized study.*

An introduction to basic online research skills using a variety of high quality Web research tools. Emphasis on techniques for effective searching and using critical thinking skills to choose appropriate online research tools and critically evaluate a variety of information sources. *LSCI 100 is offered in an online format. Students must have an email address. May be repeated once for credit. Transfer credit: UC; CSU (E1).*

**LSCI 110 DIGITAL ORAL RESEARCH PROJECT (1)  
(Credit/No Credit or letter grade.)**

*One class hour per week by arrangement.*

A practical introduction to methods and techniques of gathering and documenting oral research using digital audio technology. Students will learn to interview people in order to record and organize information relevant to specific historical, social, cultural, ethnic or other areas of research interest. Completed digital oral research projects will be included in the College Library's oral history website. (*Open entry*). *Transfer credit: CSU.*

**LSCI 665 SELECTED TOPICS IN LIBRARY AND INFORMATION SCIENCE (.5 or 1 or 1.5)**  
(Credit/No Credit or letter grade.)

Minimum of eight lecture hours per .5 unit.

This course is designed to develop specific skills that are utilized in library research and computerized information access. The course will focus on one specific topic; for example, a specific CDROM or online database, elements of the Internet or World Wide Web, research strategies for specific discipline areas, new research methodologies, etc. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

## LITERATURE (LIT.)

For information on the rotation of Literature courses, refer to the Associate Degree and Certificate Programs section of this catalog under English Major.

**LIT. 101 CONTEMPORARY LITERATURE (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

Students read, interpret and analyze a representative selection of contemporary literary fiction, poetry and drama since WWII using some of the major theoretical approaches to literature. These readings offer not only a greater critical perspective and insight into contemporary history, but an enhanced understanding of ourselves within our own culture. *Transfer credit: UC; CSU (C2).*

**LIT. 111 SHORT STORY (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

Reading, discussing, and writing about a diverse selection of classic and contemporary short fiction. Exploration of a spectrum of voices, styles, formal structures and themes will lead to an understanding and appreciation of stories from different cultures and perspectives. Independent study will encourage in-depth reading of the work of one author. *Transfer credit: UC; CSU (C2).*

**LIT. 113 INTRODUCTION TO THE NOVEL (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

Reading, discussing and writing about novels, classic and contemporary. The novel form provides in-depth exploration of characters and ideas and the entry into elaborate imaginative and intellectual worlds. Students will experience a variety of voices, writing styles and cultural perspectives while studying the literary techniques employed by novelists. *Transfer credit: UC; CSU (C2).*

**LIT. 116 INTRODUCTION TO WORLD LITERATURE (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

A sampling of world literature, from classic to modern. Students will examine how fiction, poetry, essays and plays are used to express both universal and regional concerns and the human struggle common to all of us. *Transfer credit: UC; CSU (C2).*

**LIT. 151 SHAKESPEARE (3)**

Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.

Study of representative plays and poems, with an emphasis on Shakespeare's poetic and dramatic skills and his understanding of human nature. Reading, discussion, critical papers. Students will understand Shakespeare's role in the development of English language and literature. *Transfer credit: UC; CSU (C2).*

**LIT. 166 WOMEN ON WRITING (.5)**  
(Credit/No Credit or letter grade.)

A total of eight lecture hours.

Exploration of diverse women's experience as portrayed in a variety of genres. Students will read, hear from and discuss women authors who write in such modes as the novel, short story, poetry, drama, film, news reporting and editorial comment, memoir, biography, and historical fiction. Course participants will examine and celebrate women's voices in contemporary writing. *Also listed as ENGL 166. May be repeated for credit up to a maximum of 3 units. Transfer credit: UC; CSU.*

**LIT. 191 CHILDREN'S LITERATURE (3)**  
(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ESOL 400, or ENGL 836 and READ 836, or ENGL 846, or equivalent.

An overview of the body of world literature deemed appropriate and enriching for children from infancy to adolescence. The course is designed to impart knowledge about and practice in storytelling techniques, as well as practical experience in presenting age-appropriate literature to children and youth. Theory and practice in discerning literary genres, criteria for selection, and techniques for using classic and contemporary literature with young people. *Transfer credit: CSU (C2).*

**LIT. 225 MIRRORS OF TODAY: CONTEMPORARY POETRY (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

The poetry of the last quarter of the twentieth century is both a product of and a reaction against our “postmodern condition.” This course, by situating major examples of this poetry in the relevant social, intellectual, and critical contexts, clarifies the meaning and methods of contemporary poetry in English. *Transfer credit: UC; CSU (C2).*

**LIT. 251 WOMEN IN LITERATURE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

A study of the historical, sociopolitical and cultural concerns of women as these appear in novels, short stories, and poetry. A glimpse into the struggle for self-identity and the forces that interact in the course of this struggle. *Transfer credit: UC; CSU (C2).*

**LIT. 265 ASIAN AMERICAN LITERATURE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

A survey of Asian American literature will acquaint students with the distinct literary and aesthetic qualities and the personal and cultural concerns of American writers of Asian descent. Authors may include Chinese Americans, Japanese Americans, Vietnamese Americans, Pacific Islanders, Korean Americans, Southeast Asian Americans, and Indian Americans. Material will be presented in a variety of genres. *Transfer credit: UC; CSU (C2).*

**LIT. 266 BLACK LITERATURE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

A survey of Black American literature from 1619 to the present. Literature such as autobiographical works, poetry, short stories, drama, folk tales, novellas, and novels will be included to introduce and explore the qualities of Black American writing. *Transfer credit: UC; CSU (C2).*

**LIT. 267 FILIPINO AMERICAN LITERATURE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

A survey of Filipino American writing of the twentieth century will acquaint students with the issues that these American writers of Filipino descent address as they move between different societies. The literature reflects the unique background of shared language and history, as

well as the contrasts between the cultures of the Philippines and the United States. Material will be presented in a variety of genres. *Transfer credit: UC; CSU (C2).*

**LIT. 370 READINGS IN LITERATURE OF THE LATINO IN THE UNITED STATES (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

A study of the historical, sociopolitical, and cultural concerns of Latinos in the U.S. as these appear in novels, short stories, and poetry. A glimpse into the struggle for self-identity and the forces that interact in the course of this struggle. *Transfer credit: UC; CSU (C2).*

**LIT. 373 LATIN AMERICAN LITERATURE IN TRANSLATION (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

Latin America’s innovative literature vividly portrays life and mores of our neighboring countries to the south. This course samples greater- and lesser-known works in translation, revealing important literary trends and themes which have been held in high esteem throughout the world. Material will be presented in a variety of genres. *Transfer credit: UC; CSU (C2).*

**LIT. 416 MODERN EUROPEAN LITERATURE IN TRANSLATION (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

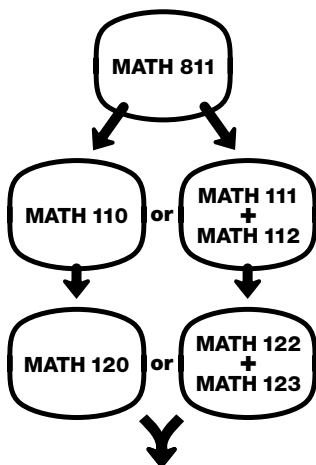
Historically, and especially today, Europe is a multicultural society with people from all regions of the world. This course may be offered as a survey of European literature or may focus on a specific region. *Transfer credit: UC; CSU (C2).*

**LIT. 432 FOLKLORE (3)****(Credit/No Credit or letter grade.)***Three lecture hours per week. Prerequisite: ENGL 100 or 105, or equivalent.*

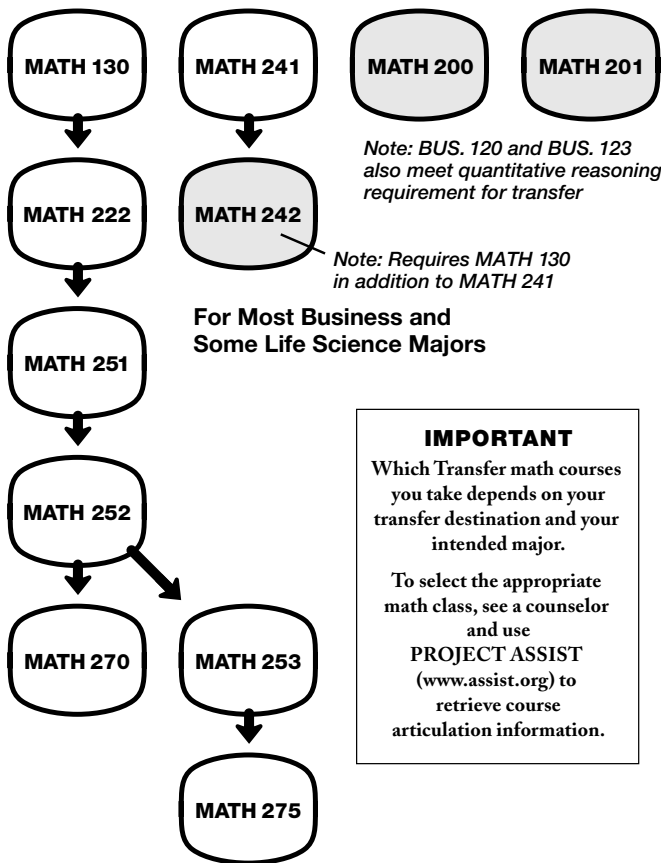
A lively study of folk tales, legends, beliefs, superstitions, proverbs, mythology, folk life, folk speech, folk songs, lyrics, folk epic, and their influence in the literature and culture that form our heritage. Special attention will be given to folklore of various racial and ethnic groups that mold American society. *Transfer credit: UC; CSU (C2).*



### Pre-Algebra and Algebra Sequence



### TRANSFER CLASSES



**IMPORTANT**  
 Which Transfer math courses you take depends on your transfer destination and your intended major.  
 To select the appropriate math class, see a counselor and use PROJECT ASSIST ([www.assist.org](http://www.assist.org)) to retrieve course articulation information.

**For Most Science, Computer Science and Engineering Majors**

### MATHEMATICS (MATH)

Students are encouraged to take the Math placement tests prior to initial placement in courses. Math placement tests are given to students to assist the counselor and the division in guiding them to the appropriate Math course. Proper placement in Math assures that students will begin their college studies in courses where they will have the best chance of success. Initial placement in classes is recommended on the basis of test scores. The tests are given on announced dates throughout the year. The normal sequence of courses for Mathematics majors is 110, 115, 120, 130, 222, 251, 252 and 253. All students are encouraged to meet with a counselor to determine the correct sequence of Math classes for all majors.

Prerequisites for the various courses are detailed in the descriptions that follow. Questions regarding equivalency of courses, transfer credit, and the like should be referred to the Division Dean.

Mathematics courses may require a minimum of one hour by arrangement per week in addition to class hours.

#### MATH 110 ELEMENTARY ALGEBRA (5)

Five lecture hours per week. Prerequisite: Completion of MATH 806 or MATH 811 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.

An introduction to elementary algebra emphasizing basic algebraic concepts and those skills necessary to apply the concepts. Topics will provide an introduction to symbol manipulation and the analytical methods for solving applications problems appropriate to the introductory level. A core of mathematical topics, including real numbers, order of operations, linear equations and graphs, polynomials, and factoring will be presented.

#### MATH 111 ELEMENTARY ALGEBRA I (3)

Three lecture hours per week. Prerequisite: Completion of MATH 806 or MATH 811 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.

An introduction to elementary algebra emphasizing basic algebraic concepts. Topics will provide an introduction to symbol manipulation, and the analytical methods for solving applications problems appropriate to the introductory level. A core of mathematical topics, including: real numbers, order of operations, linear equations and graphs. This course is equivalent to the first half of MATH 110 – Elementary Algebra.

**MATH 112 ELEMENTARY ALGEBRA II (3)**

*Three lecture hours per week. Prerequisite: Completion of MATH 111 with a grade of C or better, or equivalent.*

A continued introduction to elementary algebra emphasizing basic algebraic concepts and those skills necessary to apply the concepts. Topics will continue to provide the use of symbol manipulation, and analytical methods for solving applications problems appropriate to the introductory level. The second half of the basic core of mathematical topics of elementary algebra including polynomials, rational and irrational expressions, and quadratic equations will be presented.

**MATH 115 GEOMETRY (4)**

*Four lecture hours per week. Prerequisite: Completion of MATH 110 with grade C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

A study of Euclidean geometry with aspects of analytic geometry, covering plane and solid figures, the Cartesian coordinate system, and using formal logic.

**MATH 120 INTERMEDIATE ALGEBRA (5)**

*Five lecture hours per week. Prerequisite: Completion of MATH 110 or MATH 112 with a grade C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

Extension of fundamental algebraic concepts and operations, solutions of linear and quadratic equations, individually and in systems, logarithms, determinants, radical equations, complex numbers, and introduction to functions.

**MATH 122 INTERMEDIATE ALGEBRA I (3)**

*Three lecture hours per week. Prerequisite: Completion of MATH 110 or MATH 112 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

This course will cover all material from MATH 120. In conjunction with MATH 123, a review of elementary algebra. Extension of fundamental algebraic concepts and operations, solutions of linear and quadratic equations, individually and in systems, logarithms, determinants, radical equations, complex numbers, and introduction to functions.

**MATH 123 INTERMEDIATE ALGEBRA II (3)**

*Three lecture hours per week. Prerequisite: Completion of MATH 122 with a grade of C or better, or equivalent.*

This course will cover all material from MATH 120. In conjunction with MATH 122, a review of elementary algebra. Extension of fundamental algebraic concepts and operations, solutions of linear and quadratic equations, individually and in systems, logarithms, determinants, radical equations, complex numbers, and introduction to functions.

**MATH 130 TRIGONOMETRY (3)**

*Three lecture hours per week. Prerequisites: Completion of MATH 115 and MATH 120 or MATH 123 with grades of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

Trigonometric functions of real numbers and angles; solutions of triangles; radian measure; graphs of trigonometric functions, trigonometric equations and identities; inverse trigonometric functions; complex numbers; applications of trigonometry. *Transfer credit: CSU (B4). (CAN MATH 8).*

**MATH 150 MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS (3)**

*Three lecture hours and one hour by arrangement per week. Prerequisite: Completion of MATH 120 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

Intended for future elementary school teachers. Topics covered include elementary set theory, numeration, number systems and operations, and elementary number theory, with emphasis on problem solving. This is the first of a three-course math content sequence that most universities now require for teachers. The other two courses are upper-division. *Transfer credit: UC; CSU (B4).*

**MATH 153 MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS II (3)**

*Three lecture hours per week. Prerequisite: Completion of MATH 150 with a grade of C or better, or equivalent.*

Second semester in a two-semester sequence for elementary school teachers. Proportional reasoning (ratio, proportion, rates as functions); statistics (graphs, measures of central tendency, dispersion, normal distribution, sampling methods); probability (event/multistage experiments, odds, expected values); geometric shapes (multi-dimensional figures, congruence transformations, symmetry, tessellations); geometry measurement (systems of measurement, multi-dimensional measurements). *Transfer credit: UC; CSU (B4).*

**MATH 200 PROBABILITY AND STATISTICS (4)**

*Four lecture hours per week plus one hour per week by arrangement. Prerequisite: Completion of MATH 120 or MATH 123 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.*

Basic concepts underlying statistical methods and covers descriptive statistics, probability, probability distributions, hypothesis testing, estimates and sample sizes, correlation and regression, chi-square tests, analysis of variance, and nonparametric statistics. Computer analysis of statistical data is integrated into the course. Applications of statistics to business, life sciences and other areas are included. *Transfer credit: UC; CSU (B4). (CAN STAT 2).*

**MATH 201 QUANTITATIVE REASONING (3)**

Three lecture hours per week. Prerequisite: Completion of MATH 120 or MATH 123 with a grade C or better, or appropriate placement test score and other measures as appropriate, or equivalent.

This course develops the necessary concepts and skills for reasoning logically and quantitatively. It provides an overview, with historical perspective, of various useful and interesting facets of mathematics. It satisfies the quantitative reasoning requirement. Transfer credit: UC; CSU (B4).

**MATH 222 PRECALCULUS (5)**

Five lecture hours per week. Prerequisite: Completion of MATH 130 with a grade of C or better; or equivalent.

Functional and graphing approach to the concepts and skills necessary as background for success in Calculus. Study of more advanced algebra, including logic, theory of equations, translation, rotation and composition approach to graphing, exponential and logarithmic functions, conic sections and a brief review of trigonometry. Transfer credit: UC; CSU (B4). (CAN MATH 16).

**NOTE: The prerequisite for MATH 242 is both MATH 130 and MATH 241. Students planning to take both MATH 241 and 242 should take MATH 130 prior to entering the sequence.**

**MATH 241 APPLIED CALCULUS I (5)**

Five lecture hours per week. Prerequisite: Completion of MATH 120 or MATH 123 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.

Basic techniques of differential calculus. Selected topics from analytic geometry, limits, differentiation, and applications of the derivative. Transfer credit: UC; CSU (B4). (CAN MATH 30; MATH 241 + MATH 242 = CAN MATH SEQ D).

**MATH 242 APPLIED CALCULUS II (3)**

Three lecture hours per week. Prerequisites: Completion of MATH 130 and MATH 241 with grades of C or better, or equivalent.

Basic techniques of integral calculus. The definition, calculation, and application of the integral. Logarithmic and exponential functions. Partial derivatives, multiple integrals, differential equations, and Taylor Series. Transfer credit: UC; CSU (B4). (CAN MATH 32; MATH 241 + MATH 242 = CAN MATH SEQ D).

**MATH 251, 252, 253 CALCULUS WITH ANALYTIC GEOMETRY I, II & III (5, 5, 5)**

Five lecture hours per week. (MATH 251 + 252 + 253 = CAN MATH SEQ C).

**MATH 251 CALCULUS WITH ANALYTIC GEOMETRY I**

Prerequisite: Completion of MATH 222 with a grade of C or better, or appropriate placement test score and other measures as appropriate, or equivalent.

The study of limits and continuity, the derivatives, applications of derivative, the definite integral, improper integrals, the conic sections. Transfer credit: UC; CSU (B4). (CAN MATH 18; MATH 251 + MATH 252 = CAN MATH SEQ B.)

**MATH 252 CALCULUS WITH ANALYTIC GEOMETRY II**

Prerequisite: Completion of MATH 251 with a grade of C or better, or equivalent.

The study of applications of the definite integral, vectors, trigonometric and exponential functions, techniques of integration, polar coordinates and parametric equations. Transfer credit: UC; CSU (B4). (CAN MATH 20; MATH 251 + MATH 252 = CAN MATH SEQ B.)

**MATH 253 CALCULUS WITH ANALYTIC GEOMETRY III**

Prerequisite: Completion of MATH 252 with a grade of C or better, or equivalent.

The study of vector valued functions, sequences and series, Taylor's formula, multivariable functions, differential calculus of multivariable functions, and integral calculus of multivariable functions. Line and surface integrals and differential equations will be covered as time permits. Transfer credit: UC; CSU (B4). (CAN MATH 22).

**MATH 270 LINEAR ALGEBRA (3)**

Three lecture hours per week. Prerequisite: Completion of MATH 251 with a grade of C or better, or MATH 222 with grade of B or better, or equivalent.

The study of systems of linear equations, the algebra of matrices, determinants, vector spaces, linear transformations, the algebra of linear transformations with an introduction to dual spaces, and the applications of vectors and matrices to linear equations and linear transformations. Transfer credit: UC; CSU (B4). (CAN MATH 26).

**MATH 275 ORDINARY DIFFERENTIAL EQUATIONS (3)**

Three lecture hours per week. Prerequisite: Completion of MATH 253 with a grade of C or better, or equivalent.

Differential equations and applications of first and higher order with an emphasis on second order. Other topics may include series solutions about regular singular points, LaPlace transforms, operator techniques, and numerical methods of approximation. A course suitable for mathematics, physical science, and engineering students after they have completed the Calculus sequence. Transfer credit: UC; CSU (B4). (CAN MATH 24).

**MATH 650 MATHEMATICS SUPPLEMENT (.5-2)  
(Credit/No Credit.)**

*Twenty-four lab hours for each .5 unit.*

Based on individual needs, students will have directed learning experiences to improve their mathematical skills which will promote mastery of skills necessary for success in college level mathematics and science courses. These supplementary lessons will be arranged and supervised in the Math Assistance Lab of The Learning Center. Class hours are devoted to work on specific content areas as prescribed for the individual student. *May be repeated for credit a maximum of three times. (Open entry.) (Units do not count toward the Associate Degree.)*

**MATH 805 FUNDAMENTALS OF MATHEMATICS I (2.5)**

*A minimum of 40 lecture hours plus 8 hours by arrangement.*

Basic skills in mathematics, including whole numbers, decimals, an introduction to fractions, and limited geometry and statistics. Using these ideas and skills to solve real life word problems is emphasized. *May be repeated once for credit. (Units do not count toward the Associate Degree.)*

**MATH 806 FUNDAMENTALS OF MATHEMATICS II (2.5)**

*A minimum of 40 lecture hours plus 8 hours by arrangement. Prerequisite: Completion of MATH 805 with a grade of C or better or appropriate placement test score and other measures as appropriate, or equivalent.*

Basic skills in mathematics, including whole numbers, decimals, fractions, percents, ratio and proportion, measurement, geometry, basic statistics, and an introduction to signed numbers and order of operations. Using these ideas and skills to solve real life word problems is emphasized. *May be repeated once for credit. (Units do not count toward the Associate Degree.)*

**MATH 811 FUNDAMENTALS OF MATHEMATICS (3)**

*Five lecture hours per week plus one lab hour per week by arrangement.*

Emphasis on basic skills in mathematics including operations on whole numbers and rational numbers. Applications of these operations will be stressed. *(Units do not count toward the Associate Degree.)*

**MATH 815 BASIC MATH SKILLS LABORATORY (.5-1)  
(Credit/No Credit.)**

*One class hour per week plus lab hours by arrangement.*

Designed to make the mysteries of mathematical concepts more clear and understandable. Students will explore the basic concepts of mathematics by using concrete objects, graphs and group discussions. Workshops and by arrangement hours may be included. Should be taken concurrently with MATH 811. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**MATH 819 MATHEMATICS DEVELOPMENT (3)**

*A minimum of 48 lecture hours.*

This course prepares students for college-level Mathematics. Topics include whole numbers, decimals, fractions, percents, ratio and proportion, measurement, geometry, statistics, introductory symbolic manipulation, order of operations, and analytic methods for solving linear applications. Course emphasis will be on using these ideas and skills to solve problems from everyday life. Students will be required to complete individual and collaborative work with assignments both in-class and outside of class. Students will be required to use tutoring facilities for assignments as well. *Note: This course does not replace any course in Skyline College's required course sequence based on placement testing. (Units do not count toward the Associate Degree.)*

**MUSIC**

The courses of the Music Department are specifically designed to fill the needs of the beginner in music, those who are seeking a career in the music business, those who are preparing to transfer to a university, those who want to teach music, and those who simply want to enhance their musical enjoyment.

Students may be asked to audition or test for placement in sequential courses. **Courses marked with an asterisk (\*) require three hours studio practice per week.**

**MUS. 100 FUNDAMENTALS OF MUSIC (3)**

*Three lecture hours per week.*

Students will learn how to read music notes, rhythms, key signatures, scales and chords. Students will develop listening techniques and explore musical styles and aesthetics. Recital attendance may be required. Appropriate for the general student, this course partially fulfills General Education requirements for the Humanities. *Transfer credit: UC; CSU (C1).*

**MUS. 110 MUSIC THEORY I (3)**

*Three lecture hours per week. Prerequisite: MUS. 100, 301, 377 or 401 with a grade of C or better, or equivalent.*

Extended practice in and application of written music theory skills. Learn melodic, rhythmic and chord structures needed for performance, writing, understanding and developing strong musicianship. Projects may include composition, arrangements, transcriptions and/or orchestrations. *Transfer credit: UC; CSU (C1).*

**MUS. 111 MUSICIANSHIP I (2)**

Two lecture hours and one lab hour per week plus three lab hours per week by arrangement. Prerequisite: MUS. 100, 301, 377, or 401 with a grade of C or better, or equivalent.

Extended practice in and application of music theory expressed in performance and listening skills (musician-ship skills). Application topics may change from term to term. Projects may focus on a specific musical repertoire or a specific musicianship skill, such as sight-singing, ear training, and/or improvisation. May be repeated twice for credit. Transfer credit: UC; CSU (C1).

**MUS. 115 MUSIC, ART AND IDEAS (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

An integrated consideration of art and music as reflections of the philosophies and traditions of cultures. The understanding of the various elements common to the creative efforts of art and music are emphasized as a means to enhance and extend a student's recognition, involvement, and ultimately, appreciation of these efforts. Diverse media are examined to demonstrate the realizations of ideas into works of art and music. Also listed as ART 115. Transfer credit: UC; CSU (C1).

**MUS. 144 CONCERT ENJOYMENT (2)  
(Credit/No Credit.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

A music appreciation course in which live concerts will be attended. The concerts will be selected from a range of musical venues. One week a concert will be attended; the next week it will be critiqued. Group sales keep prices at a minimum. May be repeated for credit a maximum of three times. Transfer credit: CSU (C1).

**MUS. 202 MUSIC APPRECIATION (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

Topics addressed include aesthetics, the variety of ensembles, musical form and design, analysis of the creative process, and criteria for the evaluation of musical performances. Lectures are illustrated by live and recorded examples. Recital attendance may be required. Appropriate for the general student, this course partially fulfills General Education requirements for the Humanities. Transfer credit: UC; CSU (C1). (CAN MUS 8).

**MUS. 204 MUSIC HISTORY (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

A guided tour through the history of music of Western Civilization with the aim of broadening and deepening student awareness and appreciation of changing modes of musical expression across the centuries. Covers

Medieval, Renaissance, Baroque, Classical, Romantic, Modern, and Popular music genres. Concert attendance may be required. Transfer credit: UC; CSU (C1).

**MUS. 240 MUSIC OF THE AMERICAS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

Survey of music of the Americas emphasizing the music of Latin America. Included are African, Latin, Native American, and European influences on American musical forms such as Jazz, Folk, and Popular music and how they intersect with the Classical music tradition. Concert attendance may be required. Partially fulfills General Education requirements for the Humanities. Transfer credit: UC; CSU (C1).

**MUS. 250 WORLD MUSIC (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.

Survey of selected listening and readings from the music of India, China, Japan, Korea, Indonesia, Pacific Islands, Americas, Africa, and the Middle East. A variety of media, guest speakers/performers will be included. Required attendance at a live performance. Transfer credit: UC; CSU (C1).

**MUS. 275 HISTORY OF JAZZ (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Understanding and enjoying music by studying the historical development of jazz from a musical and sociological perspective. Topics include discussion of musical elements, vocal and instrumental ensembles, artistic values, and the role of jazz in our culture. Concert attendance may be required. Partially fulfills General Education requirements for the Humanities. Transfer credit: UC; CSU (C1).

**MUS. 290 INTRODUCTION TO MIDI (MUSICAL  
INSTRUMENT DIGITAL INTERFACE) MUSIC  
(2 or 3)**

Two lecture hours per week plus one lab hour per week by arrangement for 2 units or two lecture hours per week plus three lab hours per week by arrangement for 3 units.

Introduction to the use and implementation of MIDI (Musical Instrument Digital Interface) musical instruments, including interfacing with computers and MIDI software. Ability to read music is desirable but not essential. Transfer credit: CSU.

**MUS. 301, 302, 303, 304 \*PIANO I, II, III, and IV (1 or 2)**

Two lecture hours and one lab hour per week plus three lab hours by arrangement per week..

Students will be auditioned and placed in one of the following classes:

**MUS. 301 \*PIANO I (2)**

*Recommended MUS. 100 or equivalent.*

Beginning piano with an emphasis on music reading, keyboard harmony, improvisation and keyboard technique. *Transfer credit: UC; CSU (C1).*

**MUS. 302 \*PIANO II (2)**

*Prerequisite: MUS. 301 or demonstration of equivalent skill.*

Continuation of Piano I with increased emphasis on sightreading, technique and piano literature. *Transfer credit: UC; CSU.*

**MUS. 303 \*PIANO III (2)**

*Prerequisite: MUS. 302 or demonstration of equivalent skill.*

Piano literature from Baroque, Classic, Romantic and 20th century; keyboard harmony and ensemble. Recital performance may be required. *Transfer credit: UC; CSU.*

**MUS. 304 \*PIANO IV (2)**

*Prerequisite: MUS. 303 or demonstration of equivalent skill.*

Piano literature from Baroque, Classic, Romantic and 20th century; keyboard harmony and ensemble. Recital performance may be required. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**MUS. 350 THE ART OF ROCK, RHYTHM & BLUES I (3)**

*Three lecture hours per week plus two lab hours per week by arrangement.*

A beginning-intermediate performance course for singers, guitarists, bassists, drummers, keyboards and other instrumentalists interested in American contemporary music. Learn to organize a band and negotiate the many aspects of the music business. Students will participate in live performances by arrangement. *Transfer credit: UC; CSU.*

**MUS. 351 THE ART OF ROCK, RHYTHM & BLUES II (3)**

*Three lecture hours per week plus two lab hours per week by arrangement. Recommended: MUS. 350 or equivalent performance experience.*

An intermediate-advanced performance course for singers, guitarists, bassists, drummers, keyboards and other instrumentalists interested in American contemporary music. Learn to organize a band and negotiate the many aspects of the music business. Students will participate in live performances by arrangement. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**MUS. 377 GUITAR I (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus three lab hours per week by arrangement. Recommended: MUS. 100 or equivalent.*

Basic guitar instruction. Stringing, tuning, fingering, playing techniques, notation, chords and chord progressions, reading guitar music, strum techniques, fingerpicking, playing simple melodies, and accompaniment. Emphasis on popular and folk music literature. Introduction to music theory for the guitar and voice. Individual and group instruction. *Transfer credit: UC; CSU.*

**MUS. 378 GUITAR II (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus three lab hours per week by arrangement. Prerequisite: MUS. 377 or demonstrated equivalent skills.*

Continuation of skills begun in MUS 377. Areas covered include barre-chords, CAGED chord/scale theory, blues scales, accompaniment techniques, and major and minor scale patterns. Emphasis on popular music literature. Intermediate music theory for the guitar. Individual and group instruction. *Transfer credit: UC; CSU.*

**MUS. 379 GUITAR III (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus three lab hours per week by arrangement. Prerequisite: MUS 378 or demonstrated equivalent skills.*

Intermediate/advanced guitar instruction. Principles of moveable chord and scale structure (CAGED), advanced strumming and fingerpicking patterns, advanced theory (scale, secondary dominants, and motif development), improvisation, arpeggios, and reading music. Emphasis on American music literature. Individual and group instruction. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**MUS. 380 GUITAR IV (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus 3 hours by arrangement per week. Prerequisite: MUS. 379 or equivalent.*

Continuation of the development of skills begun in MUS 379. Additional material includes motif development, improvising, three notes per string scales, blues techniques, counterpoint, walking bass, modern rhythmic techniques, and other advanced guitar techniques. Individual and group instruction. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**MUS. 383 GUITAR ENSEMBLE I (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus 3 hours by arrangement per week. Prerequisite: MUS 378 or equivalent.*

A course for guitarists in techniques from Doo-Wop and Rhythm and Blues to Rock in a small ensemble. Students work extensively on these styles and within the application with the intention of public performance. Public performance required. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**MUS. 401, 402, 403, 404 \*VOICE I, II, III and IV  
(2, 2, 2, 2)**

*Two lecture hours and one lab hour per week plus three hours by arrangement per week. Recommended: MUS. 401 – MUS. 100 or equivalent. Prerequisites: MUS. 402 – MUS. 401 or placement by audition; MUS. 403 – MUS. 402 or placement by audition; MUS. 404 – MUS. 403 or placement by audition. Transfer credit: UC; CSU.*

**MUS. 401 \*VOICE I**

Training in vocal technique, musical expression and performance skills for the beginning singer. Content includes posture, breathing, tone production, music fundamentals, English diction, and performance preparation techniques.

**MUS. 402 \*VOICE II**

Continuation of training in vocal technique, musical expression and performance skills begun in MUS. 401 for the intermediate singer. Content includes refinement of posture, breathing, tone production, and performance preparation techniques. Further studies in music theory and language diction. Emphasis placed on song interpretation and vocal styles.

**MUS. 403 \*VOICE III**

Continuation of training in vocal technique, musical expression and performance skills begun in MUS. 401 and 402 for intermediate/advanced singers. Content includes refinement of posture, breathing, tone production, and performance preparation techniques. Further studies in music theory and language diction. Emphasis placed on song interpretation and vocal styles.

**MUS. 404 \*VOICE IV**

Continuation of training in vocal technique, musical expression and performance skills begun in MUS. 401, 402 and 403 for advanced singers. Content includes refinement of posture, breathing, tone production, and performance preparation techniques. Further studies in music theory and language diction. Emphasis placed on song interpretation and vocal styles. *May be repeated once for credit.*

**MUS. 420 TRADITIONAL KULINTANG MUSIC (2)  
(Credit/No Credit or letter grade.)**

*Two lecture hours and one lab hour per week plus two lab hours per week by arrangement.*

An introduction to the theory and performance of the traditional bronze gong music and dance of the Southern Philippines, including music and dance of the Maguindanao people of Cotabato, the Maranao people of the Lanao, the Tausug people of Sulu, and the Tiruray people of Upi. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**MUS. 430 CONCERT BAND  
(.5 or 1 or 1.5 or 2 or 2.5 or 3)  
(Credit/No Credit or letter grade.)**

*Three or five class hours per week.*

Study and performance of music for concert band. Performance is required. Open to all students of the College. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**MUS. 450 JAZZ BAND (1 or 2 or 3)**

*Three or five class hours per week.*

Career course that includes organization, training, procedures, arranging, vocals and other phases of dance band work. Performance is required. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**MUS. 470 CONCERT CHOIR (2 or 3)**

*Eight lecture hours and four lab hours per .5 unit. Recommended: MUS. 100 or equivalent.*

Performance of choral music for accompanied and/or unaccompanied choir. The choir may perform alone or in conjunction with other musical organizations on and off campus. Performance is required. *(Open entry.) May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1).*

**MUS. 475 JAZZ CHOIR (2)  
(Credit/No Credit or letter grade.)**

*Three class hours per week. Prerequisite: Vocal audition given by the instructor which includes vocalizing, sight-reading, and tonal memory.*

Study and performance of contemporary vocal/choral music within the popular and jazz idioms. Students who play bass guitar, string bass, or drums are also welcome to enroll in this course. Performance is required. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1).*

**MUS. 665 SPECIAL TOPICS IN MUSIC  
PERFORMANCE (.5-2 or 1 or 2)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus three lab hours by arrangement; no lab hours are required for the 1 unit class. Prerequisite: Successful completion of a beginning applied music course or demonstration of equivalent skill in the performance area.*

Advanced study in specialized areas of the performing arts. Designed for vocalists, pianists, and instrumentalists, this course provides for extended in-depth study of both performance practice and performance art using selected themes as listed in the class schedule. *(Open entry.) May be repeated for credit as topics vary. Transfer credit: UC; CSU.*

**NUTRITION**

See listings under Family and Consumer Sciences.

## OCEANOGRAPHY

### OCEN 100 SURVEY OF OCEANOGRAPHY (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Discussion of selected topics in oceanography designed to illustrate the scientific method and provide the student with a basic understanding of the nature of the world's oceans. An introduction to the physical, chemical, biological, and geological aspects of the sea. Transfer credit: UC; CSU (B1).

### OCEN 101 OCEANOGRAPHY LABORATORY/ FIELD STUDY (1)

Three laboratory/field hours per week. Prerequisite: Completion of or concurrent enrollment in OCEN 100.

Introductory exercises in sediments, waves and sediment transport, bathymetry of ocean basins, materials of ocean crust and sea floor, ocean currents, tides, estuaries, physical and chemical properties of seawater, and forms and diversity of marine life. Field trips included. Transfer credit: UC; CSU (B3).

## OFFICE ADMINISTRATION

See listings under Computer Applications & Office Technology.

## PARALEGAL STUDIES

### LEGL 240 INTRODUCTION TO LAW (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

The study of law, the legal profession and the court system. Emphasis is on the roles and relationships of workers in the American legal system. Some attention to administrative agency justice and to recent developments in legal services, law-related management, and new technology. Recommended for students considering work in law-related occupations. Transfer credit: CSU.

### LEGL 245 LEGAL OPERATIONS (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

This course is designed to expose students to the variety of law-related job opportunities and many of the skills necessary to perform those jobs, such as legal analysis, terminology, interviewing, investigation, litigation, law office management, and informal and formal advocacy before administrative agencies. Transfer credit: CSU.

### LEGL 250 LEGAL RESEARCH (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

The course is designed to provide students with a working knowledge of major resources in the law library. Includes practice in finding and interpreting case law,

statutes and administrative regulations. Student is given experience in using digests, looseleaf services, citators, encyclopedias, treatises and legal periodicals. Transfer credit: CSU.

### LEGL 252 PRINCIPLES OF CIVIL AND ADMINISTRATIVE PROCESS (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

An in-depth study of case processing in civil and administrative matters. An emphasis on the systems approach and origin-to-disposition studies of typical civil and administrative matters. Especially helpful for students enrolled in the courts option, the legal secretary, or legal assistant programs. Transfer credit: CSU.

### LEGL 260 ADVANCED LEGAL RESEARCH AND WRITING (3)

Three lecture hours per week. Prerequisite: LEGL 250.

Build legal research and writing skills by preparing a series of projects, including documents for real cases. Students will polish writing skills so that they can prepare professional high quality documents and effectively communicate legal ideas. Transfer credit: CSU.

### LEGL 265 LABOR LAW AND COLLECTIVE BARGAINING (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A survey course examining the role of labor in the American community. Specific course content will include the history of the labor movement, administration of labor unions, contemporary labor law, and an analysis of the collective bargaining process. Scope is expanded to include public sector labor relations as well as its traditional private sector counterpart. Transfer credit: CSU.

### LEGL 266 PROBATES, ESTATES, AND TRUSTS (1 or 3)

Three lecture hours per week. Recommended: One or more law related courses completed or taken concurrently and eligibility for ENGL 836.

A study of the fundamental principles of the law of wills and trusts, the administration of estates, and gift, inheritance and estate taxes. Transfer credit: CSU.

### LEGL 304 CONCEPTS OF CRIMINAL LAW (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Historical development and philosophy of criminal law and constitutional provisions. Special emphasis on legal definitions, the classifications of crime and their application to the administration of justice system. Study of case law, methodology, and concepts of law as a social force. Also listed as ADMJ 104. Transfer credit: CSU.



**LEGL 305 JUDICIAL PROCESS IN CALIFORNIA (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

An overview of the federal court system, the California courts, and administrative agency tribunals. Careful examination of roles and relationships of the courthouse work group. Also listed as ADMJ 205. Transfer credit: CSU.

**LEGL 306 LEGAL ASPECTS OF EVIDENCE (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

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 and interpreting individual rights and case studies. Also listed as ADMJ 106. Transfer credit: CSU.

**LEGL 320 CRIMINAL INVESTIGATION (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

A course designed for introductory and in-service Administration of Justice students to provide orientation to general and specific aspects of crimes and detection. The course will also cover crime scene searches and suspect apprehension. Also listed as ADMJ 120. Transfer credit: CSU.

**LEGL 443 LAW OFFICE PROCEDURES (1-3)**

A total of sixteen lecture hours plus twenty-four lab hours by arrangement per unit. Prerequisites: CAOT 212 or 214 and BUS. 400 or equivalent skills. Recommended: Eligibility for ENGL 836.

Intensive training in procedures applicable to secretarial duties in law offices. Emphasis on legal terminology, legal documents and correspondence, dictation, and transcription. Also listed as BUS. 443. May be repeated for credit up to a maximum of 4 units. Transfer credit: CSU.

**PHILOSOPHY****PHIL 100 INTRODUCTION TO PHILOSOPHY (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105.

A survey of philosophical views on fundamental questions concerning consciousness, reality, God, knowledge, free will, moral values, and political ideals. Incorporates an introduction to the methods of logic and critical thinking. Transfer credit: UC; CSU (C2). (CAN PHIL 2.)

**PHIL 103 CRITICAL THINKING (3)**

(Credit/No Credit or letter grade.)

Three lecture hours and one lab hour by arrangement per week. Recommended: Eligibility for ENGL 836.

An informal logic and language course that develops general learning skills, aids to understanding, creative problem-solving, effective communication, and processes of evaluation that are helpful to other areas of study. Transfer credit: UC; CSU (A3).

**PHIL 109 CRITICAL THINKING AND WRITING (3)**

Three lecture hours and one lab hour by arrangement per week. Prerequisite: ENGL 100 or ENGL 105 with a grade of C or better.

Designed to develop critical thinking and writing skills. Presents techniques for analyzing, constructing and reconstructing deductive and inductive arguments as used in the social and natural sciences. Develops the ability to create and refine logically rigorous arguments in essay form, with particular emphasis on advanced techniques of writing. Transfer credit: UC; CSU (A3).

**PHIL 160 HISTORY OF WESTERN PHILOSOPHY:****ANCIENT AND MEDIEVAL (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

The history of ancient philosophy, the early Greek Philosopher through the Medieval Period. Special emphasis on the Pre-Socratics, Plato, Aristotle, Augustine, and Aquinas. Topics include philosophy and religion, myth, science, and society. Transfer: UC; CSU (C2).

**PHIL 175 HISTORY OF WESTERN PHILOSOPHY:****16TH-18TH CENTURY (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

The history of Western Philosophy from Descartes through Kant, set in the context of the scientific revolution, the Protestant Reformation, and the emergence of modern political institutions. Specifics include Erasmus, Bacon, Pascal, Hobbes, Spinoza, Locke, Leibniz, Berkeley, Hume and Rousseau. Transfer credit: UC; CSU (C2).

**PHIL 200 INTRODUCTION TO LOGIC (3)**

Three lecture hours and one lab hour per week by arrangement. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent; and eligibility for MATH 120 or equivalent.

An introduction to symbolic logic with an emphasis on proof systems for propositional and predicate logic. Includes translation of English sentences into a symbolic language, patterns and techniques of deductive and inductive inference, and basic probability theory. Transfer credit: UC; CSU (A3). (CAN PHIL 6.)

**PHIL 240 INTRODUCTION TO ETHICS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105.

A critical examination of philosophical views about ethics including accounts of human nature and human potential; theories of value, rightness and justice; ideals of character, personal aims, action, ways of living, and other topics. Contemporary moral issues will be explored in depth. Transfer credit: UC; CSU (C2). (CAN PHIL 4.)

**PHIL 300 INTRODUCTION TO WORLD RELIGIONS (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105.

An exploration of the religions of the world, their origin, history, beliefs, practices, art, and rituals. Includes varieties of Hinduism, Buddhism, Judaism, Christianity, Islam, and other selected traditions. Transfer credit: UC; CSU (C2).

**PHIL 320 ASIAN PHILOSOPHY (3)**

(Credit/No Credit or letter grade.)

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

A general survey of the philosophical developments in India, China and Japan. Major philosophical theories of these countries will be compared and evaluated. The philosophical impact on Asian existence, human destiny, ethical and metaphysical views will be examined. Course includes an introduction to the challenges of comparative study. Transfer credit: UC; CSU (C2).

## PHYSICAL EDUCATION (MEN, WOMEN, CO-ED)

The Physical Education courses listed below are for men or women or are coeducational as shown in parentheses following the number of the course (M, W, C).

In order to raise skill levels, and on the advice of the instructor, some physical education classes may be taken up to four times for credit. Repeated course units might not be accepted for transfer at some four-year institutions.

### Adaptive Physical Education (ADAP)

#### ADAP 348 (C) ADAPTIVE PHYSICAL EDUCATION (1 or .5-1)

(Credit/No Credit or letter grade.)

One and one half to three class hours and one hour by arrangement per week. Prerequisite: Physician's recommendation or assignment by the College Health Counselor or Division Dean (on recommendation of instructor). Recommended: Concurrent enrollment in ADAP 349 or ADAP 357.

Designed to meet the individual needs of each student. Recreational sports of limited activity, isometric and isotonic programs, and remedial rehabilitative activities.

Corrective programs are available. Individual student programs are developed after consultation with physician. (Variable unit sections are open entry.) May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

#### ADAP 349 (C) FUNCTIONAL ADAPTED FITNESS ASSESSMENT (1 or .5-1)

(Credit/No Credit or letter grade.)

One and one half to three class hours per week. Corequisite: Concurrent enrollment in ADAP 348 or ADAP 356, and physician's approval.

Individual and small group assessment and participation in functional fitness, emphasizing flexibility, strength, balance, coordination and general mobility. (Variable unit sections are open entry.) May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

#### ADAP 356 (C) ADAPTED TOTAL FITNESS (1 or .5-1) (Credit/No Credit or letter grade.)

A minimum of 48 class hours plus one hour per week by arrangement for 1 unit sections; a minimum of 24 class hours plus one hour per week by arrangement per .5 unit for variable sections. Prerequisite: Physician's recommendation or assignment by the College Health Counselor or Division Dean (on recommendation of instructor). Corequisite: Concurrent enrollment in ADAP 357 or ADAP 349.

Individual and group participation in exercise using mats, chairs, cardio and weight equipment appropriate for a verified physical disability. (Variable unit sections are open entry.) May be repeated for credit a maximum of three times. Transfer credit: CSU.

#### ADAP 357 (C) PHYSICAL EDUCATION FOR INDIVIDUALS WITH SPECIAL NEEDS (1 or .5-1)

(Credit/No Credit or letter grade.)

A minimum of 48 class hours plus one hour per week by arrangement for 1 unit sections; a minimum of 24 class hours plus one hour per week by arrangement per .5 unit for variable sections. Prerequisite: Physician's recommendation or assignment by the College Health Counselor or Division Dean (on recommendation of instructor). Corequisite: Concurrent enrollment in ADAP 356 or ADAP 350.

Individual and small group physical fitness needs assessment and participation in exercise, movement patterns, and learning how to accommodate limitations necessary to succeed in a variety of adapted physical education courses. (Variable unit sections are open entry.) May be repeated for credit a maximum of three times. Transfer credit: CSU.

**Combatives (COMB)****COMB 301, 302 (C) WRESTLING, BEGINNING AND INTERMEDIATE (.5 or 1)****(Credit/No Credit or letter grade.)***One and one half or three class hours per week. Prerequisites: Intermediate – Beginning Wrestling or equivalent.***Beginning** – Instruction in rules and scoring systems. Instruction in take-downs, escapes, reversals, break-downs, rides, and pinning combinations. *Transfer credit: UC; CSU (E2).***Intermediate** – Competition in dual competition and a class tournament. *May be repeated twice for credit. Transfer credit: UC; CSU (E2).***COMB 401 (C) SELF DEFENSE (.5 or 1)****(Credit/No Credit or letter grade.)***One and one half or three class hours per week.*A course designed to gain knowledge about basic self defense. Areas covered will be mental preparation, avoidance of situations conducive to assault, punching, kicking, pressure points and defenses. Both non-violent and violent defenses will be dealt with. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).***COMB 404 (C) BEGINNING SHOTOKAN KARATE (.5 or 1)****(Credit/No Credit or letter grade.)***One and one half or three class hours and one hour by arrangement per week.*This course will introduce the student to the skills and techniques of the Japanese art of Shotokan Karate. Emphasis will be placed on physical conditioning, basic strikes and blocks, forms (kata), sparring techniques, self-discipline and self-development. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).***COMB 405 (C) INTERMEDIATE AND ADVANCED SHOTOKAN KARATE (.5 or 1)****(Credit/No Credit or letter grade.)***One and one half or three class hours and one hour by arrangement per week. Prerequisite: COMB 404.*This course will reinforce the basic skills and techniques of the Japanese art of Shotokan Karate. Intermediate and advanced techniques will be introduced as appropriate. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).***Dance (DANC)****DANC 105 (C) DANCE AND WELLNESS (.5 or 1) (Credit/No Credit or letter grade.)***One and one half or three class hours per week.*This course is designed to introduce students with physical limitations due to injury, illness or physical disability to the fundamentals of dance. Course emphasis is tailored to the development of individuals' creative potential. Students will compose final group projects. Opportunities may include participation in dances choreographed by the instructor. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).***DANC 110 (C) MODERN DANCE (.5 or 1) (Credit/No Credit or letter grade.)***One and one half or three class hours and one hour by arrangement per week.*Warm-up and floor movement with emphasis on proper techniques, creativity, style and self expression. Students will learn short dance phrases and will be expected to choreograph and perform a modern dance by the end of the semester. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2, C1).***DANC 130 (C) JAZZ DANCE (.5 or 1) (Credit/No Credit or letter grade.)***One and one half or three class hours per week.*Jazz dance warm-up and introduction to various movement forms with emphasis on rhythm, style, and proper techniques. Students will learn a variety of jazz phrases and will be expected to choreograph and perform a jazz dance at the end of the semester. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2, C1).***DANC 140 (C) BALLET (.5 or 1) (Credit/No Credit or letter grade.)***One and one half or three class hours and one hour by arrangement per week.*Basic barre, floor technique and movement fundamentals with emphasis on body control, form and special patterns. Students will learn a variety of dance phrases and will be expected to perform a ballet dance at the end of the semester. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2, C1).***DANC 161 (C) TANGO ARGENTINO (.5 or 1) (Credit/No Credit or letter grade.)***A minimum of 24 or 48 class hours.*Designed to introduce students to the essence of Argentine tango (the dance of love) as well as basic improvisational skills. Viewing tango as a language, students will develop musicality and focus on the connection between partners in order to dance confidently in social settings around the world. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

## PHYSICAL EDUCATION (DANCE)

### **DANC 162 (C) TANGO MILONGA (.5 or 1) (Credit/No Credit or letter grade.)**

*A minimum of 24 or 48 class hours. Prerequisite: DANC 161 or equivalent.*

Students will learn more advanced steps which are recognizable from professional tango productions. Tango students will be introduced to Milonga, an Argentine dance which is the precursor to the tango. Viewing tango and Milonga as a language, students will develop musicality and focus on the connection between partners in order to dance confidently in social settings. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **DANC 163 (C) TANGO BUENOS AIRES (.5-1) (Credit/No Credit or letter grade.)**

*One and one half to three class hours per week. Prerequisite: Successful completion (grade of C or better) of DANC 161 and 162 or equivalent.*

Students will begin to develop more confidence, demystifying and internalizing the tango's structural elements and intricacies. This class culminates with tango performances. *(Open entry.) May be repeated for credit a maximum of three times. Transfer credit: CSU (E2).*

### **DANC 167 (C) SWING DANCE I (.5 or 1) (Credit/No Credit or letter grade.)**

*A total of 24 or 48 class hours.*

Beginning level instruction, demonstration and practice in swing dances, such as the Charleston, Lindy Hop, Balboa, Shag, East Coast Swing, and West Coast Swing. *Transfer credit: CSU (E2).*

### **DANC 168 (C) SWING DANCE II (.5 or 1) (Credit/No Credit or letter grade.)**

*A total of 24 or 48 class hours. Prerequisite: DANC 167 or equivalent.*

Intermediate instruction, demonstration and practice in swing dances such as the Charleston, Lindy Hop, Balboa, Shag, East Coast Swing and West Coast Swing. *Transfer credit: CSU (E2).*

### **DANC 169 (C) SWING DANCE III (.5 or 1) (Credit/No Credit or letter grade.)**

*A total of 24 or 48 class hours. Prerequisite: DANC 168 or equivalent.*

Advanced instruction, demonstration and practice in swing dances such as the Charleston, Lindy Hop, Balboa, Shag, East Coast Swing, and West Coast Swing. *May be repeated twice for credit. Transfer credit: CSU (E2).*

### **DANC 330 (C) CREATIVE DANCE (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours per week.*

Introduction to principles of dance composition through individual experiences, studies in use of varied stimuli, processes of dance construction and simple compositional forms. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2, C1).*

### **DANC 350 (C) CARDIO DANCE (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week.*

Vigorous steps, stretches and toning movements from many sources: folk, jazz, ballet, modern, rock, etc., are choreographed to various rhythms to compose the Cardio Dance class. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1, E2).*

### **DANC 390 (C) DANCE COMPOSITION/THEORY/ CHOREOGRAPHY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week.*

This course is designed to introduce the student to aesthetic, philosophical and theoretical concepts regarding composition. Designed for both the serious dance student as well as students interested in exploring a new art form. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

### **DANC 400 (C) DANCE PRODUCTION (.5-2) (Credit/No Credit or letter grade.)**

*One and one half to six class hours and two to five hours by arrangement per week.*

Theory and practice in dance composition, evaluation and program production. The participant will become familiar with all types of choreography principles and stage production. Includes emphasis on a variety of dance forms from traditional Western European to ethnic. Rehearsal times will be arranged with the instructor. *(Open entry.) May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (C1, E2).*

### **DANC 440 (C) PRINCIPLES OF DANCE COMPANY/ARTS PROGRAM MANAGEMENT (.5-2)**

**(Credit/No Credit or letter grade.)**

*One and one half to six class hours and two to five hours by arrangement per week.*

This course includes all phases of arts event planning: creating an event calendar; performance themes and standards; funding and budgeting; and promotion and publicity. *(Open entry.) May be repeated for credit a maximum of three times. Transfer credit: CSU.*

### **DANC 450 (C) INTERMEDIATE/ADVANCED DANCE PRODUCTION (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and two hours by arrangement per week. Prerequisite: DANC 400 or equivalent.*

This course is designed for the intermediate/advanced student to improve technical dance training and performance skills. Aesthetic, philosophical and theoretical concepts regarding performing will be covered. Students will be required to perform in a dance choreographed by advanced student or faculty. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**DANC 665 (C) SELECTED TOPICS: DANCE IN CULTURAL CONTEXT (.5 or 1)**  
(Credit/No Credit or letter grade.)

*One and one half or three class hours per week.*

This course is designed to introduce students to the fundamentals of different styles of dance from selected cultures. It is designed for the serious dancer interested in learning ethnic dance forms as well as the general student. In-depth study of selected dance forms such as Flamenco, Congolese, and Capoeira. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**Fitness (FITN)**

**FITN 106 (C) VARSITY CONDITIONING (.5 or 1 or 1.5 or 2)**

*A minimum of 24 class hours per .5 unit.*

This course is intended for out-of-season varsity athletes to provide fitness and strength programs that will prepare them for intercollegiate competition. May include strength, cardiovascular, agility, speed and sport specific training. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**FITN 110 (C) ADULT CONDITIONING (.5 or 1 or 2)**  
(Credit/No Credit or letter grade.)

*A minimum of 24 class hours plus one hour per week by arrangement per .5 unit.*

Designed to introduce students to various modes of physical activities such as stretching, walking and jogging, weight training and informal games for the development of their personal fitness programs. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**FITN 112 (C) CROSS TRAINING (.5 or 1 or 1.5 or 2)**  
(Credit/No Credit or letter grade.)

*A minimum of 24 class hours per .5 unit.*

A course designed to incorporate strength training and fitness concepts for overall body conditioning using a variety of fitness activities that may include Spinning, weight training or resistance exercise, yoga, pilates, hiking, running, and/or fitness walking. Students will improve fitness levels, increase strength and flexibility, and lose body fat while participating in a variety of fitness activities. *May be repeated for credit a maximum of three times. Transfer credit: CSU (E2).*

**FITN 116 (C) BODY CONDITIONING (.5 or 1 or 2)**  
(Credit/No Credit or letter grade.)

*A minimum of 24 class hours per .5 unit.*

Instruction and personal fitness program development. Emphasis on various stretching and flexibility methods, the design of individual strength programs, and latest information of scientific application to developing aerobic fitness and wellness. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**FITN 160 (W) WOMEN'S CONDITIONING (.5 or 1)**  
(Credit/No Credit or letter grade.)

*One and one half or three class hours and one hour by arrangement per week.*

Study and practice of movements to develop or improve individual physical fitness. Exercises range from mild to vigorous. Individual fitness programs will be developed. Endurance activities are stressed. Emphasis on understanding the needs and benefits of regular and continuing exercise. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**FITN 201, 202 (M) MEN'S WEIGHT CONDITIONING BEGINNING AND INTERMEDIATE (.5 or 1)**

(Credit/No Credit or letter grade.)

*One and one half or three class hours and one hour by arrangement per week. Prerequisite: Intermediate – Beginning Weight Conditioning or equivalent.*

**Beginning** – Instruction and practice in the elementary lifts and procedures of weight training. Emphasis on form and techniques, safety-procedures and strength values of weight lifting using barbells, weight machines and similar equipment. *Transfer credit: UC; CSU (E2).*

**Intermediate** – Specialization and development of individual programs. *May be repeated twice for credit. Transfer credit: UC; CSU (E2).*

**FITN 205 (C) WEIGHT CONDITIONING (.5 or 1 or 2)**  
(Credit/No Credit or letter grade.)

*A minimum of 24 class hours plus one hour per week by arrangement per .5 unit.*

Individual weight training program instruction and practice to include elementary to advanced exercises and procedures. Physiology of exercise, nutrition, safety, basic to advanced program development for individual workout programs. Use of various equipment and techniques for the development of overall strength, endurance, flexibility and improvement of body composition. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**FITN 210 (W) WOMEN'S INDIVIDUAL WEIGHT CONDITIONING (.5 or 1)**  
(Credit/No Credit or letter grade.)

*One and one half or three class hours and one hour by arrangement per week.*

Vigorous weight training in an individual program of exercises designed to build specific strength with regard to each student's goal. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

## PHYSICAL EDUCATION (FITNESS – INDIVIDUAL SPORTS)

### **FITN 301 (C) SPINNING®**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours per week.*

Spinning is an aerobic exercise performed on a stationary racing bicycle and done to high cadence music. An exciting and fast paced workout, open to anyone who is interested in losing body weight or improving their aerobic conditioning. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 303 (C) TRAIL HIKING (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week.*

Designed to educate students in the development of cardiovascular fitness and healthy lifestyle through the media of hiking. An indepth experience on styles, various hiking trails, equipment and techniques, as well as the development and evaluation of fitness through hiking. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 304 (C) WALKING FITNESS (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week. Prerequisite: Completion of the first (pre) tests of the Physical Education Evaluation Program.*

This course will help students gain an understanding of cardiovascular fitness through walking. Students will understand and evaluate their individual levels of cardiovascular fitness and develop a personal walking program. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 305 (C) CARDIOVASCULAR DEVELOPMENT – RUNNING EMPHASIS, BEGINNING TO ADVANCED (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week.*

Instruction in methods to achieve total fitness through cardiovascular activities with emphasis on running. The advanced student (any student repeating the course) must submit an objective for the semester related to his/her running. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 332 (C) STRETCHING AND FLEXIBILITY (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week.*

This course is designed to help condition and tone the body, to increase circulation and flexibility, and to improve total body functions through the use of proper breathing techniques, stretching and selected postures. This course will also help decrease the level of stress through meditation and relaxation exercises. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 334 (C) YOGA (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours and one hour by arrangement per week.*

A course designed to educate the student in Hatha Yoga. A fitness course using yoga postures to increase flexibility, strength and endurance; improve balance, posture and breathing; and teach relaxation techniques. This course is appropriate for all ages and abilities. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **FITN 335 (C) PILATES (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*One and one half or three class hours per week.*

Pilates method exercise is a form of isometric exercise that simultaneously stretches, strengthens, tones and aligns the body while eliminating excess tension and strain on the joints. Pilates is designed to improve posture, coordination and balance; build strength; increase flexibility and agility; and provide a refreshing mind-body workout. *May be repeated for credit a maximum of three times. Transfer credit: UC, CSU (E2).*

### **FITN 400 (C) FITNESS ACADEMY (.5-3)**

**(Credit/No Credit or letter grade.)**

*One and one half to nine class hours and one to three hours by arrangement per week.*

Various fitness activities will be employed by the students to raise their individual fitness levels. Assessments of the students' fitness levels will be made once they have completed a series of fitness tests. From the results of these tests, personal exercise regimens will be prepared for each student. Students must meet with the instructor for orientation. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

## **Individual Sports (INDV)**

### **INDV 101, 105 (C) ARCHERY, BEGINNING AND INTER- MEDIATE (.5 or 1)**

**(Credit/No Credit or letter grade.)**

*A total of 24 or 48 class hours. Prerequisite: INDV 105 – INDV 101 or equivalent.*

**Beginning** – Fundamentals of target archery; individual and team competition. Study of rules, scoring terminology and care and selection of archery equipment. *Transfer credit: UC; CSU (E2).*

**Intermediate** – Continued instruction in techniques (with increasing distances), games and competitions, team and individual competition. *May be repeated twice for credit. Transfer credit: UC; CSU (E2).*

**INDV 121, 125 (C) BADMINTON, BEGINNING AND  
ADVANCED (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours per week. Prerequisite: Advanced – Beginning Badminton or equivalent.

**Beginning** – Rules and strategies of badminton; fundamentals of grip, strokes, footwork and court coverage, drills and competition, testing program, tournaments in singles and doubles. Transfer credit: UC; CSU (E2).

**Advanced** – Emphasis on strategy, tactics, footwork, doubles team work, and singles game. May be repeated twice for credit. Transfer credit: UC; CSU (E2).

**INDV 126 (C) COED CLUB BADMINTON (.5 or 1)****(Credit/No Credit or letter grade.)**

A minimum of 24 or 48 class hours. Prerequisite: INDV 121 or equivalent.

Coed class which prepares students for badminton competition through drills and physical training; in class competition. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 160 (C) GOLF (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours and one hour by arrangement per week.

Lectures on techniques, rules, etiquette, and philosophy for beginning, intermediate and advanced golf instruction. Practical experience associated with grip, stance, swings relative to iron and wood shots. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 165 (C) GOLF: SHORT GAME (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours per week.

Designed to improve the skills of pitching, chipping, putting and greenside sand play. Class will be held both at a practice facility and at a nine-hole golf course for practical application of skills. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 167 (C) GOLF COURSE STRATEGIES (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours per week. Recommended: INDV 160 or equivalent.

Designed for students who have established skills in golf who want to play competitively and develop a handicap with the Northern California Golf Association. Students will participate in structured play and learn numerous aspects of golf strategy, scoring and golf course management. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 168 TOURNAMENT GOLF (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours per week. Prerequisite: INDV 160, INDV 165 or INDV 167, or equivalent.

Emphasis on preparation for tournament golf. Includes an overview of rules pertaining to stroke play and match play tournaments, etiquette, and strategies of tournament play. Includes drills and instruction for skill improvement and an emphasis on tournament play at local nine hole courses. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 169 (C) GOLF SWING ANALYSIS (.5 or 1)****(Credit/No Credit.)**

A total of 24 or 48 class hours plus one hour per week by arrangement.

Through the use of video swing analysis, drills, and instructor feedback, students will increase golf swing competency in a practical setting and in tournament play. The course will be conducted at a local golf range, local nine-hole courses, and hours by arrangement at the campus. Open to all levels. This is a companion course to INDV 160, 165, 167 and 168. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**INDV 182 (C) INTRODUCTION TO TAI CHI (.5 or 1)****(Credit/No Credit or letter grade.)**

A minimum of 24 or 48 class hours.

An introduction to Tai Chi as an internal martial art using flowing, circular movements to generate power and energy, such that “soft” is able to overcome “hard.” Students will learn the 37-posture Yange style short form to enhance balance, posture, concentration, circulation, and relaxation. May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).

**INDV 251 (C) BEGINNING TENNIS (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours and one hour by arrangement per week.

Instruction in the fundamental skills of the service, forehand and the backhand strokes; court strategy and the rules of play; testing program in all tennis skills and rules. Includes use of automatic ball machine. Transfer credit: UC; CSU (E2).

**INDV 253, 255 (C) TENNIS, INTERMEDIATE AND****ADVANCED (.5 or 1)****(Credit/No Credit or letter grade.)**

One and one half or three class hours and one hour by arrangement per week. Prerequisite: Intermediate – INDV 251 or demonstration of equivalent skills. Advanced – INDV 253 or demonstration of equivalent skills.

Continued instruction in the fundamental skills of tennis. Emphasis will be placed on singles and doubles strategy, including the essence of net play. Forehand, backhand, and serve will be emphasized as offensive and defensive weapons. Competition will be included and tournaments will be held. INDV 255 may be repeated once for credit. Transfer credit: INDV 253 – UC; CSU (E2); INDV 255 – UC; CSU (E2).

**Physical Education (P.E.)**

**P.E. 105 (C) THE STUDENT-ATHLETE EXPERIENCE (2)  
(Credit/No Credit or letter grade.)**

*Two lecture hours per week.*

A survey course examining the historical, sociological, health and compliance issues related to student athletes at the community college and university level. Topics include gender issues, racism, and performance-enhancing drug use in sports. Students will be able to cite community college eligibility requirements and matriculation requirements upon completion of this course. *Transfer credit: CSU.*

**P.E. 203 (C) SPORTS MEDICINE CLINICAL  
INTERNSHIP (.5-4)**

**(Credit/No Credit or letter grade.)**

*Thirty two hours per .5 unit. Prerequisite: Completion of, or concurrent enrollment in, either P.E. 201 or P.E. 202, or equivalent.*

An in-depth practical learning experience within the sports medicine program. Students assist in injury prevention, emergency care, rehabilitation, and taping and bracing for varsity athletes under the supervision of the certified athletic trainer. Clinical hours are designed to assist in developing the skills required for NATA competencies. *May be repeated for credit a maximum of three times. (Open entry.) Transfer credit: CSU.*

**P.E. 211(C) PREVENTION AND CARE OF ATHLETIC  
INJURIES (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours per week. Corequisite: P.E. 212.*

Introduction to basic principles of prevention, assessment, treatment and rehabilitation of athletic injuries. Application of basic principles of anatomy, physiology, pathology and biomechanics to athletic injuries. Additional hands-on experience is available through the Sports Medicine Clinical Internship course. *Transfer credit: UC; CSU.*

**P.E. 212 (C) PREVENTION AND CARE OF ATHLETIC  
INJURIES LAB (1)**

**(Credit/No Credit or letter grade.)**

*Three laboratory hours per week. Prerequisite: Satisfactory completion (grade of C or better) of, or concurrent enrollment in, P.E. 211, or equivalent.*

Introduction to basic clinical skills for the prevention, assessment, treatment and rehabilitation of athletic injuries. Instruction applies basic principles of anatomy, physiology, pathology and biomechanics to the prevention and care of athletic injuries. Additional hands-on experience is available through the Sports Medicine Clinical Internship course. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**P.E. 213 (C) SPORTS MEDICINE (2)  
(Credit/No Credit or letter grade.)**

*Two lecture hours per week. Prerequisite: Satisfactory completion (grade of C or better) of P.E. 211 and P.E. 212, or equivalent. Corequisite: P.E. 214.*

Intermediate to advanced level concepts of prevention, assessment and treatment of athletic injuries. Application of basic principles of anatomy, physiology, pathology and biomechanics to the prevention and care of athletic injuries. Additional hands-on experience is available through the Sports Medicine Clinical Internship course. *May be repeated once for credit. Transfer credit: UC; CSU.*

**P.E. 214 (C) SPORTS MEDICINE LAB (1)  
(Credit/No Credit or letter grade.)**

*Three laboratory hours per week. Prerequisite: Satisfactory completion (grade of C or better) of P.E. 211 and P.E. 212, or equivalent; and satisfactory completion (grade of C or better) of, or concurrent enrollment in, P.E. 213.*

Intermediate to advanced level concepts of prevention, assessment and treatment of athletic injuries. Application of basic principles of anatomy, physiology, pathology and biomechanics to the prevention and care of athletic injuries. Additional hands-on experience is available through the Sports Medicine Clinical Internship course. *May be repeated twice for credit. Transfer credit: UC; CSU.*

**P.E. 270 (C) INTRODUCTION TO HUMAN  
PERFORMANCE (2)**

**(Credit/No Credit or letter grade.)**

*Two lecture hours per week.*

Exploration of the broad spectrum of kinesiology and human performance as an academic discipline. Explores fundamental concepts and meaning of movement/physical activity, diversity of humans as moving things, professional/career options, current issues, personal characteristics/professional responsibilities, and human performance careers, and initiates professional portfolio development. *Transfer credit: CSU (E1).*

**P.E. 301 (C) INTRODUCTION TO PERSONAL  
TRAINING (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or equivalent.*

Prepares students to take the National Council of Strength and Fitness Certified Personal Trainer Exam. Study of basic human anatomy, exercise physiology, health screening and assessment, nutrition, aerobic and anaerobic conditioning. *Transfer credit: CSU.*



**Team Sports (TEAM)****TEAM 100 (M) MEN'S BASEBALL (2)**  
**(Credit/No Credit or letter grade.)**

Ten class hours and two hours by arrangement per week.

This class will allow the student to develop high skill in the game of baseball. Through extended drills, game situations and plays, strategy will be learned. Physical conditioning for baseball will be emphasized. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**TEAM 111, 115 (C) BASKETBALL, BEGINNING AND ADVANCED (.5 or 1)**

**(Credit/No Credit or letter grade.)**

One and one half or three class hours and one hour by arrangement per week. Prerequisite: Advanced – Beginning Basketball or equivalent.

**Beginning** – Instruction in the rules, strategies and fundamental skills of basketball. Includes round-robin play during the last half of the semester. *Transfer credit: UC; CSU (E2).*

**Advanced** – Advanced instruction in the fundamentals of basketball. Specifically the details of the game will be investigated. Team play will be accented with special emphasis given to developing offenses and attacking defenses. *May be repeated twice for credit. Transfer credit: UC; CSU (E2).*

**TEAM 112 (C) BASKETBALL: ADVANCED COMPETITION STRATEGIES (.5 or 1)**

**(Credit/No Credit or letter grade.)**

A minimum of 24 or 48 class hours. Prerequisite: TEAM 111 or competitive experience, or equivalent.

Designed for potential student-athletes to pursue advanced knowledge and application of the philosophy, strategies, techniques and instruction in the competitive game of basketball. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**TEAM 116 (C) BASKETBALL: INDIVIDUAL SKILL DEVELOPMENT (.5 or 1)**

**(Credit/No Credit or letter grade.)**

A minimum of 24 or 48 class hours. Prerequisite: TEAM 115 or equivalent.

Designed to improve the individual skills of students wishing to play competitive basketball. Students will spend considerable time working on the fundamentals of the game: ball handling, passing and shooting. Students will take part in numerous basketball and conditioning drills. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**TEAM 117 (C) BASKETBALL: TOURNAMENT BASKETBALL (.5 or 1)**

**(Credit/No Credit or letter grade.)**

A minimum of 24 or 48 class hours. Prerequisite: TEAM 111, 112 or 115, or competitive experience, or equivalent.

Geared toward advanced level basketball players, this course is designed to give students competitive playing experience in a team, tournament setting. Students will learn both offensive and defensive concepts in a team setting. Tournament games will be officiated using NCAA rules and guidelines. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**TEAM 125 (C) NON-TRADITIONAL OUTDOOR GAMES (.5 or 1)**

**(Credit/No Credit or letter grade.)**

One and one half or three class hours per week.

Introduces students to rules, strategies and skills of high-energy outdoor games. Games will include Ultimate Frisbee, Speedball, Capture the Flag, and other non-traditional team activities. Recommended for education and recreation/physical education majors, and for students interested in a high-energy activity course. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**TEAM 132 (C) FLAG FOOTBALL (.5 or 1)**

**(Credit/No Credit or letter grade.)**

One and one half or three class hours per week.

This course will provide instruction in basic skills of flag football, including catching, running with the ball, strategies, blocking, and rules of the game. Drills and competition will be used. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**TEAM 141, 145 (C) SOCCER, BEGINNING AND ADVANCED (.5 or 1)**

**(Credit/No Credit or letter grade.)**

One and one half or three class hours per week. Prerequisite: Advanced – Beginning Soccer or equivalent.

**Beginning** – Instruction and practice in fundamentals of individual play. Games and round-robin play; testing program. *Transfer credit: UC; CSU (E2).*

**Advanced** – Instruction in offensive and defensive play; specific positions. *May be repeated twice for credit. Transfer credit: UC; CSU (E2).*

**TEAM 146 (M) MEN'S SOCCER THEORY (.5 or 1)**

**(Credit/No Credit or letter grade.)**

One and one half or three class hours per week. Prerequisite: TEAM 141, 145 or 148, or competitive experience, or equivalent.

Designed for student athletes to pursue knowledge about the history, philosophy, strategies, techniques, and instruction in soccer. *May be repeated three times for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

## PHYSICAL EDUCATION (TEAM SPORTS)

### **TEAM 148 (C) INDOOR SOCCER (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours per week. Prerequisite: TEAM 141 or demonstrated proficiency in soccer.*

Indoor soccer at an intermediate level of play. Includes individual and group drills, skill development, rules of the game, and team play through round robin competition. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **TEAM 149 (W) WOMEN'S SOCCER THEORY (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours per week. Prerequisite: TEAM 141 or 145, or competitive experience, or equivalent.*

Designed for student athletes to pursue knowledge about the history, philosophy, strategies, techniques, and instruction in soccer. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **TEAM 171, 173, 175 (C) VOLLEYBALL, BEGINNING, INTERMEDIATE AND ADVANCED (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours per week. Prerequisite: Intermediate – Beginning Volleyball or equivalent; Advanced – Intermediate Volleyball or equivalent.*

**Beginning** – Instruction and practice in the fundamentals of volleyball; team competition; testing program in skills and rules. *Transfer credit: UC; CSU (E2).*

**Intermediate** – Skill development with an emphasis on fundamentals, rules, and strategies of team and tournament play. Instruction and practice in intermediate skills for team competition. *Transfer credit: UC; CSU (E2).*

**Advanced** – Emphasis on team play and strategy; tournament play. *May be repeated once for credit. Transfer credit: UC; CSU (E2).*

### **TEAM 176 (W) VOLLEYBALL THEORY (.5 or 1) (Credit/No Credit or letter grade.)**

*One and one half or three class hours per week. Prerequisite: TEAM 171, or competitive experience, or equivalent.*

Designed for potential student athletes to pursue advanced knowledge in the philosophy, strategies, techniques, and instruction in the competitive game of volleyball. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

### **TEAM 179 (C) TOURNAMENT VOLLEYBALL (.5 or 1) (Credit/No Credit.)**

*One and one half or three class hours per week. Prerequisite: TEAM 171 or equivalent.*

Geared toward intermediate and advanced level volleyball players, this course emphasizes team play in a tournament setting. Course will include an introduction to, and use of, different offensive and defensive systems. Tournament play will include 2-, 3-, 4- and 6-person team play using international rules. *May be repeated for credit a maximum of three times. Transfer: UC; CSU (E2).*

### **TEAM 190 (C) BASEBALL THEORY, DEFENSE (1.5 or 2 or 2.5 or 3)**

**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in TEAM 100 or VARS 100.*

Designed to help students understand the fundamentals of playing and coaching baseball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in baseball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

### **TEAM 191 (C) BASEBALL THEORY OFFENSE (1.5 or 2 or 2.5 or 3)**

**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in TEAM 100 or VARS 100.*

Designed to help students understand the fundamentals of playing and coaching baseball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in baseball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

### **TEAM 192 (M) MEN'S BASKETBALL THEORY, DEFENSE (1.5 or 2 or 2.5 or 3)**

**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in VARS 110.*

Designed to help students understand the fundamentals of playing and coaching basketball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in basketball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

### **TEAM 193 (M) MEN'S BASKETBALL THEORY, OFFENSE (1.5 or 2 or 2.5 or 3)**

**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in VARS 110.*

Designed to help students understand the fundamentals of playing and coaching basketball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in basketball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**PHYSICAL EDUCATION (TEAM SPORTS – VARSITY SPORTS)****TEAM 194 (W) WOMEN'S BASKETBALL THEORY, DEFENSE (1.5 or 2 or 2.5 or 3)**  
**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in VARS 300.*

Designed to help students understand the fundamentals of playing and coaching basketball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in basketball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**TEAM 195 (W) WOMEN'S BASKETBALL THEORY, OFFENSE (1.5 or 2 or 2.5 or 3)**  
**(Credit/No Credit or letter grade.)**

*A total of 16 lecture hours and 24, 48, 72 or 96 lab hours. Recommended: Concurrent enrollment in VARS 300.*

Designed to help students understand the fundamentals of playing and coaching basketball. Students will gain knowledge about the history, philosophies, techniques and strategies related to the development of individual and team play in basketball. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

**Varsity Sports (VARS)**

Participation in varsity sports is limited to those who possess the necessary skill level to compete in intercollegiate athletics. Competition takes place against colleges of the Coast Conference and other northern and southern California Community Colleges. Athletes must be enrolled in 12 units during their first semester of competition (9 of which must be academic). Student-athletes must maintain a 2.0 grade point average and have passed a cumulative 24 units (18 of which must be academic) to qualify for their second season of the same sport. Student-athletes can only compete in two years of the same sport. Participants must pass a physical examination prior to being released to compete. See Athletic Director for more information.

**VARS 100 (C) VARSITY BASEBALL (2)**

*A total of 175 activity hours.*

Intercollegiate varsity baseball competition in the Coast Conference; tournaments and post-season competition with other California Community Colleges. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**VARS 110 (M) MEN'S VARSITY BASKETBALL (1)**

*A total of 175 activity hours.*

Intercollegiate men's varsity basketball competition in the Coast Conference and participation in regional and state tournaments. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**VARS 150 (M) MEN'S VARSITY SOCCER (2)**

*A total of 175 activity hours.*

Intercollegiate men's varsity soccer competition in the Coast Conference and participation in regional and state tournaments. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**VARS 200 (C) VARSITY WRESTLING (2)**

*A total of 175 activity hours.*

Intercollegiate competition in dual matches in the Coast Conference; competition in several regional wrestling tournaments each year including Coast Conference matches, Northern California matches, and the State Championships. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**VARS 300 (W) WOMEN'S VARSITY BASKETBALL (1)**

*A total of 175 activity hours.*

Intercollegiate women's varsity basketball competition in the Coast Conference and participation in regional and state tournaments. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**VARS 340 (W) WOMEN'S VARSITY VOLLEYBALL (2)**

*A total of 175 activity hours.*

Includes competition with other Northern California community colleges. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

**VARS 350 (W) WOMEN'S VARSITY BADMINTON (2)**

*A total of 175 activity hours.*

Intercollegiate badminton competition with Northern California community colleges. Participation in the Coast Conference and regional tournaments. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU.*

**VARS 360 (W) WOMEN'S VARSITY SOCCER (2)**

*A total of 175 activity hours.*

Intercollegiate Varsity Soccer competition with Northern California community colleges. Participation in the Coast Conference and regional tournaments. *May be repeated for credit a maximum of three times. Transfer credit: UC; CSU (E2).*

## PHYSICS

### PHYS 210, 220 GENERAL PHYSICS I AND II (4, 4)

Three lecture hours and three lab hours per week. Prerequisites: PHYS 210 – Intermediate algebra and plane geometry. Recommended: Completion of MATH 130, Trigonometry. PHYS 220 – Satisfactory completion of 210.

Lectures, with experimental demonstrations and lab, covering mechanics, heat and sound in the first semester; magnetism, electricity, light and modern developments in the second semester. Designed for students majoring in some field of letters and science; required of those planning to enter medicine, dentistry, pharmacy, optometry, agriculture or forestry. Transfer credit: UC; CSU (B1, B3). (PHYS 210 = CAN PHYS 2; PHYS 220 = CAN PHYS 4; PHYS 210 + 220 = CAN PHYS SEQ A).

### PHYS 211 GENERAL PHYSICS I – CALCULUS SUPPLEMENT (1)

One lecture hour per week. Prerequisite: Completion of MATH 241 or MATH 251, completion of, or concurrent enrollment in, MATH 242 or MATH 252, and completion of, or concurrent enrollment in, PHYS 210.

Application of calculus to topics in PHYS 210 such as work done by a variable force, hydrostatic pressure of compressible fluids and heat conduction. Required of some premedical, biology, and architecture students. Transfer credit: UC; CSU.

### PHYS 221 GENERAL PHYSICS II – CALCULUS SUPPLEMENT (1)

One class hour per week. Prerequisite: Completion of, or concurrent enrollment in, MATH 242 or MATH 252 and completion of, or concurrent enrollment in, PHYS 220.

Application of calculus to topics in PHYS 220 such as electric fields of uniform charge distributions, Ampere's Law and Fermat's Principle. Required of some premedical, biology, and architecture students. Transfer credit: UC; CSU.

### PHYS 250, 260, 270 PHYSICS WITH CALCULUS I, II, III (4, 4, 4)

Three lecture hours, one recitation hour, and two lab hours per week. Prerequisite: PHYS 250 – MATH 251 and concurrent enrollment in MATH 252; PHYS 260 or 270 – PHYS 250.

This three-semester physics sequence is designed to give the student majoring in engineering, physics, or chemistry a thorough foundation in the fundamentals of physics.

**PHYS 250 PHYSICS WITH CALCULUS I** – Mechanics, wave motion and special relativity. Transfer credit: UC; CSU (B1, B3). (CAN PHYS 8; PHYS 250 + 260 + 270 = CAN PHYS SEQ B).

**PHYS 260 PHYSICS WITH CALCULUS II** – Electricity and magnetism. Transfer credit: UC; CSU (B1, B3). (CAN PHYS 12; PHYS 250 + 260 + 270 = CAN PHYS SEQ B).

**PHYS 270 PHYSICS WITH CALCULUS III** – Heat, light and modern physics. Transfer credit: UC; CSU (B1, B3). (CAN PHYS 14; PHYS 250 + 260 + 270 = CAN PHYS SEQ B).

## POLITICAL SCIENCE

### PLSC 115 COMPARATIVE GOVERNMENT (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Comparative treatment of the government and politics of countries of Western Europe, Eastern Europe, and developing nations. Transfer credit: UC; CSU (D3).

### PLSC 130 INTERNATIONAL RELATIONS (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Survey of the basic elements of international relations, including the factors of sovereignty, nationalism, and national policies; the international struggle for power and order; the role of the United Nations and other supranational organizations. Transfer credit: UC; CSU (D3).

### PLSC 150 INTRODUCTION TO POLITICAL THEORY (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Introduction to ways of thinking about politics and an exploration of the concepts of political theory. Political problems will be examined along with consideration of such ideas as political culture and ideology. Transfer credit: UC; CSU (D3).

### PLSC 200 NATIONAL, STATE AND LOCAL GOVERNMENT (3)

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

A study of the structure and function of the basic national, state and local government institutions. The course will examine the dynamics of the constitutional power relationship between the respective branches of government and the operational relationship between the national, state and local governments. Students who have received credit for PLSC 210 or PLSC 301 may not receive credit for PLSC 200. Transfer credit: UC; CSU (D2b). (CAN GOVT 2).

**PLSC 210 AMERICAN POLITICS (3)**

Three lecture hours per week. Partially satisfies the American History and Institutions requirement. Recommended: Eligibility for ENGL 836.

The study of the historical and constitutional development of the foundations of United States political institutions and the dynamics of the governmental decision-making process from the colonial era to the present. Examination of the various sources of political attitudes, roles and behaviors of political participants and ways political decisions are made by the different units of government. Students who have received credit for PLSC 200 may not receive credit for PLSC 210. Transfer credit: UC; CSU (D1).

**PLSC 301 CALIFORNIA STATE AND LOCAL GOVERNMENT (3)**

Three lecture hours per week. Partially satisfies the American History and Institutions requirement. Recommended: Eligibility for ENGL 836.

Examination of state and local governments and their relationship to each other. Among topics to be studied: population growth; initiative process; elections and campaigns; the legislature; the plural executive; California Judiciary; local governments – counties, cities, school districts and regional governments; growth and environmental policies; social programs; and cultural diversity issues. Students who have received credit for PLSC 200 may not receive credit for PLSC 301. Transfer credit: CSU (D2a).

**PLSC 315 INTRODUCTION TO REVOLUTIONARY THOUGHT (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or equivalent.

Examination of the major revolutions in history – religious, political, technological, economic and gender based. The goals behind revolution will be identified and the reasons for success or failure will be discussed. Transfer credit: CSU (D3).

**PLSC 320 LATIN AMERICA IN THE INTERNATIONAL POLITICAL ECONOMY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

This course explores Latin America's role in the international political economy. The role of colonialism; different political ideologies such as communism, socialism and Peronism; the availability of natural resources; trade policies of individual states; and relations to markets will be explored. Forecasts of the economic future of the area will be considered. Transfer credit: UC; CSU (D3).

**PLSC 330 MIDDLE EAST POLITICS: U.S. AND ISRAELI-PALESTINIAN CONFLICT (3)  
(Credit/No Credit or letter grade.)**

Three hours per week. Recommended: Eligibility for ENGL 100 or equivalent.

A survey of political, religious, cultural and economic motivations that have resulted in the formation of the modern state of Israel. The role of the U.S. in the formation and the protection of the state of Israel. The Arab-Muslim nations' opposition to U.S. policies regarding the Israeli-Palestinian conflict. Transfer credit: UC; CSU (D3).

**PSYCHOLOGY****PSYC 100 GENERAL PSYCHOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 or equivalent.

Introduction to the scientific study of animal and human behavior. Origins and assessment of individual differences in terms of learning, memory, thinking, intelligence, motivation, emotion, perception, and personality. Transfer credit: UC; CSU (D3). (CAN PSY 2).

**PSYC 105 EXPERIMENTAL PSYCHOLOGY (3)**

Three lecture hours per week. Prerequisite: PSYC 100.

Application of scientific methods to psychological research. Fundamentals of experimental design, descriptive and inferential statistics, scientific report writing. Exploration of psychology as a major study and as a profession. Not recommended as a General Education elective. Transfer credit: UC; CSU.

**PSYC 110 COURTSHIP, MARRIAGE AND FAMILY (3)  
(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100 or ENGL 105, or equivalent.

An introduction to the history and development of courtship, mate selection, marriage, personality adjustments in marriage, parenthood, family life, and divorce. Sociological, psychological, biological and anthropological perspectives are used to explain the complexities of the institution of marriage, communication patterns, and family traditions. Also listed as SOCI 110. Transfer credit: CSU (D3).

**PSYC 171 QUANTITATIVE REASONING IN PSYCHOLOGY (3)**

Three lecture hours per week plus one lab hour by arrangement. Prerequisite: MATH 120 or equivalent. Recommended: Eligibility for ENGL 836.

Introduction to psychological statistics and measurements essential to understanding statistical and quantitative arguments presented in news accounts, advertising, political campaigns, and popular treatment of psychological research. Transfer credit: CSU (B4).

**PSYC 200 DEVELOPMENTAL PSYCHOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

This survey course is designed to study the life span. It will examine how the individual changes physically, cognitively and psychologically from conception to death. Theoretical models, influences affecting development, and research relevant to development throughout life will be presented and discussed. *Transfer credit: UC; CSU (D3, E1).*

**PSYC 201 CHILD DEVELOPMENT (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Consideration of physical, social, emotional, and intellectual development extending from the prenatal period through adolescence. Emphasis on factors influencing the developing personality. Also listed as ECE. 201. *Transfer credit: UC; CSU (D3, E1).*

**PSYC 268 BLACK PSYCHOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Introduction to and exploration of basic and alternative psychological theories and concepts that provide an understanding and appreciation of the psychodynamics of Black America. *Transfer credit: UC; CSU (D3).*

**PSYC 300 SOCIAL PSYCHOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 100.

An overview of how the individual thinks about, influences and relates to others. Topics include attitude formation and change, self-concept, prejudice and discrimination, interpersonal attraction, conformity and group processes. Other related concepts are included. *Transfer credit: UC; CSU (D3).*

**PSYC 301 PSYCHOLOGY OF PERSONAL DEVELOPMENT (3)**

Three lecture hours per week. Prerequisite: PSYC 100, or 108, or equivalent. Recommended: Eligibility for ENGL 836.

Study of the ways people adjust to their environments. Emphasis on the ways personality develops and changes. Review of techniques people may use to cope more effectively with stress associated with our complex society. Small group projects may be a part of this course. *Transfer credit: CSU (D3).*

**PSYC 390 PSYCHOLOGY OF CONSCIOUSNESS (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 or equivalent.

A survey of models of human consciousness meta-physical and psychological. Application of these models towards defining discrete states of consciousness, i.e., sleep, dreams, reverie, etc. Practical implications and applications of the rules and tools for expanding awareness and decreasing stress (e.g., meditation, autogenic training, etc.). *Transfer credit: UC; CSU (D3).*

**PSYC 410 ABNORMAL PSYCHOLOGY (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

The study of abnormal behavior and personality disorders. Topics include the causes of neuroses, psychoses, and other psychological problems, along with their etiology, dynamics, principal symptoms and treatments. The conceptual relationship between theory of personality and psychotherapy is examined. *Transfer credit: UC; CSU (D3).*

**PSYC 665 SPECIAL TOPICS IN PSYCHOLOGY (.5-2) (Credit/No Credit or letter grade.)**

Eight hours per week per each .5 unit. Recommended: Eligibility for ENGL 836.

Advanced, specialized study in psychology. Designed for psychology students and/or students interested in the social sciences, such as anthropology, history and philosophy. Topics will be generated by community, student and faculty interests. Field trips and off-campus investigations may require special planning by the student. *May be repeated for credit as topics vary. Transfer credit: UC; CSU.*

**READING****READ 420 CRITICAL AND EFFECTIVE READING (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week. Reading Prerequisite: READ 836 with Credit or a grade of C or higher, or eligibility for 400-level Reading courses on approved college Reading placement test, or other measures as necessary.

A college level reading course designed to advance reading effectiveness academically, professionally and personally. The course empowers college level students to critically read and analyze difficult texts of diverse cultural sources from across the curriculum. Students will learn to comprehend at a high level by summarizing, critiquing, evaluating, interpreting, reasoning, and understanding author intent, bias, tone, analogy, and figurative language. *Transfer credit: CSU.*

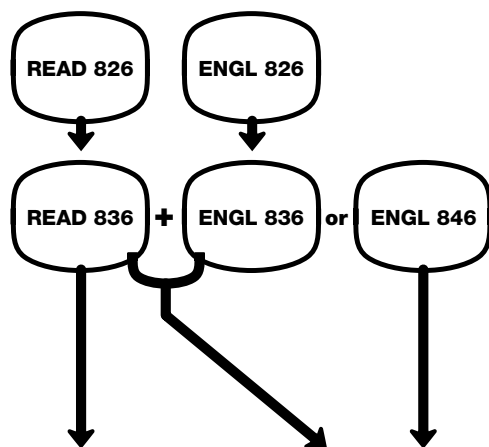
## English/Reading Course Sequence

### Start

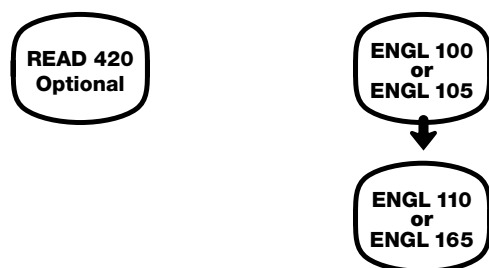
#### Placement Test

*indicates appropriate level in this sequence of courses*

#### NON-TRANSFERABLE COURSES



#### TRANSFERABLE COURSES



#### READ 425 SPEED READING (1.5) (Credit/No Credit or letter grade.)

Three lecture hours per week for eight weeks. Prerequisite: READ 836 with Credit or a grade of C or higher, or eligibility for 400-level Reading courses on approved college Reading placement test, or other measures as necessary.

Designed to increase reading speed and comprehension of college-level material through instruction, practice and application. Emphasis on learning rapid reading techniques, improving comprehension, and gaining flexibility of reading speed to suit purpose of reading across all content areas. Students will apply speed reading technique to a variety of genres and styles of writing. *May be repeated for credit a maximum of three times. Transfer credit: CSU.*

#### READ 812 READING ASSISTANCE (.5-2) (Credit/No Credit.)

*One and one half to six hours per week by arrangement.*

Each student's personal needs determine an instructional program that may include tutoring, computer-assisted instruction, and small group practice. Students will receive assistance on supplementary assignments to improve word analysis, vocabulary, comprehension, and study skills, as well as assistance on the reading assigned in their other courses. *(Open entry.) May be repeated for credit up to a maximum of 6 units. (Units do not count toward the Associate Degree.)*

#### READ 813 READING ENRICHMENT (1-3) (Credit/No Credit or letter grade.)

*Sixteen lecture hours per unit.*

This course is designed to increase student enjoyment, fluency and understanding of reading materials such as short stories, biographies, autobiographies, poetry and plays. As students read, they will improve their vocabulary, learn about different forms of writing, and come to see reading as a source of pleasure in their lives. *(Open entry.) May be repeated for credit a maximum of three times. (Units do not count toward the Associate Degree.)*

#### READ 826 READING IMPROVEMENT (3) (Credit/No Credit or letter grade.)

*Three lecture hours and one lab hour by arrangement per week. Recommended: Completion of ESOL 830 or 831/832, or appropriate score on the college Reading Placement test and other measures as necessary.*

Efficient reading strategies and study techniques to improve word analysis, vocabulary, reading comprehension, and study strategies related to text. Each student's personal needs determine individual and small group practice. *May be repeated once for credit. (Units do not count toward the Associate Degree.)*

#### READ 836 ACADEMIC READING STRATEGIES (3) (Credit/No Credit or letter grade.)

*Three lecture hours and one hour by arrangement per week. Prerequisite: READ 826 or ESOL 840 or ESOL 841 and 842 with Credit or a grade of C or higher, or eligibility for READ 836 on approved College Reading placement test and other measures as necessary. Students placing in READ 836 and ENGL 836 should enroll in both courses concurrently.*

An introduction to college reading course to improve vocabulary, comprehension, critical reading strategies, study-reading, and reading efficiency techniques to prepare students for college English and other courses across the disciplines. *May be repeated once for credit.*

**READ 863 READING FOR NON-NATIVE SPEAKERS III (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: ESL background and completion of READ 862 or ESOL 820 or 821 and 822, or placement in ESOL 830 as indicated by ESL placement test and other measures as necessary.

An intermediate level reading course designed for non-native speakers of English to improve English pronunciation, vocabulary, and reading comprehension. Assignments are tailored to students' individual needs. May be repeated twice for credit. (Units do not count toward the Associate Degree.)

**READ 864 READING FOR NON-NATIVE SPEAKERS IV (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: ESL background and completion of READ 863 or ESOL 830 or 831 and 832, or placement in ESOL 840 as indicated by ESL placement test and other measures as necessary.

An advanced level reading course designed for non-native speakers of English to improve English pronunciation, vocabulary, reading comprehension, and critical thinking. Assignments are tailored to students' individual needs. May be repeated twice for credit. (Units do not count toward the Associate Degree.)

**REAL ESTATE**

**R.E. 100 REAL ESTATE PRINCIPLES (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and MATH 110.

Study of real and personal property, joint tenancies, partnerships, sales contracts, homesteads, deeds, and taxes. Also included are the basics in financing real estate practices and regulation of the real estate business. Transfer credit: CSU.

**R.E. 110 REAL ESTATE PRACTICE (3)**

Three lecture hours per week.

Real Estate Practice is the practical application of real estate skills in the field and office environments. This course presents the skills, knowledge and abilities needed to work with buyers, sellers, lessors and lessees to ensure success as a realtor. Completion of both R.E. 100 and R.E. 110 enables students to satisfy California state requirements for licensing. Transfer credit: CSU.

**R.E. 130 CALIFORNIA MORTGAGE LOAN BROKERING AND LENDING (3)**

Three lecture hours per week.

Study of the entire mortgage loan process from loan origination to underwriting, finishing with funding and servicing. The course also covers the marketing of oneself when entering the profession of mortgage loan brokering and lending. Additional topics covered include legal aspects of the business and various forms used within the profession. Transfer credit: CSU.

**R.E. 665 SELECTED REAL ESTATE TOPICS (.5 or 1 or 1.5)**

**(Credit/No Credit or letter grade.)**

A minimum of 8 lecture hours for each .5 unit.

Course will focus on, explore, or introduce selected topics in real estate. Examples include topics such as changes in real estate law and contemporary real estate themes. By arrangement lab hours may be required for some topics. May be repeated for credit as topics vary. Transfer credit: CSU.

**RECREATION EDUCATION**

**REC. 100 INTRODUCTION TO RECREATION AND LEISURE STUDIES (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week.

The study of recreation and leisure as a profession. Career opportunities in travel and tourism, commercial, public, outdoor, private, and therapeutic recreation will be explored. History of recreation, as well as current trends, will be presented. Transfer credit: CSU. (CAN REC 2).

**RESPIRATORY THERAPY**

Admission to this program is by special application only.

**RPTH 400 PATIENT AND HEALTH CARE CONCERNS (2)**

Two lecture hours per week. Prerequisite: Admission to the Respiratory Therapy program.

Introduction to the field of Respiratory Care; job responsibility and role within the health care team. Discussion of ethical and legal issues that involve Respiratory Care Practitioners. Discussion of aging, death and dying, and information technologies. Transfer credit: CSU.

**RPTH 410 INTRODUCTION TO PATIENT CARE AND RESPIRATORY ASSESSMENT TECHNIQUES (3)**

Two lecture hours plus three lab hours per week. Prerequisite: Admission to the Respiratory Therapy program.

The study and practice of basic nursing arts. Also included will be a review of basic science relevant to respiratory therapy and its application to respiratory system assessment. The class will include some hospital practice. Transfer credit: CSU.



**RPTH 420 APPLICATION OF CARDIOPULMONARY ANATOMY AND PHYSIOLOGY (3)**

Three lecture hours per week. Prerequisite: Admission to the Respiratory Therapy program.

Study of the healthy cardiopulmonary system with application to the types of alterations that occur with disease. Emphasis will be applied to areas of particular concern to Respiratory Care Practitioners. When applicable, case histories will be utilized. Computer programs will be used for computations requiring practice. *Transfer credit: CSU.*

**RPTH 430 INTRODUCTION TO RESPIRATORY THERAPEUTICS (6)**

Four lecture hours and six laboratory hours per week. Prerequisite: Admission to the Respiratory Therapy program.

The study and laboratory practice of respiratory care procedures basic to medical/surgical respiratory care. Included will be respiratory pharmacology, oxygen and aerosol therapy, hyperinflation therapy, secretion removal procedures, adjuncts to cardiopulmonary resuscitation and the care and cleaning of respiratory therapy equipment. *Transfer credit: CSU.*

**RPTH 438 CLINICAL CLERKSHIP I – SPRING (1) (Credit/No Credit.)**

Supervised clinical experience in local hospital. Prerequisite: Admission to the Respiratory Therapy program.

Supervised experience in the medical/surgical areas of a local hospital, observing and performing respiratory care procedures to non-critical care patients. *Transfer credit: CSU.*

**RPTH 445 RESPIRATORY DISEASES I (2)**

Two class hours per week. Prerequisite: Admission to the Respiratory Therapy program.

Using the obstructive pulmonary diseases (asthma, chronic bronchitis and emphysema) as a model, the student will learn disease terminology, disease classification, history taking and physical examination. Also included will be basic radiologic, clinical and pulmonary diagnostics. *Transfer credit: CSU.*

**RPTH 448 CLINICAL CLERKSHIP II – SUMMER (2) (Credit/No Credit.)**

A total of 120 hours of supervised clinical experience in local hospitals. Prerequisite: Admission to the Respiratory Therapy program.

Supervised experience in the Medical-Surgical patient care areas of a local hospital. Emphasis is on attaining proficiency in skills performed by a Respiratory Care Practitioner in these areas. *Transfer credit: CSU.*

**RPTH 450 RESPIRATORY DISEASES II (3)**

Three lecture hours per week. Prerequisite: Completion of the first year Respiratory Therapy program.

Continuation of the study of cardiopulmonary diseases utilizing the model developed in RPTH 445. To include the treatment and pharmacotherapy of selected disorders. *Transfer credit: CSU.*

**RPTH 458 CLINICAL CLERKSHIP III (6) (Credit/No Credit.)**

Two lecture hours per week for eight weeks and 320 total hours of supervised clinical experience in local hospitals. Prerequisite: Completion of the first year Respiratory Therapy program.

Supervised experience in the Adult Intensive Care Unit and/or Coronary Care Unit of a local hospital. Emphasis is on attaining proficiency in skills performed by a respiratory care practitioner in these areas. *Transfer credit: CSU.*

**RPTH 460 RESPIRATORY CRITICAL CARE (4)**

Six lecture hours and six lab hours per week plus two hours per week by arrangement for eight weeks. Prerequisite: Completion of the first year Respiratory Therapy program.

The study and practice of techniques necessary to provide respiratory care to patients in adult critical care areas. Emphasis on team management, assessment and communication, airway management, ventilator care and monitoring. *Transfer credit: CSU.*

**RPTH 475 HEMODYNAMIC MONITORING AND SELECTED TOPICS IN RESPIRATORY CARE (2)**

Two class hours per week. Prerequisite: Admission to the Respiratory Therapy program.

The application of advanced principles of cardiopulmonary diagnostics and physiology to the care of critically ill patients. The application of the above principles to other body systems. *Transfer credit: CSU.*

**RPTH 480 DIAGNOSTIC TESTING AND OUTPATIENT RESPIRATORY CARE (2)**

Two lecture hours per week. Prerequisite: Completion of the first year Respiratory Therapy program.

By learning concepts in various diagnostic testing studies, the student will be able to identify changes in a patient's pulmonary status and assist the healthcare team in the outpatient setting to improve the patient's quality of life. Fundamental aspects of pulmonary function testing, exercise testing, and metabolic studies will be explored. *Transfer credit: CSU.*

**RPTH 484 MEDICAL TERMINOLOGY FOR  
RESPIRATORY THERAPY (2)**

Two lecture hours per week. Prerequisite: Admission to the Respiratory Therapy program.

A course designed for respiratory therapy students to study and practice the language of medicine. Special attention will be given to body systems and words most encountered in this profession. Offered in an online format. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**RPTH 485 CLINICAL MEDICINE SEMINAR (2)**

Two class hours per week. Prerequisite: Completion of the first year Respiratory Therapy program.

Integration of pathology, pathophysiology, diagnostic techniques and therapeutic modalities through the utilization of patient case studies. Preparation for job placement. Transfer credit: CSU.

**RPTH 488 CLINICAL CLERKSHIP IV (6)  
(Credit/No Credit.)**

Supervised clinical experience in local hospitals. Prerequisite: Completion of the first year Respiratory Therapy program.

Supervised experience in the Adult Intensive Care Unit, Coronary Care Unit, Pulmonary Function Lab, Neonatal/Pediatric Care Units of a local hospital. Also the option of a home care rotation. Emphasis is on attaining proficiency in skills performed by a Respiratory Care Practitioner in these areas. Transfer credit: CSU.

**RPTH 490 NEONATAL AND PEDIATRIC  
RESPIRATORY CARE (1.5)**

Two lecture hours and three lab hours per week for eight weeks. Prerequisite: Admission to the Respiratory Therapy program.

By applying the normal and abnormal cardiorespiratory anatomy and physiology of the newborn and pediatric patient, the student will master the basic foundation and competent delivery of respiratory care with this age specific population. This course will give the student the necessary background to pursue further studies in this specialized area. Transfer credit: CSU.

**RPTH 495 RESPIRATORY CARE BOARD  
EXAMINATION PREPARATION  
& REVIEW (2)**

**(Credit/No Credit or letter grade.)**

Two lecture hours per week. Prerequisite: Completion of the first year of a respiratory therapy program or an applicant to the Respiratory Care Board for Respiratory Care.

Preparation and review for the Certification Examination of the California Respiratory Care Board and the Registration Examination offered by the National Board for Respiratory Care. May be repeated twice for credit. Transfer credit: CSU.

**RPTH 665 SELECTED TOPICS IN RESPIRATORY  
THERAPY (.5 or 1 or 1.5 or 2)**

**(Credit/No Credit or letter grade.)**

Eight hours for each .5 unit.

This course is designed to develop specific skills that are utilized in the practice of respiratory therapy. The course may focus on new areas of practice or specialized skills. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**SOCIAL SCIENCE****SOSC 140 MEDIA AND SOCIETY (3)**

**(Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

An interdisciplinary study of the relationship between media and society including media's role in economic, social, political, and cultural practices. Emphasis is placed on students developing the ability to analyze and evaluate the impact of mass media on all societies. Transfer credit: CSU (D3).

**SOSC 150 GENDER, SOCIETY AND CULTURE (3)**

Three lecture hours per week. Open to women and men.

Interdisciplinary study of female experience in contemporary and traditional American society. Explores the status of women with emphasis on issues of age, class, race and political opinion. Transfer credit: UC; CSU (D3).

**SOSC 160 WOMEN IN TRANSITION SEMINAR (1)**

**(Credit/No Credit.)**

Concurrent enrollment required in designated Women in Transition Program class(es). Students must be in their first semester in the WIT Program. Open to women and men.

Assists re-entering students in understanding and evaluating their own process of transition and their changing aspirations. Familiarizes students with college resources and methods of identifying individual needs and goals. Focuses on students' redefinition of identity within the academic system. Explores the higher education system. Specific content is integrated with other WIT Program material. Transfer credit: CSU.

**SOSC SELECTED TOPICS IN WOMEN'S STUDIES**

**(.5 or 1 or 1.5)**

**(Credit/No Credit.)**

Topics will be presented that explore women's past and present contributions to society through history, politics and literature. The course will also focus on issues that challenge women in today's world ranging from how to balance academic and personal life to what is – and what isn't – sexual harassment. Topics vary every semester. May be repeated for credit as topics vary. Transfer credit: CSU.

## SOCIOLOGY

### **SOCI 100 INTRODUCTION TO SOCIOLOGY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An introduction to the scientific study of how people organize themselves and interact in social settings. The course encourages students' curiosity about society and sociological analyses of current social issues. It fosters an appreciation of cross-cultural perspectives and allows students to distinguish between personal troubles and public issues. *Transfer credit: UC; CSU (D3). (CAN SOC 2).*

### **SOCI 105 CONTEMPORARY SOCIAL ISSUES (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

Examination of selected social issues viewed in relation to changes going on in society, including poverty, aging, health care, corporate power and work. Emphasis on social science research and theory. *Transfer credit: UC; CSU (D3). (CAN SOC 4).*

### **SOCI 108 COMMUNITY RELATIONS (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836.*

An analysis of administration of justice practitioners in the context of the community. Emphasis on problems inherent in policing a heterogeneous society, police roles and subculture, community expectations of police, media images of police, and problem areas. *Also listed as ADMJ 108. Transfer credit: UC; CSU.*

### **SOCI 110 COURTSHIP, MARRIAGE AND FAMILY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An introduction to the history and development of courtship, mate selection, marriage, personality adjustments in marriage, parenthood, family life, and divorce. Sociological, psychological, biological and anthropological perspectives are used to explain the complexities of the institution of marriage, communication patterns, and family traditions. *Also listed as PSYC 110. Transfer credit: CSU (D3).*

### **SOCI 141 RACE AND ETHNICITY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An introduction to the diverse racial and ethnic aspects of American society and culture, including the role of minority groups and the nature of prejudice and discrimination. Using sociological perspectives, the course ana-

lyzes migration patterns, minority group stereotypes, protests, politics, economic contributions, education religion, pluralism, diversity, assimilation and institutional racism. *Transfer credit: UC; CSU (D3).*

### **SOCI 142 FILIPINA/O COMMUNITY ISSUES (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

An introduction to understanding the social, cultural and psychological aspects of Filipina/o Americans. Using both social and psychological frameworks, the course will explore the effects of Spanish and American colonialism, diaspora, assimilation and decolonization. *Transfer credit: CSU (D3).*

### **SOCI 201 SOCIOLOGY OF HEALTH AND MEDICINE (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

Sociological perspectives and methods for the study of health and medical practice. Major areas of investigation include the social facets of health and disease, the social behavior of health care personnel and people who utilize health care, the social functions of health organizations and institutions, the social patterns of health services, and the relationship of health care delivery systems to other systems and cultures. *Transfer credit: CSU (D3).*

### **SOCI 341 ASIAN CULTURES AND SOCIETIES (3)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

A study of Asian cultures and societies offering a comparative analysis of Asian societies. The course will focus on East Asia, South Asia, Southeast Asia, and the Philippines, and will include discussion and analysis of traditional institutions and values and how they relate to the individual's position in the family, community, and society at large. *Transfer credit: CSU (C2, D3).*

### **SOCI 665 SELECTED TOPICS IN SOCIOLOGY (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

This course explores selected topics or themes from the perspectives and insights generated by sociology. Topics of study will be developed by student survey and will be listed in the class schedule. Field trips and off-campus investigations may require special planning by the student. *May be repeated for credit as topics vary. Transfer credit: UC; CSU (D3).*

## SPANISH

Language Lab and Listening Requirement: Students enrolled in foreign language courses are required to make use of the language lab as prescribed by each department. Imitation, response, and independent practice are integral features of the study of a foreign language at the College.

### **SPAN 101 SPANISH FOR PUBLIC SERVICE I (3) (Credit/No Credit or letter grade.)**

*Three lecture hours and one lab hour by arrangement per week.*

A course to help public service professionals learn basic Spanish grammar and vocabulary, phrases and expressions to serve Spanish-speaking clientele. Students will improve oral proficiency and listening comprehension and become familiar with questions and responses in Spanish commonly heard in public service settings. The course may be tailored to a particular public service sector, such as health care, public safety, social work, or education. *May be repeated once for credit. Transfer credit: CSU.*

### **SPAN 103 SPANISH FOR TRAVELERS (3) (Credit/No Credit or letter grade.)**

*Three lecture hours and one lab hour by arrangement per week.*

An introductory Spanish course for students to acquire the ability to comprehend, speak, read and write Spanish and use Spanish conversation skills to make simple arrangements related to travel to a Spanish-speaking locale. Students will learn basic grammar and vocabulary, phrases, and expressions used in traveling. *Transfer credit: CSU.*

### **SPAN 110 ELEMENTARY SPANISH (5)**

*Five lecture hours and one lab hour per week. Recommended: Eligibility for ENGL 836 or ESOL 400.*

Spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short dialogues containing only structures already practiced. *Transfer credit: UC; CSU (C2).*

### **SPAN 111, 112 ELEMENTARY SPANISH I and II (3, 3) (Credit/No Credit or letter grade.)**

*Three lecture hours and one lab hour per week. SPAN 111 – Recommended: Eligibility for ENGL 836 or ESOL 400. SPAN 112 – Prerequisite: SPAN 111 or equivalent.*

A two-semester sequence covering the same course materials as SPAN 110. Students starting this sequence must complete SPAN 112 prior to attempting SPAN 120. *Transfer credit: UC; CSU (C2).*

### **SPAN 120 ADVANCED ELEMENTARY SPANISH (5)**

*Five lecture hours and one lab hour per week. Prerequisite: SPAN 110, 112, or equivalent college-level course.*

Continuation of SPAN 110 or SPAN 112, for students who can use Spanish to communicate about the “here and now” and relate a simple story in the past. Students practice and develop further communicative competence in written and spoken Spanish for use in a variety of social contexts and settings. Readings are used as the basis of classroom discussions. Cultural aspects of the Spanish-speaking world are emphasized. The course is conducted primarily in Spanish. *Transfer credit: UC; CSU (C2).*

### **SPAN 121 ADVANCED ELEMENTARY SPANISH I (3)**

*Three lecture hours and one lab hour per week. Prerequisite: SPAN 110 or 112, or equivalent.*

A course covering approximately the same material as the first half of SPAN 120. For students who can use Spanish to communicate about the “here and now” and relate a simple story in the past. Students practice and develop further communicative competence in written and spoken Spanish for use in a variety of social contexts and settings. Readings are used as the basis of classroom discussions. Cultural aspects of the Spanish-speaking world are emphasized. The course is conducted primarily in Spanish. *Transfer credit: UC; CSU (C2).*

### **SPAN 122 ADVANCED ELEMENTARY SPANISH II (3)**

*Three lecture hours and one lab hour per week. Prerequisite: SPAN 121 or equivalent.*

A course covering approximately the same material as the second half of SPAN 120. For students who can use Spanish to communicate about the “here and now” and relate a simple story in the past. Students practice and develop further communicative competence in written and spoken Spanish for use in a variety of social contexts and settings. Readings are used as the basis of classroom discussions. Cultural aspects of the Spanish-speaking world are emphasized. The course is conducted primarily in Spanish. *Transfer credit: UC; CSU (C2).*

### **SPAN 130 INTERMEDIATE SPANISH (3)**

*Three lecture hours and one lab hour per week. Prerequisite: SPAN 120 or 122 with a passing grade.*

Practice of conversation and composition; review of grammar; class and collateral reading of Spanish and Latin-American literature. *Transfer credit: UC; CSU (C2).*

### **SPAN 140 ADVANCED INTERMEDIATE SPANISH (3)**

*Three lecture hours and one lab hour by arrangement. Prerequisite: SPAN 130 with a passing grade.*

Further practice of conversation and composition based on class reading of works of modern Spanish and Latin-American authors; review of grammar; collateral reading of Latin-American literature. *Transfer credit: UC; CSU (C2).*

**SPAN 161 READINGS IN SPANISH AMERICAN LITERATURE I (3)**

Three lecture hours per week. Prerequisite: SPAN 140 or equivalent.

Study of some of the trends and some of the best literary works of Spanish American Literature of the 19th century. Further development of communication skills and vocabulary in the Spanish language. Study of the fantastic and often misunderstood culture, politics, and social mores of Spanish America through the analysis of its poetry, short stories, and novels. *Transfer credit: UC; CSU (C2).*

**SPAN 162 READINGS IN SPANISH AMERICAN LITERATURE II (3)**

Three lecture hours per week. Prerequisite: SPAN 161 or equivalent.

Exploration of the literary trends and some of the best novels, poetry, and short stories that exemplify Spanish American literature of the 20th century; familiarize the student with the cultural, sociological, and political framework and the concerns that these writings represent. Show how this literature reflects the fantastic reality of the Spanish American world. *Transfer credit: UC; CSU (C2).*

**SPAN 220 SPANISH FOR SPANISH SPEAKERS I (5) (Credit/No Credit or letter grade.)**

Five lecture hours and one lab hour by arrangement per week. Recommended: Completion of SPAN 110 or 112 with a grade of C or better, or equivalent college-level course, or equivalent.

Designed for students who speak and understand basic Spanish because of life experience, but who also need practice in reading and writing Spanish and want to improve their knowledge/command of grammar and other linguistic features. Students practice and develop improved communicative competence in written and spoken Spanish for use in a variety of social contexts, settings, and registers. Readings are used as the basis of classroom discussions and writing practice. Cultural aspects of the Spanish-speaking world are emphasized. The course is conducted primarily in Spanish. *Transfer credit: UC; CSU (C2).*

**SPAN 801 CONVERSATIONAL SPANISH I (2) (Credit/No Credit.)**

Three lecture hours per week.

This is the most elementary course in conversational Spanish. Emphasis is placed on learning basic conversational patterns that may be applied to everyday situations. (This course will not fulfill the language requirements at CSU or UC.)

**SPEECH COMMUNICATION****SPCH 100 PUBLIC SPEAKING (3) (Credit/No Credit or letter grade.)**

Three lecture hours and one hour by arrangement per week. Recommended: Eligibility for ENGL 836.

Study and practice in the basic principles of effective public oral communication. Students will research, prepare and extemporaneously deliver various speeches. Analysis and evaluation of oral, public communication is also included. Relevant social issues may be examined. *Transfer credit: UC; CSU (A1). (CAN SPCH 4).*

**SPCH 111 ORAL INTERPRETATION OF LITERATURE (3)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836.

Study and interpretation of the logical and emotional content of poems, short stories, and plays. Emphasis on critical reading and oral performance. *Transfer credit: UC; CSU (C2).*

**SPCH 120 INTERPERSONAL COMMUNICATION (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 and READ 836, or ENGL 846, or ESOL 400, or equivalent.

Study and practice of interpersonal relationships. Analysis of the verbal and non-verbal modes of communication. Investigation of communication conflicts in interpersonal relationships and methods of conflict resolution. *Transfer credit: UC; CSU (A1). (CAN SPCH 8).*

**SPCH 127 ARGUMENTATION AND DEBATE (3) (Credit/No Credit or letter grade.)**

Three lecture hours per week. Recommended: Eligibility for ENGL 836 or ENGL 846, or equivalent.

Lecture-laboratory course in the principles and techniques of argumentation and debate. Research in significant social problems. Analysis of propositions, issues, evidence and reasoning. Training and experience in the forms of debate. *Transfer credit: UC; CSU (A1). (CAN SPCH 6).*

**SPCH 128 FORENSICS (.5-1) (Credit/No Credit or letter grade.)**

Recommended: Eligibility for ENGL 836 or ESOL 400.

Participation in approved intercollegiate forensic contests. May be repeated for credit a maximum of three times. *Transfer credit: CSU.*

**SPCH 130 VOICE AND ARTICULATION (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 836 or ESOL 400.*

Exploration of various modes of communicating ideas, emotions and values through lessons in projection, resonance, articulation and expressiveness. Recommended for majors in Speech Communication, TV/Radio, broadcasting, theater performance, business management and law. *Transfer credit: CSU.*

**SPCH 140 SMALL GROUP COMMUNICATION (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week. Recommended: Eligibility for ENGL 100 or 105, or equivalent.*

Understanding of the principles of group interaction and decision making, including study of leadership, types of authority, teamwork and conflict resolution. Participation in discussion groups to share information, solve problems and reach consensus. *Transfer credit: UC; CSU (A1).*

**SPCH 150 INTERCULTURAL COMMUNICATION (3)**

*Three lecture hours per week. Recommended: Completion of or concurrent enrollment in ENGL 836 or ESOL 400.*

Designed for students from all cultural backgrounds. Study of basic theory and skills of intercultural communication using round table discussion, public speaking and critical analysis. Emphasis is given to empathy building for communicating effectively in a diverse social and professional environment. *Transfer credit: UC; CSU (A1).*

**SPCH 160 BASIC SKILLS IN PUBLIC SPEAKING (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours per week.*

Designed to help the intermediate-advanced non-native and native speaker in basic oral communication skills. Practice in pronunciation, conversation, small group communication and basic public speaking skills. *Transfer credit: CSU.*

**SPCH 811 SPEECH FOR NON-NATIVE SPEAKERS I (3)  
(Credit/No Credit or letter grade.)**

*Three lecture hours and one hour by arrangement per week.*

Designed for students who are novice speakers of English to develop fluency with speaking English. Practice in pronunciation, stress rhythm, intonation and usage. Recommended for ESOL 810 or ESOL 811/812 level students. *(Units do not count toward the Associate Degree.)*

**SPCH 812 SPEECH FOR NON-NATIVE  
SPEAKERS II (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours and one hour by arrangement per week.*

Designed to help students who have an intermediate level of spoken English skills increase fluency in spoken English. Intermediate level practice in pronunciation,

stress, rhythm, intonation and usage. Recommended for ESOL 820 or ESOL 821/822 level students. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**SPCH 813 SPEECH FOR NON-NATIVE  
SPEAKERS III (3)**

**(Credit/No Credit or letter grade.)**

*Three lecture hours and one hour by arrangement per week.*

Designed to develop fluency in basic conversational skills in spoken English. Practice speaking with others and conversing in varying communication experiences. Recommended for ESOL 830 or ESOL 831/832 level students. *May be repeated twice for credit. (Units do not count toward the Associate Degree.)*

**STUDENT GOVERNMENT**

**SGOV 111 STUDENT GOVERNMENT I – FALL (1-2)**

*One lecture hour per week for one unit. In addition, attendance at weekly Student Council meeting is required to earn two units.*

Designed to assist Student Council members, club officers, and other interested students in acquiring background and skills for effective participation in the college community. Includes parliamentary procedure, group dynamics and analysis of the nature and techniques of effective leadership. *(Open entry.) May be repeated once for credit. Transfer credit: CSU.*

**SGOV 112 STUDENT GOVERNMENT II – SPRING (1-2)**

*One lecture hour per week for one unit. In addition, attendance at weekly Student Council meeting is required to earn two units.*

Continuation of SGOV 111. *(Open entry.) May be repeated once for credit. Transfer credit: CSU.*

**SGOV 115 COMMUNITY SERVICE & LEADERSHIP  
PRACTICUM (1)**

**(Credit/No Credit.)**

*Eight lecture hours plus 24 hours of structured and verified community service in an established and approved service organization.*

A practicum course in community service bringing together students and approved service agencies or organizations. The course prepares students for community service and helps them find an approved community opportunity that matches their service criteria. In addition to service in the community, the course meets four times in the classroom. *May be repeated twice for credit. Transfer credit: CSU.*

## SURGICAL TECHNOLOGY

### **SURG 440 BASIC SCIENCES FOR SURGICAL TECHNOLOGY (6)**

Six lecture hours and three lab hours by arrangement per week. Prerequisite: Admission to the Surgical Technology program. Recommended: Completion of MATH 110 or equivalent; eligibility for ENGL 836 or equivalent.

This course reviews anatomy for surgical procedures and common disease states requiring surgical intervention. The course also covers common medical terminology and operating room medications pertinent to the surgical technologist.

### **SURG 441 SURGICAL PATIENT CARE CONCEPTS (10)**

Five lecture hours and fifteen lab hours and three lab hours by arrangement per week. Prerequisite: Admission to the Surgical Technology program. Recommended: Completion of MATH 110 or equivalent; eligibility for ENGL 836 or equivalent.

This course provides the student with the theoretical and technical fundamentals of caring for a patient in surgery and procedures common to the surgical technologist, including sterile technique and instrument preparation. Prepares the student for in-hospital training in the second semester.

### **SURG 442 SURGICAL SPECIALTIES (6)**

Six lecture hours per week. Prerequisites: Completion of SURG 440 and SURG 441 with grades of C or better.

Covers the most common procedures and equipment utilized by the surgical technologist during specialty surgery. These surgeries include neurological, cardiac and pediatric procedures. Prepares the student for the national certification examination.

### **SURG 443 CLINICAL PRACTICE FOR SURGICAL TECHNOLOGY (8)**

**(Credit/No Credit.)**

Thirty-two hours of clinical practice per week. Prerequisites: SURG 440 and SURG 441 with grades of C or better, and a current healthcare provider CPR card.

Hands-on experience in the surgical suite caring for patients under the supervision of a surgical technologist. The student will also gain experience in patient and staff interaction and communication. Prepares the student for the national certification examination.

### **SURG 445 INTRODUCTION TO CENTRAL SERVICE TECHNOLOGY (5)**

Four lecture hours and four lab hours per week. Recommended: Eligibility for ENGL 836 or ESOL 400, or equivalent.

The first of two courses providing an introduction to concepts and practical applications of central service processing, distribution and instrumentation. This includes basics of human anatomy, infection control, aseptic technique, sterile processing decontamination and disinfection. May be repeated for credit a maximum of three times.

### **SURG 446 CLINICAL PRACTICE FOR CENTRAL SERVICE TECHNOLOGY (1)**

**(Credit/No Credit.)**

A total of 80 hours by arrangement in a clinical setting. Prerequisite: Completion of SURG 445 with a grade of C or better.

The second of two courses in Central Service Technology. Provides the student with supervised experience in sterile processing, supply distribution and inventory control. May be repeated for credit a maximum of three times.

### **SURG 665 SELECTED TOPICS IN SURGICAL TECHNOLOGY AND CENTRAL SERVICE/ STERILE PROCESSING (.5 or 1 or 1.5 or 2)**

**(Credit/No Credit or letter grade.)**

Eight lecture hours per .5 unit.

Designed to develop specific skills that are utilized in the practice of surgical and central service technology. Topics will rotate and will focus on new areas of practice or specialized skills. May be repeated for credit as topics vary.

## TAGALOG

See listings under Filipino.

## TELECOMMUNICATIONS AND NETWORK INFORMATION TECHNOLOGY

### **TCOM 100 TELECOMMUNICATIONS, NETWORKING AND WIRELESS TECHNOLOGIES (3)**

Three lecture hours per week.

An introductory course designed to acquaint students with today's convergent communications technologies. Course will examine the structure, function and services of the networks and systems used to provide voice, data, and wireless communications. This is the first course in a program of study for Telecommunications, Wireless and Network Information Technology majors but has been designed to provide anyone interested with insight into the workings and opportunities of this dynamic and exciting field. Transfer credit: CSU.

**TCOM 312 INSTALLING/USING LINUX AS YOUR  
PC OS (1.5)****(Credit/No Credit or letter grade.)**

*A total of 24 lecture hours plus eight lab hours by arrangement.*

A first course on installing and using Linux as the operating system running on an Intel-compatible PC or workstation computer. Topics include creating installation media, installing Linux, Linux file system concepts, using the graphical desktop interface, beginning shell (command line) usage, updating the system, and configuring access to common network services. After successful completion of this course, students will be confident installing and using common Linux distributions (e.g., Red Hat, Fedora, SUSE, Ubuntu) on a home or work PC. *Also listed as COMP 312. May be repeated once for credit. Transfer credit: CSU.*

**TCOM 313 WORKING IN A LINUX SHELL  
ENVIRONMENT (1.5)****(Credit/No Credit or letter grade.)**

*A total of 24 lecture hours plus eight lab hours by arrangement. Recommended: Satisfactory completion (grade of C or better) of TCOM/COMP312, or equivalent experience using a Linux desktop system.*

A course on using the Linux shell (command line) environment. Topics include comparing the Linux graphical desktop environment and the shell environment, shell commands for file system usage, shell features for productivity and customization (history, completion, aliases, environment files), advanced shell features (regular expressions, redirection, pipelines), introduction to shell scripts and shell commands for process management and remote system access. After successful completion of this course, students will be confident using the bash-shell environment found on common Linux distributions (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as COMP 313. May be repeated once for credit. Transfer credit: CSU.*

**TCOM 314 MANAGING A LINUX SYSTEM (1.5)****(Credit/No Credit or letter grade.)**

*A total of 24 lecture hours plus eight lab hours by arrangement. Prerequisite: Satisfactory completion (grade of C or better) of TCOM/COMP 312, or equivalent experience installing or using a Linux system, or equivalent.*

An intermediate course on administering a Linux system. Designed for individuals who have installed Linux but who now want a hands-on exposure to key concepts, issues and capabilities for managing a Linux system. Topics include installing from alternate media sources (network installs), managing disk devices (defining partitions, creating file systems, and mounting/un-mounting file systems), creating multi-boot systems and boot loader

menus, using run levels including trouble-shooting with single user mode, and maintaining system software including installing from source code and recompiling kernels. The focus of this course is on developing expertise for managing a given Linux system (as opposed to managing services provided to other systems). After successful completion of this course, students will be confident in managing a system with a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as COMP 314. May be repeated once for credit. Transfer credit: CSU.*

**TCOM 315 MANAGING LINUX-BASED INTERNET  
SERVICES (3)****(Credit/No Credit or letter grade.)**

*Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: TCOM/COMP 314 or equivalent experience installing and managing a Linux system, and TCOM 480 or equivalent experience using local area networks, or equivalent. Recommended: TCOM/COMP 313 or equivalent experience using the Linux bash-shell.*

An intermediate course on managing Linux-based Internet services. Designed for individuals who have experience installing and managing Linux systems, but now want a hands-on exposure to the concepts, issues and capabilities for providing public Internet services based on Linux servers. Topics include selecting server functionality during a Linux installation, configuring name services (DNS) for a custom domain name, hosting Web pages and configuring management of Web pages, providing secure Web page connections, providing remote access, providing email services, connecting to databases for dynamic Web page hosting, and installing from packages vs. source code. This course focuses on administering Linux-based Internet servers that provide common services found on the public Internet. After successful completion of this course, students will be confident in providing Internet services using a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). *Also listed as COMP 315. May be repeated once for credit. Transfer credit: CSU.*



**TCOM 316 MANAGING LINUX-BASED INTRA-NET (ENTERPRISE) SERVICES (3)****(Credit/No Credit or letter grade.)**

Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: TCOM/COMP 314 or equivalent experience installing and managing a Linux system, and TCOM 480 or equivalent experience managing a local area network, or equivalent. Recommended: TCOM/COMP 313 or equivalent experience using the Linux bash-shell.

An intermediate course on managing Linux-based servers in a large company (intra-net or enterprise) environment. Designed for individuals who have experience installing and managing Linux systems, but now want a hands-on exposure to the concepts, issues and capabilities for providing network services typically found inside a company intra-net. Topics include selecting server functionality during a Linux installation, configuring private name services (DNS), configuring dynamic IP addressing (DHCP), providing file shares with traditional Unix NFS services or cross-platform (Windows) Samba services, managing centralized log-in resources with NIS or LDAP, controlling Internet access through proxy servers, providing security with private certificate authorities, RADIUS servers and secure tunnels, and tools to help manage deployment of client systems (PXE, diskless, private repositories). This course focuses on administering Linux-based network resources found within a company or enterprise network. After successful completion of this course, students will be confident in providing intra-net services using a common Linux distribution (e.g., Red Hat, Fedora, SUSE, Ubuntu). Also listed as COMP 316. May be repeated once for credit. Transfer credit: CSU.

**TCOM 405 ELECTRICAL FUNDAMENTALS FOR TELECOMMUNICATIONS (6)**

Five lecture hours and three lab hours per week plus one lab hour by arrangement per week. Prerequisite: Elementary algebra or equivalent.

A foundation course in the study of electricity and electronics fundamentals. This course is the first course in majors that require and in depth understanding and developed skill in direct and alternating current. Coverage includes the vocabulary, components, laws and test equipment used to apply electrical theory to working circuits and systems. Directed laboratory experience with test equipment as applied to telecommunications. Transfer credit: CSU.

**TCOM 410 WIRING AND INSTALLATION FOR TELECOMMUNICATIONS AND NETWORKING (6)**

Five lecture hours and three lab hours per week plus one lab hour by arrangement per week. Prerequisites: Satisfactory completion (grade of C or better) of or concurrent enrollment in TCOM 405 or ELEC 110, or equivalent training or experience.

Technical introduction to the structure and practices of basic telephony, with direct hands-on experience with the tools and skills required for entry-level employment. Course coverage includes equipment, techniques, terminology, and specifications used in the telecommunications and networking industries. Students will install, test and troubleshoot basic telecommunications and networking infrastructure from wired lines and cabling to network patch panels and distribution systems. Course is based upon EIA TIA 568 and 570 Standards. May include field trips. Transfer credit: CSU.

**TCOM 415 WIRELESS AND MOBILE COMMUNICATIONS FUNDAMENTALS (3)**

Three lecture hours per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 410, or concurrent enrollment in TCOM 410, or equivalent training or experience.

This course presents a study of the fundamental concept of wireless communications as it applies to mobile communications, wireless networking, and applications. The course will examine all aspects of wireless technology including: history and structure of wireless communications networks, access technologies, fundamentals of radio frequency transmission, modulation and digital voice coding, cellular packet radio systems, and wireless local area networks. Transfer credit: CSU.

**TCOM 420 SIGNAL TRANSMISSION AND RADIO FREQUENCY (R.F.) FUNDAMENTALS (6)**

Five lecture hours and three lab hours per week plus one lab hour by arrangement per week. Prerequisites: Satisfactory completion (grade of C or better) of TCOM 405 and 410, or equivalent training or experience.

Analysis of the transmission of signals as applied to wireline and wireless communications. Covers concepts of frequency, wavelength, power, phase, gain and loss, R.F. and their applications to the transmission of information. Lab and skill activities emphasize installation and measurement techniques with electronic test equipment and specialized telecommunications test gear. Students will work with live telecommunications circuits and equipment. Transfer credit: CSU.

**TCOM 440 TRANSPORT NETWORKS AND THE FUNDAMENTALS OF DIGITAL COMMUNICATIONS (6)**

Five lecture hours and three lab hours per week plus one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of or concurrent enrollment in TCOM 420, or equivalent training or experience.

Instruction covers the primary transport networks and basic digital communications fundamentals that make it possible for end users to access and utilize the world's telecommunication from both wire line and wireless access points. Focused hands-on lab activities in the installation and testing of digital signal processing at the DS1 (T-Carrier) level. Transfer credit: CSU.

**TCOM 445 WIRELESS AND MOBILE COMMUNICATIONS SYSTEMS AND APPLICATIONS (3)**

Three lecture hours per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 440, or equivalent training or experience.

An in-depth study of wireless and mobile communications systems and applications. The course will examine the technical aspects of wireless and mobile communications systems including cell sites, mobile switching centers, signaling systems, wireless network interworking, wireless intelligent network capabilities, and wireless applications and protocols. Transfer credit: CSU.

**TCOM 451 PC CONFIGURATION AND REPAIR (6)**

Five lecture hours and three lab hours per week plus one lab hour by arrangement per week. Prerequisites: Satisfactory completion (grade of C or better) of CAOT 105 or equivalent, and satisfactory completion (grade of C or better) of or concurrent enrollment in ELEC 110 or TCOM 405, or equivalent training or experience.

This course provides preparation for A+ certification. A hands-on technical course designed to provide in-depth understanding of PC hardware and software from an installation and repair outlook. Materials covered will include beginning and advanced software, hardware components and configuration, operating systems and how they control the PC. Includes direct hands-on experience with the tools and skills required for entry-level employment. Also listed as COMP 451. Transfer credit: CSU.

**TCOM 452 A+ CERTIFICATION EXAM PREPARATION (1)**

(Credit/No Credit.)

One lecture hour and three lab hours by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of or concurrent enrollment in TCOM 451, or equivalent training or experience.

Designed to assist students in preparing to take the A+ certification examination for Computer Repair. May be repeated for credit a maximum of three times. Transfer credit: CSU.

**TCOM 460 FIBER OPTICS TECHNOLOGY (3)**

Three class hours per week and one lab hour by arrangement per week.

An introductory course in fiber optics technology that will include the theory of fiber optic communications, fiber system design, network construction, and fiber optic test equipment. Instructor-directed hands-on splicing and working with test equipment is a major component of this course. Transfer credit: CSU.

**TCOM 462 SWITCHING TECHNOLOGY (3)**

Three lecture hours per week and one lab hour by arrangement per week. Prerequisites: Satisfactory completion (grade of C or better) of TCOM 100 and TCOM 410, or equivalent training or experience.

Introduction to the fundamentals of switching technologies as they apply to voice and data telecommunications circuits and systems. Explores the basic components of switching systems access methods, trunking and signaling. Both PBX and central office applications of switching will be discussed. Transfer credit: CSU.

**TCOM 465 WIRELESS LOCAL AREA NETWORKS (3)**

Three class hours and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 480, or equivalent training or experience.

An in-depth technical course in the design and implementation of wireless local area networks. Students will be introduced to the technology, infrastructure, application and installation of wireless networks. Students will install and administer a wireless network using Cisco product lines. Transfer credit: CSU.

**TCOM 480 NETWORK FUNDAMENTALS (LAN) (3)**

Three class hours per week and one lab hour by arrangement per week.

Cisco Academy Course – CCNA 1

An introductory course in networking specific to local area networks (LAN). Topics will include LAN hardware, software, topology, transmission medium, wide area network connectivity, diagnostic tools, system administration, and vendor specific LAN products. Class is complemented with hands-on experience in constructing a local area network. Course is patterned after Cisco training guidelines. Also listed as CAOT 480. Transfer credit: CSU.

**TCOM 481 NETWORK SYSTEMS ADMINISTRATION (3)**

Three class hours per week and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 480, or equivalent training or experience.

An application-based course in Network Administration specific to LAN's. Coverage includes the functions and concepts of a wide area network, Microsoft server, designing LAN user accounts and their network administration. Hands-on experience provided in setting up and troubleshooting servers, workstations, network and

peripheral devices. Course is patterned after Microsoft networking guidelines. *Also listed as COMP 481. Transfer credit: CSU.*

### **TCOM 482 INTRODUCTION TO ROUTERS (3)**

*Three class hours per week and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 480, or equivalent training or experience.*

*Cisco Academy Course – CCNA 1 & 2*

Introductory course on router configuration in wide area networks. Students will perform basic router configurations. Course examines common protocols, IP networking concepts, and subnetting techniques. Includes instructor-directed hands-on activities. This course is patterned after Cisco training guidelines. *Transfer credit: CSU.*

### **TCOM 483 NETWORK SWITCHES – CONCEPTS AND APPLICATIONS (3)**

*Three lecture hours per week and one lab hour by arrangement per week. Pre requisite: Satisfactory completion (grade of C or better) of TCOM 480, or equivalent training or experience. Recommended: Satisfactory completion (grade of C or better) of TCOM 482, or equivalent training or experience.*

*Cisco Academy Course – CCNA 3*

Introductory course in network switching concepts and configurations as applied to computer networks. Course examines switching protocols, spanning tree protocols, virtual LANs, and other specific models. Basic design of switch configurations and the use of switches in network architecture will be covered. Includes instructor-directed hands-on activities. This course is patterned after Cisco training guidelines. *Transfer credit: CSU.*

### **TCOM 484 ADVANCED ROUTING CONCEPTS AND APPLICATIONS (3)**

*Three lecture hours per week and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 482, or equivalent training or experience. Recommended: Satisfactory completion (grade of C or better) of TCOM 483, or equivalent training or experience.*

*Cisco Academy Course – CCNA 3 & 4*

An advanced course in routing concepts and configurations on large internetworks. Students will configure and manage routers by implementing advanced features and common routing protocols such as EIGRP and OSPF. Includes instructor-directed hands-on activities. This course is patterned after Cisco Router training guidelines. *Also listed as COMP 484. Transfer credit: CSU.*

### **TCOM 485 TROUBLESHOOTING THE INTERNET-WORK (3)**

*Three lecture hours and one lab hour by arrangement per week. Prerequisites: Satisfactory completion (grade of C or better) of TCOM 483 and TCOM 484, or equivalent training or experience.*

This course outlines the troubleshooting methodology and techniques for routers and switches in a network infrastructure. Students will learn to use existing software and the diagnostic features of a protocol analyzer to troubleshoot and analyze internetworks. This course is patterned after Cisco training guidelines. *Transfer credit: CSU.*

### **TCOM 486 NETWORK SECURITY (3)**

*Three lecture hours and one lab hour by arrangement per week. Prerequisite: Satisfactory completion (grade of C or better) of TCOM 482, or equivalent training or experience.*

This course introduces students to network security using firewall and VPN (virtual private network) technology. Students will be exposed to the theory and application of both firewall and VPN network architecture. Students will have the opportunity for hands-on practice to administer security policy and VPN configuration using Checkpoint software. *Also listed as COMP 486. Transfer credit CSU.*

### **TCOM 487 ADVANCED NETWORK SECURITY (3)**

*Three lecture hours per week plus three lab hours by arrangement per week. Recommended: Completion of TCOM/COMP 486, or equivalent training or experience.*

An advanced network security course. Topics include: design and administration of content security, virtual private networks, high availability, load balancing, and other advance security topics using industry standard software. *Also listed as COMP 487. May be repeated once for credit. Transfer credit: CSU.*

### **TCOM 490 TECHNICAL OVERVIEW OF THE INTERNET (3)**

*Three class hours per week and one lab hour by arrangement per week.*

A technical overview of the Internet. This course is intended for students who want to learn about the Internet system architecture, language and vocabulary. Some lectures will be demonstrated on the Internet. Homework assignments may require students having access on the Internet. *Also listed as CAOT 490. Transfer credit: CSU.*

### **TCOM 665 SELECTED TOPICS IN TELECOMMUNICATIONS (.5 or 1 or 1.5 or 2)**

**(Credit/No Credit or letter grade)**

*Eight lecture hours for each .5 unit.*

Designed to develop specific skills that are utilized in the telecommunications or the Network Information industry. *May be repeated for credit as topics vary. Transfer credit: CSU.*

