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COURSES

# COURSES

## ACADEMIC SKILLS - ACASK

### 5 ACADEMIC SUPPORT LABORATORY (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Non-Applicable

Provides students with specialized programs designed to improve basic skills in reading, spelling, grammar, vocabulary, mathematics, study skills, and English as a Second Language. Students work independently and at their own pace using computers, audio-tutorial tapes, and supplemental materials. Laboratory time is arranged with the instructor. Course may be taken 4 times.

### 10 TEST PREPARATION: OCCUPATIONAL (1.0)

6.0 hours lecture per week\*  
Associate Degree Applicable

Prepares prospective employees to successfully take the necessary placement test or qualifying examination to apply for employment in a variety of occupations, such as the psychiatric technician placement test and the civil service examination. The specific content, skills, knowledge, and the most appropriate test-taking approaches will be included to build confidence, and reduce uncertainty, confusion, and test anxiety. The goal is to maximize each individual's potential to achieve the highest possible score on the placement test or qualifying examination.

### 15 ADJUNCT STUDY SKILLS (0.5)

1.5 hours laboratory per week  
Associate Degree Applicable

Learn, practice, and apply time management, textbook reading, critical thinking, note taking, and test taking skills to specific content courses through combining small group collaborative instruction and individualized lab modules covering study skills appropriate to various content courses.

### 20 LEARNING ESSENTIALS FOR COLLEGE SURVIVAL (1.5)

3.0 hours lecture per week  
Associate Degree Applicable

Presents essential study methods that promote college success. Including, but not limited to; managing and maximizing learning and study time; critical thinking: levels of comprehension; understanding textbooks and other written material; active listening and notetaking strategies; test preparation: synthesizing and reviewing course content; test taking strategies; and campus resources. Course may be taken 4 times.

### 25 COLLEGE SUCCESS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

A comprehensive course that integrates personal growth and values, academic study strategies, and critical and creative

thinking proficiency. This survey course focuses on life management, learning styles, personal and educational values, time management, instructor-student relations, maintaining health, memory and concentration, lecture note-taking, textbook studying, subject-specific studying, test taking, using the library, critical analysis, problem solving, and creative thinking. Emphasis is on the attainment of life-long success in academic, professional and personal development.

**Transfer:** CSU; UC.

### 27 TEST AND PERFORMANCE ANXIETY (1.5)

3.0 hours lecture per week\*  
Associate Degree Applicable  
*Advisory: ENGL 56*

Explores the relationship between the physiological, psychological, and emotional responses to test and performance anxiety. Course investigates the theories of stress and anxiety and offers guided practice in the cognitive, meditative, and biofeedback-aided techniques to manage anxiety while taking a test, succeeding in math, giving a speech, and/or competing in a sports event.

**Transfer:** CSU.

### 30A INTRO PHONETIC FOUNDATIONS FOR READING AND SPELLING (3.5)

4.5 hours per week: (3.0 hours lecture, 1.5 hours laboratory)  
Associate Degree Non-Applicable

Develops an awareness of sound identity and sequence in words. Promotes the ability to use single-syllable word attack generalizations and introduces multi-syllable concepts. Features multi-sensory and discovery learning. Designed for students with learning disabilities. Contact the instructor as soon as you enroll to schedule the required 1.5 weekly lab hours.

### 30B ADVANCED PHONETIC FOUNDATIONS FOR READING AND SPELLING (3.5)

4.5 hours per week: (3.0 hours lecture, 1.5 hours laboratory)  
Associate Degree Non-Applicable

Continues to develop phonemic awareness and self-correction skills. Teaches multi-syllable word attack generalizations, prefixes, suffixes, and strategies for visual memory and proofreading. Continues to use multi-sensory and discovery learning. Contact the instructor as soon as you enroll to schedule the required 1.5 weekly lab hours.

### 32 READING COMPREHENSION (1.0 to 2.0)

2.0 hours lecture per week  
Associate Degree Non-Applicable

Designed for students who have difficulty understanding and remembering what they read. Includes progressive instruction in sentence, paragraph, essay, and textbook chapter comprehension. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised. Course may be taken 3 times.

## COURSES (CONTINUED)

- 34 BUILDING READING ESSENTIALS (3.0)**  
3.0 hours lecture per week  
Associate Degree Non-Applicable
- Promotes review, improvement, and development of the basic reading skills needed to be prepared for ACASK 36: Reading Essentials. This preparation includes the skills fundamental to effective reading and clear thinking by increasing vocabulary through word attack skills, by analyzing the structure of written material through identifying stated and implied main ideas, by discerning the relationships of supporting details, and by valid inferences. Active reading strategies are stressed for optimal comprehension.  
Course may be taken 2 times.
- 36 READING ESSENTIALS (3.0)**  
3.0 hours lecture per week  
Associate Degree Non-Applicable  
*Advisory: ACASK 34 or qualified score on the Cuesta College Assessment Test*
- Promotes understanding and retention of textbook information. Explores myths and misconceptions of the reading process and facilitates increased reading efficiency. Promotes interpretive and application skills of comprehension and develops vocabulary through the integration of content area materials.
- 47 INDEPENDENT STUDIES: ACADEMIC SKILLS (0.5 to 2.0)**  
6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*  
*Advisory: Eligibility for ENGL 56*
- Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of tutor training or disability research.  
Course may be repeated 4 times (only if each time has a different topic emphasis).  
**Transfer: CSU.**
- 50 WRITING FUNDAMENTALS (3.0)**  
3.0 hours lecture per week  
Associate Degree Non-Applicable
- Presents the sequential development of writing, beginning with sentence structure, grammar and mechanics. Practice is provided in creating a topic sentence, pre-writing, writing and revising whole paragraphs. Particular attention is paid to focusing on the topic and providing adequate support for main idea statement. Critical thinking and organizational skills are developed through mapping and brainstorming techniques for writing logical and well structured paragraphs. A multisensory approach to the writing process is emphasized to ensure success for the learning
- disabled student with processing deficits. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.  
Course may be taken 4 times.
- 55 SPELLING ESSENTIALS (3.0)**  
3.0 hours lecture per week  
Associate Degree Non-Applicable  
*Advisory: Eligibility for ENGL 56*
- Introduces techniques for improving spelling competence with emphasis on understanding and analyzing spelling errors.
- 58 GRAMMAR ESSENTIALS (1.5)**  
3.0 hours lecture per week  
Associate Degree Non-Applicable
- Focuses on the basic grammar, punctuation, and usage skills essential for effective writing.  
Course may be taken 4 times.
- 75 ARITHMETIC FUNDAMENTALS (4.0)**  
4.0 hours lecture per week  
Associate Degree Non-Applicable
- Provides a basic arithmetic and math study skills course for students who have a history of difficulties in mathematics. This course uses alternative and active approaches for learning the concepts and skills of place value, basic operations, fractions, decimals, percentages, word problems, learning styles, and math study strategies.  
Course may be taken 2 times.
- 93 ACADEMIC SKILLS SPECIAL TOPIC (0.5 to 4.0)**  
Associate Degree Applicable
- Examines a special topic in the field of study related to the discipline offering this course.
- 99 SUPERVISED TUTORING (0.0)**  
1.0 hours laboratory per week  
*Prerequisite: Enrollment in a Cuesta College credit course and referral by a counselor and/or instructor*
- Provides students one-to-one and small group tutoring in basic skills and content area courses. Includes assessment of study skills, exam reviews and study sessions. Repeatable.
- 101 COMPUTER ACCESS EVALUATION (0.5)**  
0.5 hours lecture per week  
Associate Degree Non-Applicable
- Provides a diagnostic evaluation to determine whether the student

## COURSES (CONTINUED)

possesses the necessary skills to benefit from participation in the Assistive Technology Center for the Disabled. Evaluation areas include cognitive processing abilities, keyboard access, general mobility and seating, educational or vocational goals.

### 104 ADAPTED STUDIES: LECTURE (1.0 to 2.0)

2.0 hours lecture per week  
Associate Degree Non-Applicable

Presents curricula and instruction, not available in other courses in a lecture format, to meet identified special learning needs of disabled students. May include advanced training in comprehension, phonetics, computer-assisted instruction, or other specialized topics. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.

Course may be taken 4 times.

### 107 ADAPTED STUDIES: LABORATORY (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Non-Applicable

Presents individualized curricula and instruction to meet identified special learning needs of disabled students. May include computer assisted instruction, audiotutorial programs, individual assignments, or tutoring in specialized topics. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.

Course may be taken 4 times.

### 110 KEYBOARDING FOR COMPUTER ACCESS (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Non-Applicable

Provides keyboarding basics to students with disabilities. Incorporates adaptive technologies into the context of computer tutorials.

Course may be taken 2 times.

### 113 COMPUTER ACCESS: ADAPTED WORD PROCESSING (1.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Non-Applicable  
*Advisory: Ability to type 15 words per minute*

Presents a 9-week basic word processing course. Emphasizes assistive hardware and software (speech synthesizers, screen enlargers, spell-checkers, keyboard alternatives) and beginning word processing skills (editing, saving, printing, formatting, file management). Designed for students with verified disabilities. Course may be taken 2 times.

### 119 INTRODUCTION TO COMPUTERS USING ASSISTIVE TECHNOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Non-Applicable

An introduction to computers designed for students with disabilities. Discusses the history of the personal computer as well as how it relates to students with disabilities. Students will also learn about the components that make up a personal computer and relevant information which will enable them to create an ideal computer system for themselves.

Course may be taken 4 times.

### 122 INTRODUCTION TO THE INTERNET USING ASSISTIVE TECHNOLOGY (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Non-Applicable

An introduction to the Internet designed for students with disabilities. Discusses the Internet as well as how it relates to students with disabilities. Students will also learn about the components that make up the Internet and relevant information, which will allow them to search on the Internet with the latest search engines. New technologies affecting the Internet will also be discussed and used in context to the educational setting.

Course may be taken 4 times.

### 125 COMPUTER ACCESS: ADAPTED WORD PROCESSING I (2.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Non-Applicable  
*Advisory: Ability to type 20 words per minute (depending upon nature of disability)*

Introduces the use of microcomputer access technologies for students with physical or learning disabilities within the context of word processing.

Course may be taken 2 times.

### 128 COMPUTER ACCESS: WORD PROCESSING II (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Non-Applicable  
*Advisory: ACASK 125 or equivalent*

Continues ACASK 125. Enhances the student's skills through the completion of assignments or projects.

Course may be taken 4 times.

### 131 COMPUTER ACCESS: APPLICATIONS (2.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Non-Applicable  
*Advisory: MATH 3, ENGL 100, Ability to type 15 words per minute*

Presents the use of computer access technologies for students with physical and/or learning disabilities within the context of word processing, database, and spreadsheet programs. Designed for students with verified disabilities.

Course may be taken 2 times.

## COURSES (CONTINUED)

- 140 DIAGNOSTIC TESTING FOR LEARNING DISABILITY (0.5)**  
0.5 hours lecture per week  
Associate Degree Non-Applicable
- Assesses eligibility for Disabled Student Programs and Services according to California Community College Title V regulations. Develops an Individual Educational Plan (IEP). Provides placement recommendations, support, and counseling. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.
- 147 INDEPENDENT STUDIES: ACADEMIC SKILLS (0.5 to 2.0)**  
6.0 hours laboratory per week  
Associate Degree Non-Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*
- Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of learning skills under the direction of an instructor. An appointment with a Disabled Student Programs and Services faculty member is strongly advised.  
Course may be repeated 4 times (only if each time has a different topic emphasis).
- 168 TUTOR TRAINING: SELECTED TOPICS (0.5 to 1.0)**  
1.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*
- Provides specialized information and guided practice in designated topics or projects. Tutors gain expertise in subject areas not offered in other tutor training courses. An appointment with the Tutorial Services Coordinator prior to enrollment is strongly advised.
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- AG TECHNOLOGY - AGTECH**
- 5 VINEYARD PRUNING (0.5)**  
9.0 hours lecture per week\*  
Associate Degree Applicable
- Presents theory and field practice of pruning head, cane, and cordon vines. Includes training of young and mature vines.
- 10 PROPAGATION TECHNIQUES (0.5)**  
9.0 hours lecture per week\*  
Associate Degree Applicable
- Presents rootstock and "T" budding of older vines to change varieties. Examines pros and cons of various propagation techniques used in vineyards. Covers care of vines following budding.
- 15 VINEYARD IRRIGATION AND FERTILIZATION (1.0)**  
6.0 hours lecture per week\*  
Associate Degree Applicable
- Studies rootstocks and phylloxera concerns, water and nutrition needs, water application techniques, irrigation and fertilizer injection systems.
- 20 VINEYARD CANOPY MANAGEMENT (1.0)**  
9.0 hours lecture per week\*  
Associate Degree Applicable
- Studies the latest techniques in developing trellis systems to improve both grape and wine quality.
- 30 BASIC VITICULTURE (1.0)**  
3.0 hours lecture per week\*  
Associate Degree Applicable
- Basic principles of plant growth, physiology, and anatomy as they pertain to grapevines. Fundamentals of irrigation, fertilization, and pest management will be discussed.
- 35 PEST CONTROL MANAGEMENT UPDATE (0.5)**  
9.0 hours lecture per week\*  
Associate Degree Applicable
- Presents lectures in entomology and related subjects in pest control management. Also provides update training for persons with a pest control license.  
Course may be taken 4 times.
- 40 SOIL FERTILITY AND QUALITY IN CENTRAL COAST VITICULTURE (0.5)**  
9.0 hours lecture per week\*  
Associate Degree Applicable
- Presents basic soil science and soil quality issues needed in growing wine grapes in the Central Coast wine growing region. The focus is on soil textures, soil fertility, soil quality and estimating the available water holding capacities. Soil profiles and other essential soil properties will be investigated by using backhoe pits.
- 93 AGRICULTURE TECHNOLOGY SPECIAL TOPIC (0.5 to 4.0)**  
Associate Degree Applicable
- Examines a special topic in the field of study related to the discipline offering this course.
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- ANTHROPOLOGY - ANTH**
- 1 PHYSICAL ANTHROPOLOGY (3.0)**  
3.0 hours lecture per week  
Associate Degree Applicable

# COURSES (CONTINUED)

*Advisory: ENGL 56*

Presents an introduction to, and history of, evolutionary theory, its application to human evolution, humans' relationship to primates, and the significance of racial differences.

**Transfer: CSU; UC. (CAN ANTH 2)**

## 1L PHYSICAL ANTHROPOLOGY LABORATORY (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Corequisite: ANTH 1*

Utilizes the hands-on laboratory approach in studying primatology, osteology, dentition, genetics and human variation. Both fossil and contemporary will be studied.

**Transfer: CSU; UC.**

## 2 ARCHAEOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents an introduction to archaeological theory and concepts, as well as an overview of both New and Old World archaeology.

**Transfer: CSU; UC. (CAN ANTH 6)**

## 3 CULTURAL ANTHROPOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents an introduction to the concepts of cultural anthropology, different perspectives for the study of culture and their application. Primitive cultures are studied both as they existed before contact with Western civilization and as they are today.

**Transfer: CSU; UC. (CAN ANTH 4)**

## 20 CALIFORNIA INDIANS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents a history of the California Indians, including their prehistory, the Indians at the time of European contact, the Spanish period, the early Anglo-American period, and the Indians today.

**Transfer: CSU; UC.**

## 21 NORTH AMERICAN INDIANS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Studies the North American Indians, including their lifestyle at the time of contact, their reactions to European contact, and the Indians at present.

**Transfer: CSU; UC.**

## 25 CONTEMPORARY CULTURES OF THE WORLD (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Studies the ways of life of people in different regions of the world, including Latin America, Middle East, East Asia, and Africa. Beliefs, values, and other social characteristics such as family, economics, and religion will be studied.

**Transfer: CSU; UC.**

## 47 INDEPENDENT STUDIES: ANTHROPOLOGY (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of anthropology under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU; UC.**

## ARCHITECTURE - ARCH

### 101 SURVEY OF ARCHITECTURAL EDUCATION AND PRACTICE (1.5)

1.5 hours lecture per week

Associate Degree Applicable

Exploration of the major paradigms which have guided the development of architectural education and the profession. Survey of the roles of the architects and an introduction to curricula and programs designed to prepare students for careers in architecture.

**Transfer: CSU; UC.**

### 102 INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN (1.5)

1.5 hours lecture per week

Associate Degree Applicable

Introduces the professional fields of architecture, engineering, city planning, construction and landscape design. Includes the design process and development as a basis for architectural analysis. This course is not taught at Cuesta College, but may be taken at Cal Poly through concurrent enrollment.

**Transfer: CSU; UC.**

### 110 ARCHITECTURAL DESIGN & PRESENTATION COMPUTER GRAPHICS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CIS 10 or equivalent and completion of or concurrent enrollment in ARCH 111*

# COURSES (CONTINUED)

Introduces computer design and presentation skills for architecture students including image editing, page layout, and 3D modeling.

**Transfer:** CSU.

## 111 DESIGN AND VISUAL COMMUNICATION I (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable

Presents principles, concepts, methods and skills pertaining to freehand and drafted drawings employing orthographic, axonometric, oblique and lineal perspective drawing systems to represent ideas, objects and environments. Includes principles and concepts of two- and three-dimensional visual design. Covers basic color theory principles, concepts and application; basic physical model building concepts and skills; shadow casting principles, conventions and techniques for orthographic, axonometric, oblique and perspective drawing systems.

**Transfer:** CSU; UC.

## 112 DESIGN AND VISUAL COMMUNICATION II (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite:* ARCH 111 and Completion of or concurrent enrollment in ARCH 110

Continuation and extension of the content and issues introduced in ARCH 111, plus the principles, concepts, methods and skills pertaining to the freehand, drafted and digital visualization and communication of quantitative and qualitative information to support analysis and conceptualization.

**Transfer:** CSU; UC.

## 113 ARCHITECTURAL PORTFOLIO PRESENTATION (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite:* ARCH 112

*Advisory:* Concurrent enrollment in ARCH 252

Prepares students with skills and resources needed to present work in a consistent and unified portfolio for job procurement and transfer credit. This studio based design course focuses on the development of a professional architectural portfolio representing student architectural design, model making and visual communication skills.

**Transfer:** CSU; UC.

## 115 ARCHITECTURAL MODEL MAKING (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite:* ARCH 111 and CTECH 50

*Advisory:* Completion of or concurrent enrollment in ARCH 112, ARCH 231, or high school drafting

Introduces basic concepts and creation of 3D scaled material architectural models for visual representation and communication of architectural design.

Course may be taken 4 times.

**Transfer:** CSU.

## 207 ARCHITECTURAL ENVIRONMENT CONTROL SYSTEMS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* PHYS 5B

*Advisory:* Completion of or concurrent enrollment in ARCH 252

Introduces the theory and application of climate, energy use and comfort as determinates of architectural form. Includes architectural methods of ventilating, cooling, heating, and lighting for envelope-load dominated buildings. Acceptable for credit, CSU, (credit based on portfolio review).

**Transfer:** CSU.

## 220 GREEN BUILDING DESIGN WITH LEED TRAINING (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ARCH 207, ARCH 231, CTECH 50, or comparable professional experience

Introduces Green Building Design and prepares architecture students and design and construction professionals for LEED accreditation with an introduction to the U.S. Green Building Council LEED Rating System, green building design fundamentals, and industry resources, processes and strategies for green design.

**Transfer:** CSU.

## 230 ARCHITECTURAL COMPUTER AIDED DRAFTING AND DESIGN (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory:* ARCH 231

Presents the use of computer aided drafting and design software as a tool for generating construction drawings, 3D modeling and design presentations. This course provides an introduction to the use of Architectural Desktop and 3D Studio VIS as it applies to architectural practice.

**Transfer:** CSU.

## 231 INTRODUCTION TO ARCHITECTURAL PRACTICE (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* CTECH 50 and ARCH 111

Introduces wood construction methods, processes, and their documentation.

**Transfer:** CSU.

## 251 ARCHITECTURAL DESIGN FUNDAMENTALS I (5.0)

# COURSES (CONTINUED)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ARCH 112

Presents theories, principles, methods and means of creative problem solving, two- and three-dimensional visual organizations to communicate concepts and meanings, basic verbal and visual communication skills, analysis of the built environment with emphasis on the creation and interrelationship of architectural form, function and light.

**Transfer:** CSU; UC.

## 252 ARCHITECTURAL DESIGN FUNDAMENTALS II (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ARCH 251

*Advisory:* Completion of or concurrent enrollment in ARCH 113 and ARCH 207

Continuation of theories, principles, methods and means of creative problem solving, two- and three-dimensional visual organizations to communicate concepts and meanings, basic verbal and visual communication skills, analysis of the built environment with emphasis on the creation and interrelationship of architectural form, function, structure and context.

**Transfer:** CSU; UC.

## 254 ADVANCED ARCHITECTURAL GRAPHIC COMMUNICATION (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ARCH 111 and ARCH 112

*Advisory:* ARCH 251

Presents advanced architectural presentation drawing and graphic communication skills with emphasis on representing quantitative and qualitative information, ideas, and concepts with freehand sketching and drawing techniques. Includes abstract diagramming, the use of color and the design of two-dimensional graphic communications with direct application in a community design charette.

Course may be taken 4 times.

**Transfer:** CSU.

## ART

### 93 ART SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 100 ART APPRECIATION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Introduces the form, content, and media of the visual arts. Overview of artistic methods, materials, and language, exploring cultural and historical significance. Presents major art movements and styles including prehistoric to contemporary.

**Transfer:** CSU; UC.

### 103 SURVEY OF ART HISTORY: OLD STONE AGE THROUGH GOTHIC (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 1A

Presents the first of a three-semester course in the history of Western art. Includes cultural and historical background of Prehistoric (Paleo-lithic and Neolithic periods), Ancient Near Eastern, Egyptian, Aegean, Greek, Roman, and Medieval art traditions. Discusses and compares the cultural background of each of these artistic traditions.

**Transfer:** CSU; UC. (CAN ART 2)(ART 103 + ART 104 + ART 105 = CAN ART SEQ A)

### 104 SURVEY OF ART HISTORY: RENAISSANCE THROUGH 19TH CENTURY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 1A

Presents the second of a three-semester course in the history of Western art. Includes cultural and historical background of the Renaissance, Baroque, Rococo, Neo-Classic, Romantic, Realist, Impressionist, and Post-Impressionist periods of art.

**Transfer:** CSU; UC. (ART 103 + ART 104 + ART 105 = CAN ART SEQ A)(ART 104 + ART 105 = CAN ART 4)

### 105 SURVEY OF ART HISTORY: MODERNISM AND POST-MODERNISM (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 1A

Presents an overview of the art movements, artists and issues of Modernism and Post-Modernism. This includes art from the mid-nineteenth century, through the twentieth century and contemporary art. Includes the social, political, and aesthetic context of the time.

**Transfer:** CSU; UC. (ART 103 + ART 104 + ART 105 = CAN ART SEQ A)(ART 104 + ART 105 = CAN ART 4)

### 106 SURVEY OF ART HISTORY: NON-WESTERN ART (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 1A

# COURSES (CONTINUED)

Surveys the art traditions of African, Asian, Native American, Pre-Columbian, and other non-Western cultures as expressions of their religions and philosophies. Compares non-Western to Western art to reveal cross-cultural influences and explains the diversity of 20th century art.

**Transfer:** CSU; UC.

**119 ART ISSUES SEMINAR (1.0)**  
1.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents lectures and discussions concerning a specific topic in contemporary or historical art issues or theory. Provides the opportunity for an in-depth study and analysis of individual artists, art works, movements and contemporary trends in art making and criticism.

Course may be taken 3 times.

**Transfer:** CSU.

**120 FUNDAMENTALS OF 2-D DESIGN (3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable

Introduces the basic design elements and principles common to all visual art forms. Provides studio experience in the practical application of design and color theory through creative assignments.

**Transfer:** CSU; UC. (CAN ART 14)

**121 BEGINNING DRAWING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable

Presents an overview of the art of drawing in an historical and contemporary context by introducing the basic practice and theories of drawing as a fine art. It introduces basic elements and principles of design, a variety of drawing media, and the use of drawing as a personal means of visual expression and communication.

**Transfer:** CSU; UC. (CAN ART 8)

**122 INTERMEDIATE DRAWING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 121*

Continues ART 121 with an emphasis on composition and content.

Course may be taken 2 times.

**Transfer:** CSU; UC.

**123 LIFE DRAWING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 122*

Presents the fundamentals of anatomy and representation of the human form in various attitudes and movements. The skeleton and live models will be used.

**Transfer:** CSU; UC.

**124 INTERMEDIATE LIFE DRAWING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 123*

Continues ART 123 with an emphasis on personal interpretation and the use of the figure in composition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

**130 BEGINNING PAINTING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 120 and Art 121*

Introduces basic painting techniques, methods, materials and language, including color mixing, brushwork, and composition.

**Transfer:** CSU; UC.

**131 INTERMEDIATE PAINTING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 130*

Presents a continuation of ART 130 with an emphasis on contemporary issues in painting. Composition and content is also stressed.

Course may be taken 4 times.

**Transfer:** CSU; UC.

**132 WATERCOLOR PAINTING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 120 and ART 121*

Explores the fundamental techniques and creative use of aqueous media in painting on paper.

**Transfer:** CSU; UC.

**133 INTERMEDIATE WATERCOLOR PAINTING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ART 132*

Continues ART 132 with an emphasis on problem-solving, composition and development of personal style.

Course may be taken 3 times.

**Transfer:** CSU; UC.

**134 FIGURE PAINTING (2.0 to 3.0)**  
6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

## COURSES (CONTINUED)

Associate Degree Applicable

*Prerequisite:* ART 123 and ART 130

*Advisory:* ART 124 and ART 131

Introduces the fundamentals of painting from the human figure, the creative use of various painting media, and the figure in context.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 140 INTRODUCTION TO PRINT MEDIA (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Introduces a variety of print media including traditional historical printmaking practices such as relief, etching, and stencil.

Includes contemporary print media such as photocopy, offset lithography, computer generated images and artists' books.

Presents the art of printmaking in an historical and contemporary context.

**Transfer:** CSU; UC.

### 141 ETCHING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 121

Offers instruction and studio practice in etching and related intaglio printmaking techniques as well as the designing of images appropriate to these techniques.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 143 BOOK ARTS (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 120

Presents an investigation of the book form as a vehicle of creative expression. Explores the book structure through the history, concepts and the creative application of this unique art object, in which the content is not limited to words alone.

Course may be taken 4 times.

### 144 PHOTOGRAPHY (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Introduces black and white still photography as a fine art in an historical and contemporary context. Presents traditional darkroom practices through projects that introduce the elements and principles of design. Emphasizes use and care of 35mm cameras, related photography equipment, black and white film processing and photographic enlargements. NOTE: A 35mm camera is required for class.

**Transfer:** CSU; UC.

### 145 INTERMEDIATE PHOTOGRAPHY (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 144

Continues study of photography as a fine art as introduced in ART 144. Presents intermediate level concepts and darkroom techniques in black and white still photography. The development of photography as a means of personal expression, the infusion of content, and composition will be stressed.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 146 CAMERAART (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 144

Explores photography as an art form including cross-media hybrids such as painting with light, handcoloring and drawing on photographic images, use of liquid light, combining images and words, and conventional photography.

Course may be taken 4 times.

**Transfer:** CSU.

### 147 DIGITAL VIDEO EDITING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Presents an overview of digital non-linear video editing, including acquiring digital video and combining and editing source material to create complete digital movies. Topics include: basic editing techniques, cuts and transitions, adding and altering audio, titling, keying and transparency, and applying filters and effects.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 148 DIGITAL VIDEO EFFECTS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Presents the art and science of digital compositing for visual effects and 2D animation, utilizing Adobe After Effects for film and video applications. Explores technical and aesthetic issues.

Course may be taken 4 times.

**Transfer:** CSU.

### 149 DIGITAL PHOTOGRAPHY (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 144 and ART 156

Introduces concepts and technical fundamentals of digital photography as an extension to traditional photography. Presents practices and techniques unique to digital photography through projects that emphasize personal expression, the infusion of content and composition. Emphasizes the practical and aesthetic

# COURSES (CONTINUED)

issues of digital photography, care and use of digital cameras, and other equipment related to digital photography.

Course may be taken 4 times.

**Transfer:** CSU.

## 150 MACINTOSH OPERATING SYSTEM (1.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)\*

Associate Degree Applicable

Introduces the Macintosh Operating System, computer hardware basics, technology, terminology, peripheral equipment and general practices used when operating a personal computer. Basic computer graphics and related graphics hardware are introduced.

## 153 DIGITAL ART (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Introduces the use of the Macintosh computer, specific to art applications and the creation of fine art. Instruction will focus on the Macintosh operating system, and the use of current industry standard vector-based drawing and raster-based image editing softwares, computer hardware basics, technology, terminology, peripheral equipment and general practices used when operating a personal computer.

**Transfer:** CSU; UC.

## 154 INTERMEDIATE DIGITAL ART (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 153

Continuation of ART 153 with emphasis on the more complex tools and procedures of the software which is introduced in ART 153. Presents intermediate level of integration of digital media with natural art media. Critiques focus on contemporary aesthetic and ethical issues in digital art as well as the design attributes of the artwork.

Course may be taken 2 times.

**Transfer:** CSU; UC.

## 155 VECTOR GRAPHICS (1.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* ART 150 or basic computer skills

Presents primary instruction in the use of industry standard vector-based drawing program. It includes instruction on the use of various digital input devices, complex file storage and transfer systems and output options for hard copy print and screen presentations.

**Transfer:** CSU; UC.

## 156 IMAGE EDITING (1.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* ART 150 or basic computer skills

Presents primary instruction in the use of the industry standard image editing program. It includes instruction on the use of various digital input devices, complex file storage and transfer systems and output options for hard copy print and screen presentations.

**Transfer:** CSU; UC.

## 157 DIGITAL PAINTING (1.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* ART 150 or basic computer skills

Presents primary instruction on the use of the industry standard software for digital painting. It includes instruction on the use of various digital input devices, complex file storage and transfer systems, and output options for hard copy and screen presentations.

**Transfer:** CSU; UC.

## 158 PAGE LAYOUT (1.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* ART 150 or basic computer skills

Presents primary instruction in the use of the industry standard software for digital graphics layout. It includes instruction on the use of various digital input devices, complex file storage and transfer systems, and output options for hard copy.

**Transfer:** CSU.

## 160 CONCEPTUAL BLOCKBUSTING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Presents students with basic concepts to enhance innate creative abilities. Explores the mental and emotional factors involved in the creative process; linear and non-linear thinking, and multiple intelligences. Numerous creative problem-solving techniques, invention, scientific, and artistic case studies are explored. The underlying assumption is that innovation is a skill which can be learned.

**Transfer:** CSU.

## 165 MOTION GRAPHICS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory:* ENGL 56

Introduces the basic principles of animation, interactivity, and other time-based media projects. Students will preview how these are used to construct games, animations and interactive media.

Course may be taken 2 times.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 166 GRAPHIC DESIGN (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ART 153*

Principles and processes used in visual communication. This class focuses on the creative and practical exploration in the area of visual communication. Topics in this class are fundamental to the creation of digital layout, graphics, illustrations, photography, animation, video and multimedia. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content.

**Transfer:** CSU.

## 167 INTERMEDIATE GRAPHIC DESIGN (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ART 166*

Continues the practical skills of ART 166 emphasizing critical assessment of the design principles used in visual communication as well as creative and practical exploration. Topics in this class are fundamental to the creation of digital layout, graphics, illustrations, photography, animation, video and multimedia.

**Transfer:** CSU.

## 168 TYPOGRAPHY (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces basic principles in the effective use of type. Emphasis is on the use of typography in graphic design. Topics include the history of type, aesthetic qualities of letterforms, anatomy of the letter, typeface and style, and compositional arrangement.

**Transfer:** CSU; UC.

## 170 FUNDAMENTALS OF 3-D DESIGN (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Introduces the basic elements and principles of three-dimensional design. Presents a variety of studio problems using basic sculptural materials, tools and methods. Presents an overview of 3D design in historical and contemporary context.

**Transfer:** CSU; UC. (CAN ART 16)

## 171 BEGINNING SCULPTURE (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Introduces the issues and techniques of contemporary sculpture. Assignments emphasize ideas and personal expression while utilizing the elements and principles of design. Projects explore materials such as fabrication with plaster, metal, mixed media, and wood, and contemporary approaches such as site-specific and installation sculpture.

**Transfer:** CSU; UC. (CAN ART 12)

## 172 INTERMEDIATE SCULPTURE (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ART 171*

Continues study of issues and techniques of contemporary sculpture as introduced in ART 171. Presents intermediate level assignments in fabrication and introduces the casting process. Additional emphasis will be placed on large-scale projects such as site-specific, performance, installation and public art.

Course may be taken 4 times.

**Transfer:** CSU.

## 173 FIGURE SCULPTURE (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ART 123, ART 170, or ART 171*

Introduces basic anatomy including the opportunity to sculpt from a live model using traditional and contemporary techniques and materials. Emphasizes development of individual, creative work within directed assignments.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 174 SCULPTURE FOUNDRY (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Successful completion of Art 170 or Art 171 or equivalent study to be presented in a portfolio and evaluated by the instructor*

Provides instruction and practice in bronze casting of sculpture using the lost wax processes including direct modeling and mold making. Emphasizes contemporary art issues related to bronze sculpture.

Course may be taken 4 times.

**Transfer:** CSU.

## 180 CERAMICS (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

Introduces the practice and appreciation of ceramics as a fine art covering the basic elements and principles of three-dimensional design, methods and materials specific to ceramic media, and the use of ceramics as a personal means of visual expression and communication. Presents an overview of the art of ceramics in an historical and contemporary context.

**Transfer:** CSU; UC. (CAN ART 6)

## 181 CERAMICS (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ART 180*

## COURSES (CONTINUED)

Continues ART 180 with an emphasis on throwing on the potter's wheel, sculptural form derived from wheel-thrown objects, and sculptural form combining wheel and handbuilt forms.

Course may be taken 3 times.

**Transfer:** CSU; UC.

### 182 INTERMEDIATE CERAMICS (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 180

Explores contemporary issues in ceramic art and the more technically involved construction and decorating methods. Covers large scale handbuilding, advanced wheel work, glaze testing, and kiln stacking.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 183 CERAMIC SCULPTURE (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ART 180 or a comparable college-level beginning ceramics class

*Advisory:* ART 170 and/or ART 171

Presents contemporary and traditional processes and materials in their application to the construction of ceramic sculpture.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 190 ART EXCURSIONS (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* Completion of or concurrent enrollment in any art class

*Advisory:* Eligibility for ENGL 1A

Presents an opportunity for fine arts students to sketch and study original works of art in museums, galleries, art schools, and other sites in the Los Angeles and San Francisco areas. Sketchbook drawings and/or journal notes may be used by the student as a basis for developing an independent art work or essay.

Course may be taken 4 times.

**Transfer:** CSU.

### 193 PORTFOLIO PRESENTATION (2.0 to 3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory:* ENGL 56

Develops basic skills in resume formulation, selecting, mounting and photographing art work for portfolio presentation to future college or vocational agencies. Examines opportunities and requirements for work in various art-related fields, and investigates goals relative to individual development.

Recommended for art majors and minors.

Course may be taken 2 times.

**Transfer:** CSU.

### 195 ART GALLERY (3.0 to 5.0)

11.0 hours per week: (2.0 hours lecture, 9.0 hours laboratory)

Associate Degree Applicable

*Advisory:* ART 120, ART 170, and ART 190

Explores theoretical, technical and aesthetic aspects of exhibiting works of art, as well as providing actual experience in operating an art gallery. Students will work with exhibiting artists, learn about contemporary issues in art and the relationship between gallery, artist and viewing public. Students assist in design, publicity, installation and management of the Cuesta College Art Gallery.

Course may be taken 4 times.

**Transfer:** CSU.

### 199 INDEPENDENT STUDIES: ART (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Art under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## ASTRONOMY - ASTR

### 10 ASTRONOMY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* MATH 23 or MATH 23SI or equivalent

*Advisory:* Eligibility for ENGL 1A

Presents the astronomy of planets, satellites, asteroids, comets, meteors, the sun, stars, and galaxies.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 10L ASTRONOMY LAB (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* MATH 23 or MATH 23SI or equivalent

*Corequisite:* ASTR 10

*Advisory:* Eligibility for ENGL 1A

Laboratory application of the principles presented in ASTR 10.

**Transfer:** CSU; UC.

## AUTOMOTIVE TECHNOLOGY - ATECH

### 47 INDEPENDENT STUDIES: AUTOMOTIVE TECHNOLOGY (0.5 to 2.0)

# COURSES (CONTINUED)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the technical field in which the study is to be undertaken*

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic in the automotive technology area with support and direction from an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

## 52 INTERNAL COMBUSTION ENGINES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or 65*

Presents the principles of internal combustion engines encompassing design, construction, and application of engine components, including the ignition, cooling, lubricating, fuel systems, and engine tests and measurements.

## 53 ENGINE OVERHAUL PROCEDURES (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: ATECH 52 or equivalent*

Presents a lecture and laboratory course covering theory and manipulative skills required for entry-level employment as an Engine Service Technician. Covers information needed to pass A.S.E. Automotive Technician Certification Test for Engine Service Specialist. Covers diagnosis removal, teardown, inspection, machining, reassembly, installation, and break-in of automotive engines.

## 58 AUTOMOTIVE ELECTRICITY AND ELECTRONICS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Studies basic electrical theory, transistors and other semiconductors, as well as batteries, charging systems, cranking systems, lighting, vehicle wiring, and accessory systems.

## 60 AUTOMOTIVE ELECTRICAL ACCESSORIES (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents electrical and electronic testing, troubleshooting, and repair procedures on the modern vehicle. Covers body and accessory circuits, power options, instrumentation, and interfacing between engine and body control computers.

## 63 AUTOMOTIVE FUEL SYSTEMS: CARBURETION (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Studies automotive fuel systems including filters, tanks, lines, safety equipment, pumps, carburetors, and computer controlled carburetors.

**Transfer: CSU.**

## 64 BASIC AREA CLEAN AIR CAR COURSE (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Minimum one year of trade experience in emissions/tune-up or 180 hours (9 semester units) of accredited training in tune-up, fuel and electrical courses*

Covers the rules and regulations governing the Smog Check Program, inspection procedures using the BAR97 Emissions Inspection System (EIS), and an overview of Onboard Diagnostics II (OBDII). Successful completion of ATECH 64 meets a portion of the requirements for technicians seeking an Emission Basic (EB) or Emission Advanced EA Smog Check Technician License.

Course may be taken 4 times.

## 66 AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR (2.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents theory and practical application of safety inspections, battery service, oil and lubrication, cooling system, ignition system, brake inspection, wheel bearings and minor repairs.

## 68 AUTOMOTIVE REPAIR BUSINESS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Introduces the many facets of operating an automotive repair business, including entrepreneurship, franchising, market analysis, physical facilities, financing, organization, taxes, insurance, bookkeeping, legal aspects. Material is covered from both the employee's and the employer's point of view.

## 69 AUTOMOTIVE TECHNOLOGY INTERNSHIP (3.0)

6.0 hours per week: (1.5 hours lecture, 4.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: Successful completion of 12 semester units of ATECH courses with a 3.0 GPA*

Presents lecture and lab instruction centering around the working environment in the automotive repair industry. Students are assigned to a commercial automotive repair facility for their laboratory experience. Lectures cover such topics as work habits, resumes, interviewing, attitude, safety, labor laws, record keeping, and rules and regulations pertinent to the automotive

# COURSES (CONTINUED)

repair industry.

Course may be taken 4 times.

**Transfer:** CSU.

## 70 AUTO BODY REPAIR I (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents the fundamentals of automotive body repair. Includes instruction in body construction, welding, metalworking methods and equipment used in the auto body repair industry. Emphasis is placed on developing the knowledge and manipulative skill necessary for gainful employment in the auto body repair industry.

## 71 ADVANCED AUTO BODY (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ATECH 70*

Presents an advanced course in automotive body and fender repair which combines laboratory work on campus and on-site research in a commercial repair facility. This course covers estimating damage, frame alignment, trim work, upholstery removal and installation, shop management, and major collision damage repair. Emphasis is placed on developing the knowledge and manipulative skill necessary for gainful employment in the automotive collision repair industry.

## 75 AUTOMOTIVE PAINTING (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Covers surface preparation, selection and application of undercoats, topcoats and other types of refinishing materials and equipment which are compliant with current Air Pollution Control District rulings and laws governing commercial automotive refinishing operations. Addresses health, safety, and environmental concerns relative to the automotive painting industry. Emphasizes development of the knowledge and manipulative skills necessary for gainful employment in the automotive painting industry.

## 77 ADVANCED AUTOMOTIVE PAINTING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ATECH 70, 75*

*Advisory: Eligibility for English 56 or 65*

Presents complete vehicle refinishing, color matching techniques, color theory and custom painting as well as vehicle detailing. Prepares students for employment as an automotive painter. Course may be taken 2 times.

## 80 MANUAL DRIVETRAINS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents the fundamental operation, service, diagnosis, and repair of clutch assemblies, manual transmissions and transaxles, rear wheel drive (RWD) drive shafts and universal joints, front wheel drive (FWD) half-shafts and constant velocity joints, rear axle assemblies and differentials, and drive axle wheel bearings as applied to automobiles and light duty trucks.

**Transfer:** CSU.

## 81 MANUAL TRANSMISSIONS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: ATECH 82, ATECH 86, and ATECH 109 and eligibility for ENGL 56 or ENGL 65*

Presents the operation, diagnosis, repair, and overhaul of rear wheel drive manual transmissions, front wheel drive manual transaxles, and rear wheel drive axles as applied to automobiles and light duty trucks both foreign and domestic.

**Transfer:** CSU.

## 82 AUTOMATIC TRANSMISSIONS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Introduces fundamental operations, rebuilding procedures, and service of torque converters and automotive automatic transmissions. Provides preparation for Automotive Service Excellence Certification.

## 84 BRAKING SYSTEMS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ATECH 109 and eligibility for ENGL 56 or ENGL 65*

Presents automotive braking systems including conventional drum type brakes, disc brakes, vacuum and hydraulic boosters, and anti-lock brake systems. Provides training for licensing by the Bureau of Automotive Repair and by Automotive Service Excellence Certification.

**Transfer:** CSU.

## 86 CHASSIS AND SUSPENSION SYSTEMS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents suspension geometry and design, wheel alignment, active suspension systems, wheel balancing, tires, and steering systems. Provides training toward Automotive Service Excellence Certification.

## 87 AUTOMOTIVE FUEL INJECTION AND TURBOCHARGERS (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

# COURSES (CONTINUED)

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Presents both mechanical and electrical fuel injection systems for automotive gasoline and diesel fuel engines as well as automotive and light truck turbochargers.

## 88 AUTOMOTIVE HEATING AND AIR CONDITIONING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 or ENGL 65*

Provides theory and practical application of the function and repair of heating and air conditioning systems as applied to domestic and imported automobiles. Provides training toward Automotive Service Excellence Certification.

## 93 AUTOMOTIVE TECHNOLOGY SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## 109 INTRODUCTION TO AUTOMOTIVE COMPUTERS (2.5)

4.0 hours per week: (2.0 hours lecture, 2.0 hours laboratory)

Associate Degree Applicable

Covers the theory, operation, and basic test procedures for on-board computers found on domestic and imported vehicles. Designed for entry level automotive study.

## 120 AUTOMOTIVE IGNITION SYSTEMS (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

Covers modern vehicle ignition system theory, diagnosis, and repair. Includes IT, EI, and Coil-On-Plug systems. Course may be taken 2 times.

## 125 ENGINE PERFORMANCE (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ATECH 52, ATECH 109, ATECH 120 or one year in the automotive trade*

Studies automotive engine performance theory and operation including fuel, electrical, emission, and computer systems. Emphasizes tune-up, pollution control, and driveability diagnostic techniques.

Course may be taken 2 times.

## 127 ENHANCED CLEAN AIR CAR COURSE (1.0)

2.0 hours per week: (1.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in ATECH 64*

Provides training as required by the California Bureau of Automotive Repair to meet Advanced Emission Specialist Technician license requirements. Includes training on Smog Check failure analysis and operation of the Bar-97 dynamometer testing system.

Course may be taken 3 times.

## BIOLOGY - BIO

### 1A BIOLOGY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better and CHEM 10 or high school chemistry with a grade of C or better*

*Advisory: ENGL 56*

Presents the principles of life and life processes with an emphasis on cellular structure, cellular chemistry, genetics, and life's origins and diversity.

**Transfer: CSU; UC. (CAN BIOL 2)(BIO 1A + BIO 1B = CAN BIOL SEQ A)**

### 1B BIOLOGY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: BIO 1A with a grade of C or better*

Continues BIO 1A with emphasis on plant and animal structure and physiology, evolution, and ecology.

**Transfer: CSU; UC. (BIO 1A + BIO 1B = CAN BIOL SEQ A)**

### 2 GENERAL BOTANY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: BIO 1A*

*Advisory: ENGL 56*

Presents a study of structure and function of roots, stems, leaves, flowers, fruits and seeds of the flowering plants. Includes the characteristics, life cycles, classification, evolution and ecology of cyanobacteria, fungi, algae and vascular plants.

**Transfer: CSU; UC. (CAN BIOL 6)**

### 3 GENERAL ZOOLOGY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: BIO 1A with a grade of C or better*

Presents a study of the comparative biology of the animal kingdom. Topics covered include comparative anatomy and physiology, embryology, evolution, and ecology.

**Transfer: CSU; UC. (CAN BIOL 4)**

### 4 GENERAL BACTERIOLOGY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

# COURSES (CONTINUED)

Associate Degree Applicable

*Prerequisite: CHEM 10 or equivalent with a grade of C or better*

*Advisory: ENGL 56 and BIO 1A*

Presents the general facts regarding bacteria and other microbial forms, particularly those that affect general health. Laboratory work includes culture techniques, animal host techniques, and identification of microbes.

**Transfer:** CSU; UC. (CAN BIOL 14)

## 5 HUMAN ANATOMY (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Studies human anatomy with models and selected preserved material to demonstrate the anatomical systems. Utilizes an audio-tutorial approach to instruction.

**Transfer:** CSU; UC. (CAN BIOL 10)(BIO 5 + BIO 6 = CAN BIOL SEQ B)

## 6 GENERAL HUMAN PHYSIOLOGY (5.0)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CHEM 10 or equivalent with a grade of C or better and BIO 5*

*Advisory: BIO 1A*

Presents the physiology of human body systems with emphasis upon functions of growth, fitness, motion and sensitivity. Lecture and laboratory contents are appropriate for students of biology, nursing, pre-medical and exercise sciences.

**Transfer:** CSU; UC. (CAN BIOL 12)(BIO 5 + BIO 6 = CAN BIOL SEQ B)

## 8E BIOLOGY SEMINAR: ENVIRONMENTAL (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in any college biology course*

*Advisory: ENGL 56*

Presents discussions of the latest developments in biology and allied fields with an emphasis on environment-related topics.

**Transfer:** CSU; UC.

## 8G BIOLOGY SEMINAR: GENERAL TOPICS (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in any college biology course*

*Advisory: ENGL 56*

Presents discussions in the latest developments in biology and allied fields with an emphasis on general topics.

**Transfer:** CSU; UC.

## 9C COASTAL BIOLOGY FIELD STUDIES (1.0)

54.0 hours laboratory by arrangement per week\*

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in any college biology laboratory course*

*Advisory: BIO 22*

Emphasizes observations and techniques used to appreciate and evaluate California's coastal ecosystems. Camping, food, and other expenses will be the responsibility of the students.

**Transfer:** CSU; UC.

## 9D DESERT BIOLOGY FIELD STUDIES (1.0)

54.0 hours laboratory by arrangement per week\*

Associate Degree Applicable

*Prerequisite: BIO 20 or any college biology laboratory course*

*Advisory: ENGL 56*

Presents a field study course on the California deserts. Includes the formation of the deserts and the ecological relationship of desert plants and animals. Practices field techniques used in data collection and analysis. Camping, food, and other expenses will be shared by the students. UC credit contingent upon UC review.

**Transfer:** CSU; UC.

## 9H HAWAIIAN BIOLOGY FIELD STUDIES (1.0 to 3.0)

36.0 hours per week: (9.0 hours lecture, 27.0 hours laboratory)\*

Associate Degree Applicable

Presents a field study course on the Natural History of Hawaii. Includes the formation of the islands and the ecological relationship of the island plants and animals. Transportation and Land costs are the responsibility of the students. Course may be taken 4 times.

**Transfer:** CSU; UC.

## 9S SIERRA BIOLOGY FIELD STUDIES (1.0)

54.0 hours laboratory by arrangement per week\*

Associate Degree Applicable

*Prerequisite: BIO 20 or any college biology lab course*

*Advisory: ENGL 56*

Studies Sierra ecosystems with emphasis on riparian and meadow habitats, Alpine and coniferous forest ecology and grandeur. Practices field study observations and techniques. Camping, food, and other expenses will be the responsibility of students.

**Transfer:** CSU; UC.

## 10E NATURAL HISTORY OF EASTERN CALIFORNIA MOUNTAINS & DESERTS (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Presents a lecture and field study course on the ecology and natural history of Eastern California mountains and deserts. Includes the study of their geological history, native plant and animal communities, human impacts, and the history and function

## COURSES (CONTINUED)

of the preservation and conservation of ecosystems including the U.S. Forest Service and Bureau of Land Management. A field trip will reinforce and elaborate upon lecture material. Field techniques also will be taught on the field trip. Students will be required to maintain and turn in a standardized field notebook. Camping, food, transportation, and other expenses will be the responsibility of the students. Students should be prepared for camping in both hot and cold (freezing) environments and for extensive hiking on and off trails over rugged terrain at elevations greater than 10,000 feet.

Course may be taken 2 times.

**Transfer:** CSU; UC.

### 10R NATURAL HISTORY OF THE COAST RANGES (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Presents a lecture and field study course on the ecology and natural history of the coast ranges. Includes the study of their geological history, native plant and animal communities, human impacts, and the history and function of the preservation and conservation of ecosystems including the national forest, Bureau of Land Management, and California state parks. A field trip will reinforce and elaborate upon lecture material. Field techniques also will be taught on the field trip. Students will be required to maintain and turn in a standardized field notebook. Camping, food, transportation, and other expenses will be the responsibility of the students. Students should be prepared for camping in a moist, coastal environment and extensive hiking on and off trails from sea level to over 2000 feet over rugged terrain.

Course may be taken 2 times.

**Transfer:** CSU; UC.

### 10V NATURAL HISTORY OF DEATH VALLEY NATIONAL PARK (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Presents a lecture and field study course on the ecology and natural history of Death Valley National Park (DVNP). Includes the study of its geological history, native plant and animal communities, human impacts on DVNP ecosystems, and the history and function of the National Park Service. A field trip to DVNP will reinforce and elaborate upon lecture material. Field techniques also will be taught on the field trip. Students will be required to maintain and turn in a standardized field notebook. Camping, food, transportation, and other expenses will be the responsibility of the students. Students should be prepared for camping in hot deserts, high mountain elevations (8000+ feet), and extensive hiking on and off trails.

Course may be taken 2 times.

**Transfer:** CSU; UC.

### 11 LIFE SCIENCE (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces the non-biology major to the organization and evolution of life and the structure and function of living systems from cells to biomes. Utilizes the lecture and laboratory approach to instruction.

**Transfer:** CSU; UC.

### 12 HUMAN BIOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces fundamental structural and functional concepts of the human body systems, and their disorders and therapies. Designed for non-science majors and provides an appreciation for popular interests such as fitness, immunity, inheritance, and common medical terminology.

**Transfer:** CSU; UC.

### 12L HUMAN BIOLOGY LABORATORY (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion or concurrent enrollment in BIO 12*

*Advisory: ENGL 56*

Laboratory to accompany Human Biology (BIO 12), a general education course for non-biology majors and pre-health related fields. Provides an introduction to the biology of the human species, designed to create an awareness and understanding of the human body functions, human's place in nature and the mechanics of human heredity. Provides direct participation in experiments, demonstrations, and discussions. Topics include elements of human anatomy and physiology, nutrition, disease, elements of human heredity and environmental adaptations, and interpretations of relevant current topics in biology.

**Transfer:** CSU; UC.

### 13 GENETICS IN SOCIETY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces basic principles of genetics and heredity. Emphasizes current advances in genetics, including stem cell research, cloning, cancer, and genetically modified crops. Investigates the social consequences and ethical implications of biotechnology in medicine and agriculture.

**Transfer:** CSU; UC.

### 16 PLANTS & PEOPLE (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

Designed for plant enthusiasts who do not have a strong science background. Includes the basic structure, physiology, reproduction, taxonomy, evolution, and ecology of plants. Discusses varied uses of plants by people of different cultures

## COURSES (CONTINUED)

throughout history. Laboratory work includes setting up experiments, growing, and propagating plants. Students will also learn basic gardening techniques and how to design water-efficient sustainable gardens using California native plants.

**Transfer:** CSU; UC.

### 20 ENVIRONMENTAL BIOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Presents a study of biological concepts, processes, and organismal biology, including scientific methodology, metabolism, genetics, evolution and ecology. These concepts are used to assess environmental issues including human population growth, biodiversity, biological conservation, pollution, and resource and energy use.

**Transfer:** CSU; UC.

### 20L ENVIRONMENTAL BIOLOGY LAB (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in BIO 20*

*Advisory: Eligibility for ENGL 1A*

Presents an optional laboratory course designed to complement BIO 20, Environmental Science. Applies and expands knowledge gained in BIO 20 through field trips, laboratory investigations, and special projects.

**Transfer:** CSU; UC.

### 21 GENERAL ECOLOGY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56 and eligibility for MATH 7*

Studies plant and animal communities emphasizing the interrelationships of living organisms and their living and non-living environment. The emphasis in lecture is on major principles describing these interrelationships including evolution, energy flow and nutrient cycling via food webs, competition, and predation. The emphasis in the laboratory is on the gathering and interpretation of ecological data in lab and field.

**Transfer:** CSU; UC.

### 22 INTRODUCTION TO MARINE SCIENCE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents and integrates the fundamental geological, physical, chemical, and biological aspects of ocean processes. Provides a general introduction to marine research, technology, history and man's interrelationship with the sea.

**Transfer:** CSU; UC.

### 22L INTRODUCTION TO MARINE SCIENCE LABORATORY (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in BIO 22*

Presents an applied, optional course designed to augment BIO 22, through open-sea, laboratory and intertidal investigations.

**Transfer:** CSU; UC.

### 24 PRINCIPLES OF NATURAL HISTORY (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Presents an ecological approach to the natural history of terrestrial plants and animals in California. Emphasizes classification, relationships to environment, interrelationships, problems of life, economic importance, and field biology techniques.

**Transfer:** CSU; UC.

### 26 UNDERSTANDING RARE SPECIES IN CALIFORNIA (1.0)

2.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces the importance of rare species, studies reasons for rarity, and examines methods of preservation. Biological, economical and political influences on rare species are considered.

**Transfer:** CSU.

### 42H HONORS SEMINAR: BIOLOGY (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 1A*

Provides the opportunity for broadening the student's background in general education and for providing a study of selected topics in biology. Emphasis shall be on discussion and analysis of subject matter and current advancements. Open only to students admitted to the Honors Program.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 43 FACILITATOR ASSISTED LEARNING: BIOLOGY SEMINAR (0.5)

9.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: ENGL 56*

Develops interpersonal skills, understanding of the learning process, and effectiveness as a facilitator. Seminar prepares students to facilitate in their subject area.

Course may be taken 3 times.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 44A FACILITATOR ASSISTED LEARNING PRACTICUM: ANATOMY (1.0)

1.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Provides practical applications of facilitator assisted learning (FAL) in small groups of anatomy students.  
Course may be taken 4 times.

**Transfer:** CSU.

## 44B FACILITATOR ASSISTED LEARNING PRACTICUM: BIOLOGY (1.0)

1.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: Completion or concurrent enrollment in BIO 43*  
*Advisory: ENGL 56*

Provides practical applications of facilitator assisted learning (FAL) in small groups of biology students.  
Course may be taken 4 times.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: BIOLOGY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of biology under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 93 BIOLOGY SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## BROADCAST COMMUNICATIONS - BCST

### 21 INTRODUCTION TO BROADCASTING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents the history of the development of radio, television, and cable as technical tools for communication and studies the relationship of this technology to the broadcasting industry, considering such topics as FCC, comparisons of international and American broadcasting, PBS and commercial organizations, regulations, programming sales and advertising, ratings, criticism, free speech implications, and cable and CCTV applications.

**Transfer:** CSU.

### 23 VIDEO OPERATIONS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents the theory and demonstration of video control room and studio equipment. Offers beginning students a comprehensive overview of video studio and field operations, technical fundamentals, and basic program production.

**Transfer:** CSU.

### 24A BASIC AUDIO PRODUCTION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents basic fundamentals of sound, psychoacoustics, sound equipment, and procedures for obtaining the first media job. Laboratory practice provides hands-on use of equipment.

**Transfer:** CSU.

### 24B ADVANCED AUDIO PRODUCTION (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: BCST 24A or equivalent*

Emphasizes polishing basic production skills and developing new and more complex production techniques through computer (Digidesign Pro Tools) editing and audio recording. Provides laboratory practice in the day-to-day operation of the campus radio station.

**Transfer:** CSU.

### 24C ADVANCED AUDIO PRODUCTION (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: BCST 24B with a grade of C or better*  
*Advisory: Eligibility for ENGL 56*

Builds upon the skills introduced in BCST 24B. Introduces theory of programming, format operations, and management of small market stations. Provides experience in news scripting and on-the-air newscasting. Introduces quick punch advanced recording using the Digidesign Pro Tools audio computer. Provides laboratory practices in the day-to-day operation of the campus radio station. Provides some staff members for KGUR radio station.

**Transfer:** CSU.

### 24D ADVANCED AUDIO PRODUCTION (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: BCST 24C with a grade of C or better*  
*Advisory: Eligibility for ENGL 56*

Builds upon the skills and techniques introduced in BCST 24C.

# COURSES (CONTINUED)

Further develops production skills with the introduction of Digidesign Pro Tools mixdown and mastering techniques, and bouncing tracks. Air personality skills emphasized. Provides laboratory practice in the operation day-to-day operation of the campus radio stations. Provides some staff members for KGUR radio station.

**Transfer:** CSU.

## 25A VIDEO STUDIO PRODUCTION (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in BCST 23*

Provides experience in the creation and production of studio video material, including use of TV cameras, switching equipment, studio lighting, audio equipment, and other components of video. Students participate in video productions as performers, camera operators, switchers, floor managers, video and audio engineers, producers, and directors.

**Transfer:** CSU.

## 25B FIELD VIDEO PRODUCTION AND EDITING (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in BCST 23*

Provides experience in the creation and production of single-camera-field video program material. Students will get experience in single-camera-field shooting, non-linear editing, producing, writing, and evaluating.

**Transfer:** CSU.

## 26 WRITING FOR ELECTRONIC MEDIA (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: ENGL 1A or equivalent with a grade of C or better*

Introduces the principles, techniques, and style of writing for electronic media. Includes the writing of commercials, public service announcements, news, editorials, narration, and dramatic presentations. Introduces an analysis of content and ethical considerations of the electronic media.

**Transfer:** CSU.

## 30A TELEVISION INTERNSHIP (3.0)

9.0 hours laboratory by arrangement per week

Associate Degree Applicable

*Prerequisite: BCST 25A and approval of station management*

Provides practical supervised work experience as a regular staff member in a local area television station. Includes work in the production department of a station helping to prepare for and operate equipment during newscasts which may include studio camera operation, floor directing, teleprompter operation, and other assigned responsibilities.

**Transfer:** CSU.

## 30B TELEVISION INTERNSHIP (3.0)

9.0 hours laboratory by arrangement per week

Associate Degree Applicable

*Prerequisite: BCST 25B and approval of the station management*

Provides practical supervised experience working as a regular staff member in a local television station. Includes field shooting, videotape editing, field sound operation, and other production responsibilities as assigned.

**Transfer:** CSU.

## 30C TELEVISION INTERNSHIP (3.0)

9.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: BCST 25A or BCST 25B and approval of station management*

Provides practical supervised work experience as a regular staff member in a local cable company, television station, or other facility. Includes planning, scheduling, talent coordination, production duties and other responsibilities as assigned.

**Transfer:** CSU.

## 30D TELEVISION INTERNSHIP (3.0)

9.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: BCST 25A or BCST 25B and approval of the station management*

Provides practical supervised work experience as a regular staff member in a local area cable company, television station, or other facility. Includes working for independent production companies or advertising agencies.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: BROADCAST COMMUNICATIONS (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of broadcast communications under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 93 BROADCAST COMMUNICATIONS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

# COURSES (CONTINUED)

## BUSINESS - BUS

### 1A PRINCIPLES OF ACCOUNTING (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 and MATH 23 or MATH 23SI*

Provides basic principles of accounting for service and merchandising enterprises. Includes an analysis of books of original and final entry, preparation of financial statements, deferrals and accruals, use of special journals and subsidiary ledgers, notes, allowance method for write-offs, inventory methods, methods of depreciating plant assets, and payroll systems.

**Transfer:** CSU; UC. (CAN BUS 2)(BUS 1A + BUS 1B = CAN BUS SEQ A)

### 1B PRINCIPLES OF ACCOUNTING (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: BUS 1A*

Provides accounting for partnerships and corporations. Includes consolidated statements, statement of changes in financial position, financial statement analysis, accounting for bonds, cost accounting, cost-profit-volume and differential analysis, and accounting for non-profit organizations.

**Transfer:** CSU; UC. (CAN BUS 4)(BUS 1A + BUS 1B = CAN BUS SEQ A)

### 18 BUSINESS LAW (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Offers basic legal knowledge essential to business with emphasis on the laws of contract, sales, agency and employment, commercial paper, property, and secured transactions. Includes study of nature and background of American law, courts, and court procedures.

**Transfer:** CSU; UC. (CAN BUS 8)

### 19 INTERNATIONAL BUSINESS LAW (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Offers basic legal knowledge essential to business including study of nature and background of American law and courts and court procedures with emphasis on both domestic and international laws of contract, sales, agency, employment, business organizations, commercial paper, property, and dispute resolution.

**Transfer:** CSU; UC.

### 29 BUSINESS INTERNSHIP (1.0 to 3.0)

8.0 hours per week: (0.5 hours lecture, 7.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: 6 units of Business classes*

Provides students an opportunity to experience the responsibilities of an employee in a business setting related to their courses of study in business.  
Course may be taken 4 times.

### 40 ADVERTISING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: BUS 43*

*Advisory: Eligibility for ENGL 56*

Introduces the student to the principles, purposes and practices of advertising; the importance of correct appeal, style, headline, typography, color, layout, ethics; and other problems involved in the creation and evaluation of effective advertising. (No artistic ability required.)

**Transfer:** CSU.

### 41 SALES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents principles, purposes, and practices of personal selling and its importance to an organization and to a free enterprise economic system.

**Transfer:** CSU.

### 43 MARKETING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Introduces fundamentals of product planning, pricing, distribution and promotion of goods, services and non-profits; market research, consumer behavior, international business, and the industrial market.

**Transfer:** CSU.

### 45 INTRODUCTION TO BUSINESS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Introduces the field of business and business economics. Includes functions, characteristics, organization, operation, and general problems of business. Surveys the various fields of business management, distribution, records, selling, finance, and production.

**Transfer:** CSU; UC.

### 46 RETAIL MERCHANDISING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A and MATH 23 or MATH 23SI*

## COURSES (CONTINUED)

Introduces students to the methods and techniques of retail distribution of merchandise, with special emphasis on buying, selling and promotion processes in the retail store.

**Transfer:** CSU.

### 47 INDEPENDENT STUDIES: BUSINESS (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of business under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

### 48 SMALL BUSINESS MANAGEMENT (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents the role of small businesses in the free enterprise system. Discusses numerous aspects of small business ownership and entrepreneurship. Provides techniques in strategic planning, marketing, and controlling business operations for managers of small firms.

**Transfer:** CSU.

### 49 ENTREPRENEURSHIP (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 and MATH 23 or MATH 23SI*

Introduces students to the concepts, techniques and requirements for establishing a business.

**Transfer:** CSU.

### 50 ENTREPRENEUR SIMULATION (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56 and MATH 23 or MATH 23SI*

Introduces students to the use of a simulation in making decisions affecting the success/failure of a business.

**Transfer:** CSU.

### 51 ELEMENTS OF ACCOUNTING (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Provides a condensed and general accounting background dealing with basic accounting practices and procedures. Introduces necessary procedures for "service" as well as "service-trading" businesses and payroll accounting. Not open to students with credit in or enrolled in BUS 1A or BUS 1B.

**Transfer:** CSU.

### 60 INTERNATIONAL BUSINESS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: BUS 45*

Provides an understanding of the cultural dimensions and market forces necessary to conduct business in a global environment. Examines ethnocentric models of cultural values and behavior and explores cross-cultural differences between Asia, Latin America, Africa, Middle East, Europe, and the United States in order to develop appropriate strategies to conduct business in a transnational setting. Introduces adaptation skills to successfully deal abroad and identifies the major components of national culture impacting the development and growth of business products and services in the international marketplace.

**Transfer:** CSU.

### 62 GEOGRAPHY FOR INTERNATIONAL BUSINESS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Survey of the characteristics and issues that help define Europe, Latin America, Africa, the Middle East, Asia and the Pacific Rim. Course introduces the topics of natural resource allocation, population patterns, economic variables, political institutions and regional cultural characteristics pertaining to consumers and how they act in the business environment in different regions of the world.

### 64 INTERNATIONAL TRADE RELATIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents how domestic and foreign trade policy is established and discusses its impact on companies conducting international trade. Covers trade agreements, political systems, global monetary determinants and economic policies which facilitate or impede free market trade worldwide.

### 65 BASICS OF EXPORTING AND IMPORTING (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents processes and strategies necessary to export and import from overseas markets. Considers the demand for product utilization, marketing within cultural contexts, pricing levels, transportation channels, export/import documentation requirements plus financing alternatives.

### 66 ISO 9000/TOTAL QUALITY MANAGEMENT (2.0)

2.0 hours lecture per week

Associate Degree Applicable

# COURSES (CONTINUED)

*Advisory: ENGL 56*

Introduces ISO 9000 as a comprehensive management system which assures a quality level of industrial standards that can be applied to worldwide trade. Presents how TQM can be incorporated into company operations leading to continual performance improvements with a focus on the customer.

## **68 INTERNATIONAL MARKETING (3.0)**

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents the issues Associated with marketing products and services in an international context. Discusses the analysis of markets, competitors, consumers and governments in Europe, Asia, Latin America and the Middle East plus sources of information to conduct global research.

## **70 DEALING WITH CHANGE (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides students with an understanding of change and the influence it has on an organization and the individuals in that organization. Topics will include understanding organizational change, theoretical models of change, stages of change, and how to manage organizational change.

Course may be taken 2 times.

## **71 TEAM BUILDING (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides the student with an understanding of how teams work together, common problems teams encounter and how to solve them. Students will learn to recognize various team player styles. Students will be introduced to team building in the workplace. Course may be taken 2 times.

## **72 COMMUNICATING WITH PEOPLE (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Introduces the student to key elements in communication within business organizations. Topics will include verbal and nonverbal communication, listening skills and specific supervisory communication skills. Course may be taken 2 times.

## **73 CONFLICT RESOLUTION (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides the student with an analysis of attitudes and behavior, which create conflict between individuals and groups within an organization. Course may be taken 2 times.

## **74 CUSTOMER SERVICE (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides the student with certain key skills and attitudes in order to effectively meet the needs of customers. The student will be introduced to the concept of internal and external customers, customer satisfaction and customer retention.

Course may be taken 2 times.

## **75 VALUES & ETHICS (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Acquaints the student with the importance of values and ethics in the workplace. The importance of values and ethics involved in the supervisor's carrying out his/her duties will be emphasized.

## **76 ATTITUDE IN THE WORKPLACE (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides the student with certain key skills in the area of attitude so that they may effectively maintain a positive attitude at the workplace and at home. Concepts of how attitudes are communicated, the three types of attitudes and how to adjust one's attitude will be presented. Course may be taken 2 times.

## **77 STRESS MANAGEMENT (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Acquaints the student with various skills the supervisor needs to help employees. Included is the recognition of stress and how to manage it.

Course may be taken 2 times.

## **78 DECISION MAKING & PROBLEM SOLVING (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Introduces the student to decision making and problem solving as a supervisor.

Course may be taken 2 times.

## **79 TIME MANAGEMENT (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

Introduces the student to time management principles and specific tools that assist in making maximum use of time. Course may be taken 2 times.

## **80 EFFECTIVE LABOR RELATIONS (0.5)**

4.5 hours lecture per week\*  
Associate Degree Applicable

# COURSES (CONTINUED)

Provides students with an understanding of the elements of an effective labor relations program for today's workforce. Topics will include understanding principal labor legislation, ways to respond to legal challenges and how to develop basic labor relations approach.

Course may be taken 2 times.

## 83 MANAGEMENT AND SUPERVISION (3.0)

3.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Discusses the process of management and how to supervise employees in today's business climate. The behavioral aspects of managing human resources are emphasized with a focus on the current practices of world-class companies.

**Transfer:** CSU.

## 86 HUMAN RELATIONS (3.0)

3.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Introduces students to the basic principles of how to manage employees in various organizational settings such as business, government and the service sector.

**Transfer:** CSU.

## 93 BUSINESS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## 96 WORKPLACE HUMAN RELATIONS (2.0)

4.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Discusses the process of forming personal attitudes, identifying and changing our personal attitudes, the behavioral aspects of interpersonal relationship and self-esteem are studied. Personal communication skills concepts are discussed. Cultural diversity awareness and increased team building skills are explored.

## CHEMISTRY - CHEM

### 1A GENERAL COLLEGE CHEMISTRY (5.0)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or its equivalent with a grade of C or better and CHEM 10, High School Chemistry or equivalent with a grade of C or better*

Presents the first semester of a one-year course in the

fundamental principles of chemistry. Topics covered include kinetic-molecular treatment of gases, atomic structure and the periodic law, thermochemistry, chemical bonding, correlation of structure with properties, quantitative relationships in chemical reactions, chemical formulas and equations. Laboratory work includes a study of precision and accuracy, standard methods of gravimetric and volumetric analysis, and some computer acquisition and analysis of data.

**Transfer:** CSU; UC. (CAN CHEM 2)(CHEM 1A + CHEM 1B = CAN CHEM SEQ A)

### 1B GENERAL COLLEGE CHEMISTRY (5.0)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CHEM 1A with a grade of C or better*

A continuation of Chemistry 1A with particular reference to the periodic classification of the elements and the laws of chemical equilibrium as illustrated by the qualitative scheme of analysis. Topics covered will include chemical kinetics, thermodynamics, aqueous equilibria, free energy entropy, electrochemistry, coordination chemistry, nuclear and organic chemistry. Laboratory work will include quantitative work as well as a qualitative scheme of analysis for cations and anions and some computer acquisition and analysis of data.

**Transfer:** CSU; UC. (CAN CHEM 4)(CHEM 1A + CHEM 1B = CAN CHEM SEQ A)

### 10 INTRODUCTORY CHEMISTRY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 23, MATH 23SI or equivalent, with a grade of C or better*

Presents an introduction to chemistry and chemical laboratory techniques and methods, including a survey of important chemical principles, a description of the elements, and their compounds.

**Transfer:** CSU.

### 10FAL INTRODUCTORY CHEMISTRY WITH FACILITATOR ASSISTED LEARNING (4.0)

7.0 hours per week: (3.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 23, MATH 23SI or equivalent*

Presents an introduction to chemistry and chemical laboratory techniques and methods, including a survey of important chemical principles and a description of the elements and their compounds. One lab hour per week will utilize Facilitator Assisted Learning to practice problem solving.

**Transfer:** CSU; UC.

### 11 INTRODUCTORY ORGANIC/BIOCHEMISTRY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

# COURSES (CONTINUED)

Associate Degree Applicable

*Prerequisite: CHEM 10 or equivalent*

Presents a semester course of organic and biochemistry. The classification, structure, reactions, bioenergetics, biosynthesis, and chemical communication of organic compounds are studied. In the laboratory, techniques and types of reactions are studied.

**Transfer: CSU; UC.**

## 12A ORGANIC CHEMISTRY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CHEM 1B with a grade of C or better*

Presents the first semester of a one-year course in organic chemistry. The structure and physical properties of the aliphatic, alicyclic and aromatic compounds are correlated with attention to nomenclature and reaction mechanisms. The concepts of stereochemistry, nucleophilic substitution, electrophilic addition and spectroscopy will be introduced. In the laboratory, separation techniques and synthesis reactions will be performed.

**Transfer: CSU; UC.**

## 12B ORGANIC CHEMISTRY (5.0)

9.0 hours per week: (3.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CHEM 12A with a grade of C or better*

Presents the second semester of a one-year course in organic chemistry. The study of reaction types and mechanisms will be correlated with structures. In addition, carbohydrates, fats, proteins and nucleic acids will be studied in conjunction with certain cellular processes. Organic synthesis, structural features, and literature materials will be studied.

**Transfer: CSU; UC.**

## 43 FACILITATOR ASSISTED LEARNING CHEMISTRY SEMINAR (0.5)

9.0 hours lecture per week\*

Associate Degree Applicable

Develops interpersonal skills, understanding of the learning process, and effectiveness as a facilitator. Seminar prepares students to facilitate in their subject area.

Course may be taken 2 times.

**Transfer: CSU.**

## 44 FACILITATOR ASSISTED LEARNING PRACTICUM: CHEMISTRY (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: CHEM 10 or CHEM 10FAL*

Provides practical applications of facilitator assisted learning (FAL) in small groups of chemistry students. Course may be taken 4 times.

**Transfer: CSU.**

## 47 INDEPENDENT STUDIES: CHEMISTRY (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of chemistry under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU; UC.**

## 93 CHEMISTRY SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## COMPUTER APPLICATIONS/OFFICE ADMINISTRATION - CAO A

### 20A BEGINNING COMPUTER KEYBOARDING AND DOCUMENT PROCESSING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Designed for all students whose keyboarding skill will be primary and/or secondary to their vocation and/or for personal use. Provides basic keyboarding skills by touch, using a microcomputer with a 10-key pad. Includes basic formatting instructions for letters, tables, and reports.

### 20B INTERMEDIATE COMPUTER KEYBOARDING AND DOCUMENT PROCESSING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 20A or ability to type 30 words per minute*

*Advisory: CAO A 46 or CAO A 51A, CAO A 51B and CAO A 51C*

Designed for all students whose keyboarding skill will be primary and/or secondary to their vocation and/or personal use. Provides the primary purposes of building speed and accuracy and arranging letters, memos, reports, business forms and tables in proper format.

### 20R REVIEW COMPUTER KEYBOARDING (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 20A or ability to type 20 words per minute*

Presents a review of basic operations and machine functions of the computer. Emphasizes keyboarding techniques, methods, drills, and strategies in order to further develop keyboarding capabilities, and reviews basic formatting skills.

### 20S SPEED AND ACCURACY COMPUTER KEYBOARDING (2.0)

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

## COURSES (CONTINUED)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 20R or ability to type 30 words per minute*

Increases skills in typing speed and accuracy to meet requirements of advanced keyboarding word processing classes. Emphasizes keyboarding basics through keystroking analysis and corrective drills.

### 23 BUSINESS ENGLISH (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Provides an essential course in the writing of sentences and paragraphs necessary to prepare business communications including email messages, memos, letters, and short reports. Introduces principles and correct application of English grammar, style, word usage, language structure, punctuation and sentence construction.

### 24 MACHINE TRANSCRIPTION SKILLS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 20B or ability to type 35 words per minute and CAO A 46, CAO A 48 or CAO A 51A, CAO A 51B and CAO A 51C*

Emphasizes a high degree of skill in transcribing from machine dictation and improves proofreading skills. Continues keyboarding, spelling, vocabulary, and word division skills used in writing letters, reports, memos, and other written communications.

**Transfer:** CSU.

### 25 BUSINESS CALCULATIONS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Provides students with a functional knowledge of electronic calculators and helps them learn to solve efficiently and skillfully various types of problems involving the four arithmetic processes. This functional knowledge includes using proper techniques in the basic operations, understanding the machine parts, interpreting the answers, and recording the answers. Introduces a calculator program on the computer.

**Transfer:** CSU.

### 26 VOICE RECOGNITION SOFTWARE WITH DOCUMENT APPLICATION (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

Uses voice-recognition software in place of the computer keyboard to create documents and navigate the Internet. Covers dictation procedures and voice commands to input text, access program menus, and activate keyboard commands. Uses voice

dictation to create e-mail messages, memorandums, letters, and other business documents. Reviews punctuation, capitalization, number usage, and word usage principles in the context of creating business documents by voice.

### 27 BUSINESS COMMUNICATIONS (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: CAO A 23*

Presents a study of the principles and techniques applicable to all forms of effective business communication. Covers general areas of grammar mechanics and sentence structure. Emphasis is on memorandums, e-mail, routine request letters, positive response letters, negative response correspondence, persuasive communication, and goodwill and special messages. Includes informal and formal reports, proposals, resumes and cover letters, and follow-up messages.

**Transfer:** CSU.

### 28 OFFICE TECHNOLOGY AND TELECOMMUNICATIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Ability to type 25 words per minute*

Introduces typical office routines and responsibilities; principles, practices, and terminology as applied to most common filing methods; business forms; record keeping; office automation; communication and bank services; telephone procedures; human relations; telecommunications; and job securing processes.

### 29 COMPUTER APPLICATIONS/OFFICE ADMINISTRATION INTERNSHIP (0.5)

3.0 hours per week: (0.5 hours lecture, 2.5 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in CAO A 28*

Provides students an opportunity to experience the responsibilities of an office employee in a business setting.

### 46 BEGINNING WORD PROCESSING MICROSOFT WORD (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: Ability to type 35 words per minute*

Introduces basic operations and components of a microcomputer and the Microsoft Word word processing program. Includes text entry, formatting, locating, editing, printing, fonts, writing tools, tabs, merging, headers/footers, and footnotes/endnotes. Course may be taken 2 times.

**Transfer:** CSU.

### 47 INDEPENDENT STUDIES: COMPUTER APPLICATIONS/OFFICE ADMINISTRATION (0.5 to 2.0)

6.0 hours laboratory per week

## COURSES (CONTINUED)

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Computer Applications/Office Administration under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

### 48 BEGINNING WORD PROCESSING: WORDPERFECT FOR WINDOWS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: Ability to type 35 words per minute*

Introduces basic operations and components of a microcomputer and the WordPerfect word processing program. Includes text entry, editing, formatting, managing documents, fonts, printing, writing tools, tabs, headers/footers, footnotes/endnotes, manipulating text, and merging.

Course may be taken 2 times.

**Transfer: CSU.**

### 49 ADVANCED WORD PROCESSING: WORDPERFECT FOR WINDOWS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 48*

Introduces advanced operations of word processing. Emphasizes WordPerfect's formatting documents with special features; macros; graphics and graphic elements; Draw and TextArt; columns; tables; charts; outline feature; sorting and extracting text; styles; creating tables, indexes, and lists; and working with the Web.

Course may be taken 2 times.

**Transfer: CSU.**

### 50 ADVANCED WORD PROCESSING: MICROSOFT WORD (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 46*

Introduces advanced operations of word processing. Emphasizes Microsoft Word's macros, hyphenation, bookmarks, borders, clip art, Draw program, WordArt, Equation Editor, World Wide Web, home pages, hyperlinks, tables, charts, columns, styles, sort and select, outlines, fill-in form templates, table of contents, and index features.

Course may be taken 2 times.

**Transfer: CSU.**

### 51A BEGINNING WORD PROCESSING MODULE I (1.0)

4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CAO A 20B or ability to type 35 words per minute*

*Advisory: ENGL 56*

Introduces basic operations and components of a microcomputer and the word processing program. Includes text entry, editing, formatting, spell checking, and printing functions.

Course may be taken 2 times.

**Transfer: CSU.**

### 51B BEGINNING WORD PROCESSING MODULE II (1.0)

4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CAO A 20B or ability to type 35 words per minute and CAO A 51A or the basic knowledge of the word processing program*

*Advisory: ENGL 56*

Introduces special features of the word processing program. Includes formatting, tabs, merging, multiple page documents, headers and footers, footnotes and endnotes, and find and replace.

Course may be taken 2 times.

**Transfer: CSU.**

### 51C BEGINNING WORD PROCESSING MODULE III (1.0)

4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CAO A 20B or ability to type 35 words per minute and CAO A 51A or the basic knowledge of the word processing program*

*Advisory: ENGL 56*

Introduces special features of the word processing program. Includes creating tables, columns, framing and borders, WordArt or TextArt, and draw programs.

Course may be taken 2 times.

**Transfer: CSU.**

### 52 COMPUTERIZED ACCOUNTING USING QUICKBOOKS PRO (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: BUS 1A or BUS 51*

Provides students familiar with accounting concepts the knowledge, skills, and practice needed to use microcomputers for accounting applications. Includes inputting and electronically managing general journal, specialized journals, financial statement analysis, payroll, inventory, accounts receivable, accounts payable, depreciation, and other accounting applications. Provides training for entry-level computerized bookkeepers, small business owners, and students pursuing further accounting courses.

Course may be taken 2 times.

**Transfer: CSU.**

### 53 ESSENTIALS OF MS PUBLISHER (2.0)

# COURSES (CONTINUED)

2.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: CAO A 66*

Introduces the basics of desktop publishing using MS Publisher. Provides an opportunity for the student to use graphic design and layouts to enhance messages with predefined layouts, programmed guidance through the creation process; and, the ability to personalize, change, completely re-design from basics. Course may be taken 2 times.

## 54 ESSENTIALS OF MS OUTLOOK (2.0)

2.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: CAO A 66*

Introduces the computer user to an electronic desktop information management (DIM) system; a central location from which to create, view, and organize all computer information. Simplifies organizational tasks, journal entries, works with Web addresses by allowing the storage, management and navigation to web sites. Course may be taken 2 times.

## 55 INTRODUCTION TO VOICE RECOGNITION SOFTWARE (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

Provides an opportunity for the student to learn speech recognition software and introductory concepts for the student to dictate phrases and sentences into a word processing program. Course may be taken 2 times.

## 56 TEST PREP FOR MICROSOFT OFFICE SPECIALIST(MOS) CERTIFICATION (0.5)

4.5 hours lecture per week\*  
Associate Degree Applicable

Provides students with the opportunity to become a Specialist in the Microsoft office programs (Word, Excel, Powerpoint, Access or Outlook.) Includes unlimited review and practice tests along with test-taking strategies. Upon completion of class, student will be prepared to take MOS certification exams. Course may be taken 4 times.

## 60 MICROCOMPUTER OPERATIONS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CAO A 20A, CAO A 62 or ability to type 25 words per minute*  
*Advisory: ENGL 56*

Provides an overview of computer hardware, software, and operating system concepts used on computer systems. Students will use a computer to execute problem solving exercises using the operating system. Students will be able to customize the start-up of the operating system and will be able to optimize the use of the operating system.

## 61 INTRODUCTION TO SPREADSHEETS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: Eligibility for ENGL 56*

Introduces the basics of an electronic spreadsheet program. Provides hands-on experience to create the various functions of spreadsheets, macros, databases, and charts. Learn to analyze, identify, and apply the principles needed to apply these various functions.

**Transfer: CSU.**

## 62 INTRODUCTION TO BEGINNING COMPUTER KEYBOARDING (1.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)\*  
Associate Degree Applicable

Introduces typing fundamentals, machine functions, keyboard use, and speed and accuracy drills. Designed to develop a minimum typing speed of 20 words a minute.

## 64 INTRODUCTION TO DATABASE MANAGEMENT (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: Eligibility for ENGL 56*

Introduces the basics of database management by implementing simple databases. Includes creating, querying, sorting, indexing, and manipulating a database file and generating reports and labels. Create custom screens, work with multiple database files, and work with advanced command and report structures applying the knowledge and skills acquired in this course.

**Transfer: CSU.**

## 65 ADOBE INDESIGN, INTRODUCTION TO ELECTRONIC DOCUMENTS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable

Presents primary instruction in the use of Adobe InDesign, a design-oriented publishing tool. Create documents and integrate text and graphics to produce files that may be printed inhouse, printed commercially, or published to a web site.

**Transfer: CSU.**

## 66 INTRODUCTION TO COMPUTER BASICS (1.0)

3.0 hours per week: (2.0 hours lecture, 1.0 hours laboratory)\*  
Associate Degree Applicable

Covers the basics of the computer's Windows operating system. Includes working with folders and files, customizing the operating system environment, using a browser to explore and search the World Wide Web.

**Transfer: CSU.**

# COURSES (CONTINUED)

- 67 POWERPOINT (1.0)**  
 1.0 hours lecture per week  
 Associate Degree Applicable  
*Prerequisite: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: Eligibility for ENGL 56*  
 Introduces the functions of the PowerPoint program, enabling the production of high-quality output for presentation to an audience. Include delivering web presentations.  
 Course may be taken 2 times.
- 68 INTRODUCTION TO PHOTOSHOP (3.0)**  
 3.0 hours lecture per week  
 Associate Degree Applicable  
*Advisory: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
 Presents the basic components of image editing using Adobe Photoshop 6.0, including color management, image formats, and image creation. Concentrates on the Photoshop environment and the use of selections, layers, masks, channels, paths, type, painting tools, blending modes, and filters. Projects include compositing, retouching, and creating images for both the print process and web publishing.  
 Course may be taken 4 times.  
**Transfer: CSU.**
- 69 INTRODUCTION TO WEB PUBLISHING: DREAMWEAVER (3.0)**  
 5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
 Associate Degree Applicable  
*Advisory: CAO A 62 OR CAO A 20A or ability to type 25 words per minute and manage personal computer files. LIBINF 7 and CAO A 68*  
 Introduces Web publishing using Macromedia Dreamweaver. Includes web design terms, techniques and publishing issues; use of Dreamweaver software for Website creation, editing and publishing; and the use of graphic image editing techniques in relation to Web publishing.
- 70A INTRODUCTION TO DATABASE MANAGEMENT-MODULE I (1.0)**  
 4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*  
 Associate Degree Applicable  
*Prerequisite: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: ENGL 56*  
 Introduces the basics of database management. Includes creating and manipulating a database file, and creating and modifying custom forms.  
 Course may be taken 2 times.  
**Transfer: CSU.**
- 70B INTRODUCTION TO DATABASE (1.0)**
- 70C INTRODUCTION TO DATABASE MANAGEMENT MODULE II (1.0)**  
 4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*  
 Associate Degree Applicable  
*Prerequisite: CAO A 70A and CAO A 62, CAO A 20 or ability to type 25 words per minute*  
*Advisory: ENGL 56*  
 Introduces the basics of database management. Create various reports, create and modify select queries, and implement one-to-many relationships within a database.  
 Course may be taken 2 times.  
**Transfer: CSU.**
- 70C INTRODUCTION TO DATABASE MANAGEMENT MODULE III (1.0)**  
 4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*  
 Associate Degree Applicable  
*Prerequisite: CAO A 70B and CAO A 62, CAO A 20 or ability to type 25 words per minute*  
*Advisory: ENGL 56*  
 Introduces the basics of database management. Create many-to-many relationships, create a main form and subform, use cascade update and cascade delete, create parameter query, use aggregate functions, and use macros.  
 Course may be taken 2 times.  
**Transfer: CSU.**
- 71A INTRODUCTION TO SPREADSHEETS-MODULE I (1.0)**  
 4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*  
 Associate Degree Applicable  
*Prerequisite: CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: ENGL 56*  
 Introduces the basics of an electronic spreadsheet program. Provides hands-on experience to create formulas and to manipulate multiple workbooks.  
 Course may be taken 2 times.  
**Transfer: CSU.**
- 71B INTRODUCTION TO SPREADSHEETS-MODULE II (1.0)**  
 4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*  
 Associate Degree Applicable  
*Prerequisite: CAO A 71A and CAO A 62, CAO A 20A or ability to type 25 words per minute*  
*Advisory: ENGL 56*  
 Introduces the basics of an electronic spreadsheet program. Includes formatting, page set-up, and printing tips and techniques. Learn to create charts and macros, and use lists and built-in functions.  
 Course may be taken 2 times.  
**Transfer: CSU.**
- 71C INTRODUCTION TO SPREADSHEETS- (1.0)**

# COURSES (CONTINUED)

## MODULE III

4.5 hours per week: (2.5 hours lecture, 2.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CAO A 71B and CAO A 62, CAO A 20A or ability to type 25 words per minute*

*Advisory: ENGL 56*

Introduces the basics of an electronic spreadsheet program. Includes naming cells and ranges, linking and embedding, using templates, and enhancing the worksheet.

Course may be taken 2 times.

**Transfer:** CSU.

### 72 PHOTOSHOP ELEMENTS (1.5)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)\*

Associate Degree Applicable

Presents image-editing basics for amateur photographers and photo hobbyists. Provides tools and features for users to touch up and enhance photos from digital cameras or scanners; create original images with paintbrushes, textures and special effects; merge photos into panoramas; and other image editing tasks.

### 73 ADOBE ACROBAT (1.5)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)\*

Associate Degree Applicable

Presents primary instruction in the use of Adobe Acrobat. Create PDF files and slideshows, review PDF files, set up email-based reviews, and add digital signatures.

### 93 COMPUTER APPLICATIONS/OFFICE ADMINISTRATION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 520A BEGINNING COMPUTER KEYBOARDING AND DOCUMENT PROCESSING (0.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

*Advisory: ENGL 56*

Designed for all students whose keyboarding skill will be primary and/or secondary to their vocation and/or for personal use. Provides basic keyboarding skills by touch, using a microcomputer with a 10-key pad. Includes basic formatting instructions for letters, tables, and reports.

### 520B INTERMEDIATE COMPUTER KEYBOARDING AND DOCUMENT PROCESSING (0.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

*Advisory: CAO A 51A, CAO A 51B and CAO A 51C or CAO A 20A, CAO A 520A, CAO A 46 or ability to type 30 words per minute*

Designed for all students whose keyboarding skill will be primary and/or secondary to their vocation and/or personal use. Provides the primary purposes of building speed and accuracy and arranging letters, memos, reports, business forms and tables

in proper format.

### 520C ADVANCED COMPUTER KEYBOARDING AND DOCUMENT PROCESSING (0.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

*Advisory: CAO A 51A, CAO A 51B and CAO A 51C or CAO A 20B, CAO A 520B, CAO A 45 or ability to type 40 words per minute*

Continues the development of the speed and accuracy levels necessary for an acceptable keyboarding performance in an office. Emphasis is placed on building production skill in keyboarding accurate business correspondence, manuscripts, materials for duplication, and various business forms.

### 520R REVIEW COMPUTER KEYBOARDING (0.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

*Advisory: CAO A 20A, 520A, or ability to type 20 words per minute*

Presents a review of basic operations and machine functions of the IBM computer. Emphasizes keyboarding techniques, methods, drills, and strategies in order to further develop keyboarding capabilities, and reviews basic formatting skills in centering, correspondence, reports, and business forms.

### 520S SPEED AND ACCURACY COMPUTER KEYBOARDING (0.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

*Advisory: CAO A 20R, 520R, or ability to type 30 words per minute*

Increases skills in typing speed and accuracy to meet requirements of advanced keyboarding word processing classes. Emphasizes keyboarding basics through keystroking analysis and corrective drills.

### 562 INTRODUCTION TO BEGINNING COMPUTER KEYBOARDING (0.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)

Introduces typing fundamentals, machine functions, keyboard use, and speed and accuracy drills. Designed to develop a minimum typing speed of 20 words a minute.

## COMPUTER INFORMATION SYSTEMS - CIS

### 10 INTRODUCTION TO COMPUTER APPLICATIONS (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: ENGL 56 or eligibility for ENGL 1A*

*Advisory: CAO A 20A, CAO A 62 or ability to type 25 words per minute*

Introduces computer terminology, relationship between hardware and software, computer operating systems and application software such as word processing, spreadsheet, database

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

# COURSES (CONTINUED)

management programs, Web features, and linking between application programs.

**Transfer:** CSU; UC. (CAN CSCI 2)

## 11 FORTRAN FOR SCIENTISTS AND ENGINEERS (2.5)

4.0 hours per week: (2.0 hours lecture, 2.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 65A or equivalent

Presents the Fortran language for programming computers. Includes techniques for analyzing problems and devising algorithms for the computer solution of problems requiring the use of elementary algebraic concepts.

**Transfer:** CSU; UC.

## 12 BEGINNING COBOL PROGRAMMING (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 23, MATH 23SI or equivalent

Presents an introduction to programming computers using the Cobol programming language. Includes techniques for analyzing problems and devising algorithms for the computer solution of problems requiring the use of elementary algebraic concepts.

**Transfer:** CSU; UC.

## 14 BEGINNING BASIC PROGRAMMING (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 23, MATH 23SI or equivalent

Presents an introduction to structured programming using the QUICK BASIC programming language. Includes techniques for analyzing problems and devising algorithms for the computer solution of problems requiring the use of elementary algebraic concepts.

**Transfer:** CSU; UC. (CAN CSCI 6)

## 17 "C" PROGRAMMING LANGUAGE (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

Presents a course in programming computers using the ANSI "C" programming language. Includes techniques for analyzing problems and devising algorithms for the computer solution of problems requiring the use of elementary algebraic concepts.

**Transfer:** CSU; UC. (CAN CSCI 16)

## 19 OBJECT ORIENTED PROGRAMMING - C++ (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Advisory:* CIS 17, CIS 31 or CIS 114

This course presents the fundamental concepts of object oriented programming using the C++ language. The course includes techniques for problem analysis and software design with algorithmic problem solutions using basic procedural constructs.

The course includes an introduction to simple data structures and their relation to software design.

**Transfer:** CSU; UC.

## 21 C# .NET PROGRAMMING (3.0)

4.0 hours per week: (3.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Advisory:* CIS 17, or CIS 19, or CIS 31, or CIS 114

Presents the fundamentals of the C# programming language and application development in the "DOT-NET" environment. Concepts include basic C# language syntax and structure, object-oriented design and programming, event handling, user interfaces, elementary data structures, and database connectivity.

**Transfer:** CSU; UC.

## 31 FUNDAMENTALS OF COMPUTER SCIENCE I (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Advisory:* CIS 17 or CIS 114

Presents the fundamentals of an engineering approach to software development. Includes techniques for problem analysis and software design, implementation and verification. Includes algorithmic problem solving using basic procedural constructs and solving computational problems requiring an understanding of intermediate algebraic concepts. Introduction to object oriented programs, graphical user interfaces and software engineering.

**Transfer:** CSU; UC.

## 32 FUNDAMENTALS OF COMPUTER SCIENCE II (2.0)

4.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* CIS 31

Continues the fundamentals of algorithmic problem solving and applications in the engineering of modern computer software using procedural and object-based methods and object oriented programming languages. Presents the principles of abstract data types, including the specification and implementation of simple abstractions such as tables, stacks, queues and lists. Includes basic searching and sorting algorithms and introduces the analysis of algorithms and recursion.

**Transfer:** CSU; UC.

## 33 FUNDAMENTALS OF COMPUTER SCIENCE III (2.0)

4.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* CIS 32

*Corequisite:* CIS 41

Introduces advanced concepts in JAVA including: theory, generic programming implementation, applications, and analysis of Associated algorithms including lists, stacks, queues, hash tables, trees, and graphs, recursion, iteration, searching, and sorting

# COURSES (CONTINUED)

algorithms and analysis.

**Transfer:** CSU; UC.

## 40 MICROCOMPUTER ARCHITECTURE & PROGRAMMING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* CIS 17 or CIS 31

*Advisory:* MATH 24A and ENGR 19

Presents basic microprocessor concepts including internal architecture, memory, addressing, and control through the use of assembly language. Students will write a variety of assembly language programs to perform logic functions and high speed hardware control operations. The use of assemblers, linkers, and debugging tools will be explored.

**Transfer:** CSU; UC.

## 41 DISCRETE STRUCTURES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* MATH 29 and MATH 42 or Math 63 or High School equivalent

Introduction to structures of computer science: numbers, sets, relations, functions and trees. This course includes propositional and predicate logic, applications of predicate logic: preconditions, postconditions, invariants, guards; inductive proofs; applications to verification of algorithms; introduction to complexity of algorithms.

**Transfer:** CSU; UC.

## 47 INDEPENDENT STUDIES: COMPUTER & INFORMATIONAL SCIENCE (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken.

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of computer and information science under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 51 INTRODUCTION TO WEB PUBLISHING: FRONTPAGE (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory:* CIS 10

Overview of the fundamentals of web publishing. This course provides an understanding of web publishing issues and the internet as well as a thorough working knowledge of Microsoft Frontpage.

**Transfer:** CSU.

## 93 COMPUTER INFORMATION SYSTEMS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## 111 INSTALLING AND MAINTAINING COMPUTER SOFTWARE (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

Presents the fundamentals of computer software installation and maintenance. Includes techniques for installing computer applications on various computer platforms. Students will learn how to install and upgrade personal computer software.

## 112 TROUBLESHOOTING COMPUTER APPLICATIONS (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

Presents the fundamentals of troubleshooting and repair of computer software. The course includes communication strategies and techniques for the diagnosis and repair of malfunctioning applications on various computer platforms. Includes the use of diagnostic tools and vendor services. Intended for students completing an Associate in Science degree in Computer Systems Technician program.

## 114 INTRODUCTION TO VISUAL BASIC (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 23, MATH 23SI or equivalent

Introduces programming skills necessary to create Microsoft Visual Basic desktop applications. Instructs how to build custom, multiple-form applications incorporating menus, status bars, and custom toolbars. Includes writing code for input field validation and debug applications using debugging tools. Uses standard controls, control arrays, and create controls dynamically. Implements centralized error-handling in applications and creates setup programs to distribute applications.

**Transfer:** CSU.

## 115 VISUAL BASIC FOR INTERNET APPLICATIONS (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory:* CIS 114 or beginning programming language

Introduces Visual Basic as a tool for creating interactive web pages and linking to business applications. Topics from elementary programming techniques to more advanced subjects such as Active Server Pages and Active Data Objects will be covered.

# COURSES (CONTINUED)

Course may be taken 4 times.

## 117 FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING FOR TECHNICIANS (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable

Presents concepts of computer programming using an object-oriented computer programming language. Includes techniques for problem analysis, software design, implementation, and verification with particular reference to object-oriented programming languages.

## 118 FUNDAMENTALS OF PROGRAMMING FOR THE INTERNET (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable

Presents concepts of writing computer programs for use on the Internet. Includes techniques for problem analysis, software design, implementation, and verification with particular reference to object-oriented programming.

## 121 OPERATING SYSTEMS CONCEPTS I (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Presents the fundamentals of computer operating systems using the Windows operating system as the primary example. Covers how to install, configure and troubleshoot an operating system. Examines operating system concepts associated with applications software support and computer resource management and control.

## 122 INTRODUCTION TO LINUX (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: ELTECH 153*

Presents detailed coverage of operating system concepts and provides the hands-on training necessary for the installation, configuration, and maintenance of the Linux operating system. Subjects covered include file system management and applications support, print server administration, creating user accounts and user groups, networking protocols and TCP/IP networking services, system backup and troubleshooting.

## 123 MICROCOMPUTER PERIPHERALS (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable

Present the fundamentals of computer peripheral devices. Students will learn how to install and troubleshoot various internal and external computer system components.

## 126 NETWORK OPERATING SYSTEMS CONCEPTS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite: ELTECH 153 or equivalent*  
*Advisory: CIS 130*

Presents the concepts and provides the hands-on training necessary for the installation, configuration, and maintenance of a network based computer operating system. Subjects covered include client operating system installation and configuration, network resource location and access using directory services, managing the configuration database (registry), file systems and applications support. Networking protocols and TCP/IP networking services are examined, along with the above topics, during extensive hands-on exercises on a laboratory network. Course may be taken 4 times.

## 128 WINDOWS SERVER ADMINISTRATION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ELTECH 153*  
*Advisory: CIS 121*

Provides the knowledge and skills necessary to perform network server configuration and administration tasks for a typical business network using the Windows Server operating system. Topics will include: configuring network resources, and Active Directory services, server performance optimization, backup strategies, auditing and monitoring network resources and events. Course may be taken 4 times.

## 130 NETWORKING FUNDAMENTALS (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable  
*Advisory: ELTECH 153*

Provides students with classroom and laboratory experience in current and emerging networking technology. Topics include network terminology and protocols, the OSI and TCP/IP networking models, network topologies and media access control techniques, local area networks (LAN's) and internetworking devices (repeaters, hubs, switches, and routers). Special attention is paid to LAN configuration and operation, media types, and IP addressing schemes.

**Transfer: CSU.**

## 131 ROUTER THEORY AND TECHNOLOGY (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: CIS 130*

A course on router technology, router configuration, dynamic routing, and routing protocols. Other topics include Ethernet, Token Ring, and Fiber Distributed Data Interface (FDDI) network architectures, and detailed coverage of Transport Control and Internetworking Protocols (TCP/IP). Students will perform router initialization, configuration, testing, and troubleshooting using console ports, over the network Telnet sessions, and Trivial File Transport Protocol (TFTP) servers.

**Transfer: CSU.**

## COURSES (CONTINUED)

### 132 ADVANCED ROUTING AND SWITCHING (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: CIS 131*

Presents advanced routing concepts such as: the Interior Gateway Routing Protocol (IGRP), network security and traffic control using Access Control Lists, and Novell's IPX internetworking protocol. It also covers LAN switch configuration and technology, Virtual LANs, and the principles of Local Area Network design.

**Transfer: CSU.**

### 133 WIDE AREA NETWORKING (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: CIS 132*

Presents concepts and protocols related to Wide Area Network (WAN) management and design. Detailed coverage is devoted to the Point-to-Point Protocol (PPP), Frame Relay, ISDN, DSL, Leased Lines (T1/T3), and Virtual Private Networks (VPNs). Hierarchical WAN design techniques are used in the completion of a Threaded Case Study (TCS).

**Transfer: CSU.**

### 141 DATABASE SYSTEM ADMINISTRATION (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CAO 64*  
*Advisory: CIS 128*

Provides the knowledge and skills required to install, configure, administer, and troubleshoot Microsoft SQL Server 2000 client-server database management system. Topics include architecture, planning, upgrading, installation, file management, security, backup and restoration of the data, performance issues, constructing and using structured query language (SQL) statements, creating/ transferring/deleting databases, and managing users. This course prepares students for the Microsoft Certified Professional (MCP) exam #70-228: Installing, Configuring, and Administering Microsoft SQL Server Enterprise Edition.

Course may be taken 4 times.

### 143 WEB SITE ADMINISTRATION (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CIS 128 or equivalent*

Provides a solid understanding of what is going on behind the scenes of a Web Site. Coursework emphasizes Web Site structure, performance factors, Web Server maintenance, basic programming techniques, and scripting languages. Security issues such as daemons, auditing, IP spoofing and sniffing, firewalls, encryption, Java security, CGI security and viruses are covered.

Course may be taken 4 times.

## CONSTRUCTION TECHNOLOGY - CTECH

### 47 INDEPENDENT STUDIES: CONSTRUCTION TECHNOLOGY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the technical field in which the study is to be undertaken*

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic in the construction technology area with support and direction from an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU.**

### 50 INTRODUCTION TO CONSTRUCTION (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable  
*Advisory: ENGL 56 or ENGL 65*

Presents the use and application of construction processes and materials for residential, commercial, heavy and highway construction. Covers topics such as elements of city planning, contracting, designing, construction finance, and real estate principals.

**Transfer: CSU.**

### 55 BASIC WOODWORKING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable

Presents the application of power and hand tools to the mill and cabinet trade. Examines types of woods, both hard and soft. Deals with methods of fastening and types of fasteners and joints. Emphasizes general power tools such as table saw, jointer, planer, drill press, sander, shaper and lathe. Safety, capabilities and techniques are covered.

Course may be taken 2 times.

**Transfer: CSU.**

### 56 MACHINE WOODWORKING/FURNITURE (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: CTECH 55*

Presents the study, design, and development of practical applications for basic furniture cabinet, table, and chair construction as utilized by the wood products industry. Includes partitions, face frame, carcass, and basic door and drawer construction used in the furniture industry. Covers operation of woodworking machines, tools and processes, techniques, and care and suitability of tools and machines.

Course may be taken 4 times.

# COURSES (CONTINUED)

- 57 CABINET MAKING/32 MM EUROPEAN CONSTRUCTION** (3.0) Associate Degree Applicable  
*Advisory: CTECH 65*  
 5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
 Associate Degree Applicable  
*Prerequisite: CTECH 55*  
 Introduces European 32mm production methods as used in cabinetmaking. Includes European design and space utilization, European machinery, hardware, and the latest in European systems. Examines the influence of the 32mm system on the American cabinetmaking industry.  
 Course may be taken 4 times.
- 58 CABINET MAKING/FACE FRAME CONSTRUCTION** (3.0) Associate Degree Applicable  
*Prerequisite: CTECH 55*  
 5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
 Associate Degree Applicable  
 Presents traditional face frame cabinet construction as applied in kitchens and bathrooms. Covers design, layout, and material analysis. Includes hands-on experience in carcass construction, face frames, partitions and construction of doors and drawers.  
 Course may be taken 4 times.
- 63 CONSTRUCTION MANAGEMENT** (3.0) Associate Degree Applicable  
*Advisory: ENGL 56 or ENGL 65*  
 3.0 hours lecture per week  
 Associate Degree Applicable  
 Presents the principles and practices of construction management for small firms, with emphasis on marketing, cost accounting, job costing, ownership structure, financing, legal requirements, and construction bonding.
- 64 BLUEPRINT READING** (3.0) Associate Degree Applicable  
*Advisory: ENGL 56 or ENGL 65 and CTECH 50*  
 3.0 hours lecture per week  
 Associate Degree Applicable  
 Introduces basic skills in interpreting blueprints used in construction and interpreting requirements of a plan check. Covers architectural working drawings of residential, light construction, and commercial buildings. Provides an overview of building code provisions in a plan check.
- 65 BLOCK MASONRY** (3.0) Associate Degree Applicable  
 6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
 Associate Degree Applicable  
 Introduces basic concrete block masonry skills. Includes manufacture, sizes and shape, installation techniques, basic plan reading, estimating, scaffolding, and concrete coring.  
 Course may be taken 4 times.
- 66 BRICK MASONRY** (3.0) Associate Degree Applicable  
 6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
 Associate Degree Applicable  
 Provides lecture, demonstrations and training on the installation and uses of brick masonry, veneer fireplaces and cultured stone. Includes basic blueprint reading and estimating for masonry.  
 Course may be taken 4 times.
- 68 RESIDENTIAL PLUMBING** (3.0) Associate Degree Applicable  
 6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
 Associate Degree Applicable  
 Introduces basic residential plumbing theory, installation techniques, plan reading and estimating methods.  
 Course may be taken 2 times.
- 69 RESIDENTIAL WIRING** (3.0) Associate Degree Applicable  
*Advisory: CTECH 50*  
 6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
 Associate Degree Applicable  
 Introduces basic residential wiring skills. Includes basic electrical theory, installation techniques, basic plan reading, estimating and wiring methods.  
 Course may be taken 2 times.
- 70 ADVANCED WOODWORKING** (3.0) Associate Degree Applicable  
*Prerequisite: CTECH 55*  
 6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
 Associate Degree Applicable  
 Introduces advanced wood and cabinet making skills. Examines the types of woods, plywoods, and composites used in European and faceframe cabinet systems. Includes methods of fastening cabinet joints, cabinet design, and production techniques.  
 Course may be taken 2 times.
- 71A HOMEBUILDING - LAYOUT AND CONCRETE I** (3.0) Associate Degree Applicable  
*Advisory: CTECH 50*  
 12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)\*  
 Associate Degree Applicable  
 Provides basic instruction in the skills required for employment in building construction. Includes instruction in tool, equipment, and construction site safety, surveying, blueprint reading, concrete formwork, backhoe operations, and concrete flatwork.  
 Course may be taken 2 times.
- 71B HOMEBUILDING - LAYOUT AND CONCRETE II** (2.0) Associate Degree Applicable  
*Prerequisite: CTECH 71A*  
 12.0 hours laboratory per week  
 Associate Degree Applicable  
 Provides instruction to develop speed and skill through repetition and increasing responsibility for employment in building layout

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

# COURSES (CONTINUED)

and concrete construction.  
Course may be taken 2 times.

## 72A HOMEBUILDING - FLOOR AND WALL FRAMING I (3.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)\*  
Associate Degree Applicable  
*Advisory: CTECH 50*

Provides basic instruction in the skills required for employment in building construction. Includes instruction in rough carpentry, floor systems, wall framing, ceiling joists, exterior siding, shear walls, trusses, windows and roof sheathing, and fireplaces.  
Course may be taken 2 times.

## 72B HOMEBUILDING - FLOOR AND WALL FRAMING II (2.0)

12.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: CTECH 72A*

Provides instruction to develop speed and skill through repetition and increasing responsibility, for employment in rough carpentry including floor systems, wall framing, exterior siding, shear walls, trusses, windows, roof sheathing, and fireplaces.  
Course may be taken 2 times.

## 73A HOMEBUILDING - ROOF FRAMING I (3.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)\*  
Associate Degree Applicable  
*Advisory: CTECH 50*

Introduces types of roof and stair systems, roofing, estimating live and dead loads, and specialized structural systems.  
Course may be taken 2 times.

## 73B HOMEBUILDING - ROOF FRAMING II (2.0)

12.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: CTECH 73A*

Provides an opportunity to develop speed and skill in framing roof systems, stair systems and specialized structural systems.  
Course may be taken 2 times.

## 74A HOMEBUILDING - FINISH CARPENTRY I (3.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)\*  
Associate Degree Applicable  
*Advisory: CTECH 50*

Provides basic instruction in the skills required to install interior and exterior doors, cabinet systems, interior and exterior trim, including stair cases, wainscot, decks and railings. Also covers basic millwork and machine use for making special moldings.  
Course may be taken 2 times.

## 74B HOMEBUILDING - FINISH CARPENTRY II (2.0)

12.0 hours laboratory per week

Associate Degree Applicable  
*Prerequisite: CTECH 74A*

Course provides an opportunity to develop speed and skill in installing doors, installing cabinets, installing base, window, closet and wall trim, decks, railings, and interior finish.  
Course may be taken 2 times.

## 75 BASIC HEATING, REFRIGERATION AND AIR CONDITIONING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56 or ENGL 65*

Introduces residential gas heating, commercial refrigeration, and residential air conditioning. Includes demonstrations and systematic problem solving of electrical and mechanical malfunction.

## 76 BASIC WATER TREATMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: MATH 23 or MATH 23SI*

Prepares the student to become a Water Treatment Plant Operator, Grade 1 or Grade 2. Includes the study of plant operation, water sources and treatment, reservoir management, coagulation and flocculation, sedimentation, filtration, disinfection, taste and odor control, and corrosion control.

## 77 WATER DISTRIBUTION SYSTEMS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: MATH 23 or MATH 23SI*

Prepares the student to be an operator for water storage and distribution systems. Provides an understanding of the basic operational and maintenance concepts of water distribution systems. Develops the ability to analyze and solve problems such as tastes and odors, corrosion damage, and system failures when they occur.

## 80A BUILDING CODE I, ARCHITECTURAL DESIGN PROVISIONS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: CTECH 50 and eligibility for ENGL 65*

Introduction to the Building Code, concentrating on the permit process and fundamental architectural design requirements involving occupancies, maximum allowable area, type of construction, proximity to property lines, exiting, fire protection, disabled access, elevators, and construction safety. This course is the first in a series of two which will familiarize the student with building code provisions relating to the design and construction of residential and commercial structures. The emphasis will be on requirements which limit or specify the building space to be

# COURSES (CONTINUED)

created.

## **80B BUILDING CODE II, STRUCTURAL DESIGN AND MATERIAL PROVISIONS (3.0)**

3.0 hours lecture per week  
Associate Degree Applicable

Application of the Building Code, concentrating on basic structural requirements for wood, concrete, steel, and masonry construction. The course will cover code provisions for site preparation, foundations, roofing, and interior/exterior finish materials. This course is the second in a series of two which will familiarize the student with building code provisions relating to the design and construction of residential and commercial structures. The emphasis will be on requirements relating to the structural design of the building and the materials used to create the building space.  
Course may be taken 2 times.

## **81 NATIONAL ELECTRICAL CODE (3.0)**

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: CTECH 69 and ENGL 56 or ENGL 65*

Introduces the use of the National Electrical Code. Promotes an understanding of the electrical code necessary to the installation of such systems and the need to safeguard the public through uniformity and safety in building laws.

## **82 UNIFORM PLUMBING AND MECHANICAL CODES (3.0)**

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: CTECH 50 and ENGL 56 or ENGL 65*

Introduces the use of the Uniform Plumbing and Mechanical Code. Promotes an understanding of the plumbing and mechanical codes necessary to the installation of plumbing and HVAC systems and the need to safeguard the public through uniformity and safety in building laws.  
Course may be taken 2 times.

## **83A COMMERCIAL WIRING AND ELECTRICAL SYSTEMS (4.0)**

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Presents planning, construction, and testing of a typical commercial electrical installation including: plans and specifications, applicable codes, load calculations, wire sizing, conduit fill analysis and bending, branch circuits, feeders, grounding practices, transient surge suppression, uninterruptible power supply selection and installation techniques. Course developed in conjunction with the California Apprenticeship Council's standards for the State Electrical Certification Examination.  
Course may be taken 4 times.

## **83B INDUSTRIAL WIRING AND ELECTRICAL SYSTEMS (4.0)**

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Studies the responsibilities and knowledge required for professional industrial electricians working under current state certification requirements including: the industrial electrical service, power and lighting, feeder bus systems, panelboards, fiber optics and other high bandwidth data cabling systems, harmonics and filtering, hazardous locations, power factor, ballasts, transformers, switching systems, grounding and bonding, installation techniques, and applying code requirements to all aspects of industrial wiring systems. Course developed in conjunction with the California Apprenticeship Council's standards for the State Electrical Certification Examination.  
Course may be taken 4 times.

## **93 CONSTRUCTION TECHNOLOGY SPECIAL TOPIC (0.5 to 4.0)**

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## **555 BASIC WOODWORKING (0.0)**

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Presents the application of power and hand tools to the mill and cabinet trade. Examines types of woods, both hard and soft. Deals with methods of fastening and types of fasteners and joints. Emphasizes general power tools such as table saw, jointer, planer, drill press, sander, shaper and lathe. Safety, capabilities and techniques are covered.

## **568 RESIDENTIAL PLUMBING (0.0)**

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Introduces basic residential plumbing theory, installation techniques, plan reading and estimating methods.

## **569 RESIDENTIAL WIRING (0.0)**

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
*Advisory: CTECH 50*

Introduces basic residential wiring skills. Includes basic electrical theory, installation techniques, basic plan reading, estimating and wiring methods.

## **570 ADVANCED WOODWORKING (0.0)**

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
*Prerequisite: CTECH 55, CTECH 555 or consent of instructor*

Introduces advanced wood and cabinet making skills. Examines the types of woods, plywoods, and composites used in European and faceframe cabinet systems. Includes methods of fastening cabinet joints, cabinet design, and production techniques.

## COURSES (CONTINUED)

### 571A HOMEBUILDING - LAYOUT AND CONCRETE I (0.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)  
*Advisory: CTECH 50*

Provides basic instruction in the skills required for employment in building construction. Includes instruction in tool, equipment, and construction site safety, surveying, blueprint reading, concrete formwork, backhoe operations, and concrete flatwork.

### 571B HOMEBUILDING - LAYOUT AND CONCRETE II (0.0)

12.0 hours laboratory per week  
*Prerequisite: CTECH 71A, CTECH 571A or consent of instructor*

Provides instruction to develop speed and skill through repetition and increasing responsibility for employment in building layout and concrete construction.

### 572A HOMEBUILDING - FLOOR AND WALL FRAMING (0.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)  
*Advisory: CTECH 50*

Provides basic instruction in the skills required for employment in building construction. Includes instruction in rough carpentry - floor systems, wall framing, ceiling joists, exterior siding, shear walls, trusses, windows and roof sheathing, and fireplaces.

### 572B HOMEBUILDING - FLOOR AND WALL FRAMING II (0.0)

12.0 hours laboratory per week  
*Prerequisite: CTECH 72A, CTECH 572A or consent of instructor*

Provides instruction to develop speed and skill through repetition and increasing responsibility for employment in rough carpentry including floor systems, wall framing, exterior siding, shear walls, trusses, windows, roof sheathing, and fireplaces.

### 573A HOMEBUILDING - ROOF FRAMING I (0.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)  
*Advisory: CTECH 50*

Introduces types of roof and stair systems, roofing, estimating live and dead loads, and specialized structural systems.

### 573B HOMEBUILDING - ROOF FRAMING II (0.0)

12.0 hours laboratory per week  
*Prerequisite: CTECH 73A, CTECH 573A or consent of instructor*

Provides an opportunity to develop speed and skill and framing roof systems, stair systems and specialized structural systems.

### 574A HOMEBUILDING - FINISH CARPENTRY I (0.0)

12.0 hours per week: (4.0 hours lecture, 8.0 hours laboratory)  
*Advisory: CTECH 50*

Provides basic instruction in the skills required to install interior

and exterior doors, cabinet systems, interior and exterior trim, including stair cases, wainscot, decks and railings. Also covers basic millwork and machine use for making special moldings.

### 574B HOMEBUILDING - FINISH CARPENTRY II (0.0)

12.0 hours laboratory per week  
*Advisory: CTECH 74A or CTECH 574A*

Course provides an opportunity to develop speed and skill in installing doors, installing cabinets, installing base, window, closet and wall trim, decks, railings, and interior finish.

## COUNSELING - COUNS

### 50 MATH ANXIETY (2.0)

2.0 hours lecture per week  
 Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in MATH 23, MATH 23SI or equivalent*

Presents cognitive and behavioral techniques to reduce math anxiety as well as effective strategies for solving mathematical problems at the elementary algebra level.

### 52 ORIENTATION TO COLLEGE FOR RE-ENTRY STUDENTS (1.0)

2.0 hours lecture per week\*  
 Associate Degree Applicable

Directed toward the adult re-entry student, 25 years or older. Presents self exploration, goal setting, and developing a student education plan. Covers issues of time and stress management, value clarification, problem solving, decision making, college resources, and support systems.

### 54 CAREER EXPLORATION (1.0)

2.0 hours lecture per week\*  
 Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Assesses the student's interests, skills, personality, values, and includes career research in a planning process. Applies assessment information to occupational possibilities and choice of college majors.

**Transfer: CSU.**

### 56 STUDENT SUCCESS (1.0)

2.0 hours lecture per week\*  
 Associate Degree Applicable  
*Advisory: ENGL 56*

Prepares students for a successful college experience. College skills will include the understanding of campus/ community diversity, communication, financial planning for college, utilizing campus/community resources, setting educational priorities to include looking at major and certificate programs, and understanding of college rules, regulations, and policies.

# COURSES (CONTINUED)

## 58 GREAT START TO COLLEGE (0.5)

0.5 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* Completion of "Great Start" Assessment and Orientation Workshop

*Advisory:* ENGL 100

Introduces new students to Cuesta College and prepares them for their first semester. Students attend a "Great Start" Assessment Testing and Orientation workshop to understand the requirements for their educational goal of transfer, Associate Degree or certificate, as well as policies and procedures of the college. Students also attend student success workshops and complete a Student Education Plan (SEP).

## 60 PLANNING FOR TRANSFER (0.5)

3.0 hours lecture per week\*

Associate Degree Applicable

*Advisory:* ENGL 56

Designed to provide students with information and resources to facilitate a smooth transfer from Cuesta College to four year colleges and universities. Students learn to research transfer possibilities, find a school which fits their academic and personal needs, and develop a Student Educational Plan to plan transfer goal(s). transfer goal.

## 61 CAREER SKILLS AND JOB SHADOWING (1.0)

2.0 hours lecture per week\*

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Introduces career readiness concepts through exploration of personal work attitudes and skills, study of job search techniques, and job shadowing experiences.

**Transfer:** CSU.

## CRIMINAL JUSTICE - CJ

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## 2 INTRODUCTION TO CRIMINAL JUSTICE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Presents the history, philosophy, and organization of the criminal justice system. Surveys criminal procedures and theories of crime, punishment, rehabilitation, and prevention. Reviews standards for professionalism in the system.

**Transfer:** CSU; UC.

## 4 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents legal processes, responsibilities, and interrelationships of each component of the justice system. Includes a review of case and common law, pertinent court decisions, case methodology

and research.

**Transfer:** CSU.

## 6 CONCEPTS OF CRIMINAL LAW (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents elements of the penal code and general laws about crimes against persons, property, standards of morality, and the state.

**Transfer:** CSU; UC.

## 8 LEGAL ASPECTS OF EVIDENCE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents kinds of evidence and principles of admissibility, witness competency, privileged communications, and hearsay. Includes the procedures to be followed in evidence collection and preservation.

**Transfer:** CSU.

## 10 PRINCIPLES OF INVESTIGATION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents investigation fundamentals of crime scene search, collecting/ recording evidence, interviews and interrogation. Covers procedures used in investigating various kinds of criminal activity.

**Transfer:** CSU.

## 12 JUVENILE JUSTICE PROCEDURES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents the organization, functions, and jurisdiction of juvenile justice agencies. Covers juvenile processing and detention, case disposition, statutes, and court procedures.

**Transfer:** CSU.

## 13 CONCEPTS OF ENFORCEMENT SERVICES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents concepts, responsibilities, and techniques of police patrol in handling ordinary police occurrences, including public service responsibilities.

**Transfer:** CSU.

## 24 POLICE-COMMUNITY RELATIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Examines the interrelationships between criminal justice agencies and the community. Emphasizes a public service image, an understanding of ethnic groups, and skills in confrontations with

## COURSES (CONTINUED)

the public during crises.

**Transfer:** CSU; UC.

### 47 INDEPENDENT STUDIES: CRIMINAL JUSTICE (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the technical field in which the study is to be undertaken*

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic of criminal justice under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## CULINARY ARTS - CULART

### 10 CULINARY ARTS FUNDAMENTALS I (2.5)

10.0 hours per week: (2.5 hours lecture, 7.5 hours laboratory)\*

Associate Degree Applicable

Introduces the student to the culinary arts profession and the professional kitchen. Emphasis on basic cooking methods, equipment use, and ingredients provides the student with a beginning understanding of food chemistry and cooking techniques. The course includes "hands-on" experience managing the dining room and kitchen in the production of stocks, broths, sauces, gravies, soups, and breakfast cookery.

**Transfer:** CSU.

### 13 FOOD SERVICE SAFETY AND SANITATION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Examines the principles of hygiene and sanitation and their application to food service operations. Emphasis is placed on the implementation of proper methods and procedures and the food handlers responsibility in maintaining high sanitation and safety standards.

**Transfer:** CSU.

### 20 CULINARY ARTS FUNDAMENTALS II (1.5)

6.0 hours per week: (1.5 hours lecture, 4.5 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CULART10*

*Corequisite: CULART25*

Engages the student in the practical kitchen application of vegetable, grain, starch and the principles and practices used in producing pantry items in a commercial environment. A variety of menu items are prepared including salads, salad dressings, sandwiches, and vegetable, grain and legume dishes.

**Transfer:** CSU.

### 25 BAKING AND BAKING SCIENCE I (1.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: CULART 10*

*Corequisite: CULART20*

Introduces the student to the basic skills needed for professional baking. Enables the student to learn and practice the skills and methods of the production of bread, desserts, and other baked goods using quantity production techniques.

### 93 CULINARY ARTS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## DANCE

### 25 DANCE IMPROVISATION AND COMPOSITION (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Exploration and development of improvisational and composition skills for the craft of choreography.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 28 SOCIAL DANCE FORMS (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Introduction to social dance techniques. Instruction and practice to include Swing, Cha Cha, Waltz, Fox Trot, Rhumba and Tango dances.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 49 DANCE ENSEMBLE (0.5 to 3.0)

9.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: By audition or consent of instructor*

*Advisory: One semester of dance technique in ballet, jazz, or modern recommended*

A laboratory course providing instruction in various dance techniques, choreography, music collaboration, make-up, costume construction, light design, and set construction, culminating in an informal dance performance. Requires rehearsal.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 50 DANCE HISTORY OF THE 20TH CENTURY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

# COURSES (CONTINUED)

A study of 20th century social and theatrical dance forms in the context of western societies with an emphasis on American dance. Influential choreographers, dancers and theorists will be discussed.

**Transfer:** CSU; UC.

## 52 DANCE CULTURES OF THE WORLD (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

An introductory overview to some of the major dance traditions of the world. Emphasis is on why people dance, how they dance and why they dance the way they do. The particular forms may vary each semester but may include; African, Asian, Native American, Flamenco, Hawaiian and primitive dance.

**Transfer:** CSU; UC.

## 54 INTRODUCTION TO DANCE (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Introduces the technique, history and choreography of the three major dance forms: ballet, jazz dance, and modern dance. Includes a final performance.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 55 BALLET (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

“Beginning Ballet”: Introduces classical ballet. Develops alignment, turnout, muscular control, grace, flexibility, five basic positions, terminology, and rhythm. “Intermediate Ballet”: Reviews fundamentals of ballet techniques with increased complexity and introducing additional movement vocabulary. Development of strength in feet by means of exercises on demi-point, development of stability and strength in legs by increasing the number of movements covered. Development of technique by executing the movements in a faster tempo.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 56 JAZZ DANCE (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Introduces jazz dance techniques including phrasing, performance, technique, choreography, and the presentation of simple dance.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 58 DANCE CHOREOGRAPHY AND PERFORMANCE (2.0)

6.0 hours laboratory per week  
Associate Degree Applicable

Presents basic dance techniques and choreography as they apply to dance production. Requires rehearsal and performance of selected student and/or faculty pieces. Presents choreography and dance production experience in a professional stage setting to broaden and expand comprehension of dance as an artistic and commercial form of expression.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 60A MODERN DANCE, BEGINNING (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Presents beginning Modern Dance techniques, theory and processes. Includes technique practice focusing on the fundamentals of time, space and energy, exploration of anatomically efficient dance forms and preparation for individual expression through class performance.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 60B MODERN DANCE, INTERMEDIATE (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Presents intermediate Modern Dance techniques, theory and processes. Includes technique practice focusing on the fundamentals of time, space and energy, exploration of anatomically efficient dance forms and preparation for individual expression through class performance.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 60C MODERN DANCE, ADVANCED (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Presents advanced Modern Dance techniques, theory and processes. Includes technique practice focusing on the fundamentals of time, space and energy, exploration of anatomically efficient dance forms and preparation for individual expression through class performance.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## DRAMA - DRA

### 1A PRINCIPLES OF ACTING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Explores each person's creative artistic expression and emphasizes the study of acting as a discipline. The fundamental techniques of acting are explored by analyzing plays with an emphasis on the actor's approach to personal awareness, characterization, and the performer's relationship to all parts of the play's production.

# COURSES (CONTINUED)

**Transfer:** CSU; UC. (CAN DRAM 8)

## 1B PRINCIPLES OF ACTING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* DRA 1A, DRA 48 or DRA 52

Continues the study of the theory and practice of acting with special emphasis on styles and forms of acting.

**Transfer:** CSU; UC. (CAN DRAM 22)

## 2 APPLIED PRINCIPLES OF ACTING (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* DRA 1A

Presents experience in ensemble interaction within the framework of dramatic works. Provides an opportunity to perform in workshop scenes and to present a program of short dramatic works for an audience.

**Transfer:** CSU; UC.

## 5 INTRODUCTION TO DRAMATIC LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 1A

Surveys the development of the world theatre from Greek drama to the present time as observed in the reading of representative plays. Introduces the playwrights, works, conventions, and traditions of important movements in the history of the theatre.

**Transfer:** CSU; UC.

## 6 THEATRE APPRECIATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Completion of or concurrent enrollment in ENGL 56

A study of the combined elements of theatre through examination of current and classical plays with special emphasis on dramatic analysis and cultural significance for non-drama majors. Also provides background in various technical aspects of production and in the skills and talents required to successfully produce both plays and musicals.

**Transfer:** CSU; UC.

## 7 INTRODUCTION TO THE THEATRE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 1A

Introduces theatre and related crafts such as costuming, lighting, and theatre architecture. Emphasizes awareness of components constituting an artistic entity and the ability to objectively evaluate a professional or non-professional performance.

**Transfer:** CSU; UC. (CAN DRAM 18)

## 8 VOICE FOR THE ACTOR (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* DRA 1A

Designed to (1) improve natural, clear, unaffected speech, and (2) eliminate negative habits and regional accents: exercises for physical tension, vocal support, tone production, vocal quality, and articulation.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 11A STAGECRAFT (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable

Introduces theatre shop equipment and basic construction techniques needed for design and fabrication of stage scenery and props.

**Transfer:** CSU; UC.

## 11B STAGECRAFT (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* DRA 11A

Provides a basic background in technical drawing and fabrication of theatre scenery, props, and related stage properties through research and construction assignments.

**Transfer:** CSU; UC.

## 15 INTRODUCTION TO STAGE MOVEMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Introduces the student to various aspects of stage movement, including choreography, blocking, stage combat, mime, and character work. Develops students' awareness of the expressive nature of the human body and how to use the body as a tool for creating a character.

**Transfer:** CSU; UC.

## 18 MAIN STYLES IN FILMS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 1A

Traces the main currents in American and British films by means of the various movie genres and the representative films. Explores the conventions and aesthetic standards for the Western, mystery, comedy, musical, and science fiction of motion pictures.

**Transfer:** CSU; UC.

## 47 INDEPENDENT STUDIES: DRAMA (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable

Provides an opportunity for an in-depth study or practicum experience by an individual student in a selected topic of drama,

# COURSES (CONTINUED)

under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 48 PLAY PRODUCTION (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Eligibility for ENGL 56

Studies the techniques involved in the production of dramatic works. Emphasizes directing, acting, stagecraft, costuming, make-up, publicity, and stage lighting. Students must complete a major production responsibility.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 50 MUSICAL THEATRE WORKSHOP (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Audition is required and previous choral experience is recommended

Develops the students' skills for performance in musical theatre, including singing, acting, stage movement and choreography.

Public performance may be required. Same as MUS 50.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 51 MUSICAL THEATRE PERFORMANCE (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Completion of or concurrent enrollment in DRA 50 or MUS 50 and/or audition

*Advisory:* Eligibility for ENGL 56

Studies the techniques involved in the production of a full-length musical with emphasis on acting, singing, dancing, costuming, makeup, stagecraft, and publicity. Produces one musical each semester. Public performance will be required. Same as MUS 51.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 52 WRITING, DIRECTING, AND ACTING FOR THEATRE (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents practical experience in the creation of a production company, within the class, whose objectives are the casting, rehearsal, and public performance of live theatre.

Course may be taken 4 times.

**Transfer:** CSU.

## 93 DRAMA SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## EARLY CHILDHOOD EDUCATION - ECE

### 1 CHILD GROWTH AND DEVELOPMENT (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 56

Presents a study of human development from conception to adolescence. Examines cognitive, language, physical, social, and emotional development, both typical and atypical. Fosters the understanding of human behavior and self-awareness. Meets Title XXII requirements, DS 1.

**Transfer:** CSU; UC. (CAN HEC 14)

### 2 CHILD, FAMILY AND COMMUNITY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 56

Studies patterns of family living in contemporary society, emphasizing the varying roles and interaction of family members and factors which affect family life. Discusses cultural, social, economic, racial, and ethnic differences. Focuses on the developing child and emphasizes the influences of family and community. Same as FAMST 2. Meets Title XXII requirements, DS 2.

**Transfer:** CSU; UC.

### 3 CREATIVE ACTIVITIES FOR YOUNG CHILDREN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Explores creative activities and experiences in art, music, drama, literature, social science, biological science, physical science, computer science and mathematics appropriate for children from infancy through the third grade. Covers the concept of development of young children and the need for presentation of creative activities in a sequential manner. Meets Title XXII requirements: DS 3, DS 5.

**Transfer:** CSU.

### 4 CHILD HEALTH SAFETY AND NUTRITION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Explores the interrelated roles of the home, the school and the

# COURSES (CONTINUED)

community meeting the health and safety needs of the young child. Topics to be covered include nutrition, common childhood diseases, immunizations, accident prevention, emergency care and special health problems of the young child. Referral procedures to utilize the resources available from the schools and the community to meet the health and safety needs of the young child will be explored. Meets Title XXII requirements: DS 7.  
**Transfer:** CSU.

## 5 INTRODUCTION TO EARLY CHILDHOOD EDUCATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Concurrent enrollment in ECE 6 is highly recommended*

Presents an overview of early childhood education with its importance, historical models, current types of programs, regulatory laws, salaries and job potential for the student. Presents an introduction to the development of a planned program for young children. Meets Title XXII requirements, DS 3.  
**Transfer:** CSU.

## 6 OBSERVING AND RECORDING TECHNIQUES (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: Concurrent enrollment in ECE 5 is highly recommended*

Explores techniques in observing and recording the development and behavior of children. Includes observation of the effects of adult interaction with children both individually and in group settings. Collection and analysis of data through various observation methods. Meets Title XXII requirements: DS 3.  
**Transfer:** CSU.

## 7 GUIDANCE OF THE YOUNG CHILD (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: ECE 5*  
*Corequisite: ECE 8*

Presents the theories of behavior and development of the young child. The social, emotional, intellectual, moral and physical development of the young child will be examined in relation to guidance in the Early Childhood classroom. Meets Title XXII requirements: DS 3.  
**Transfer:** CSU.

## 8 PRACTICUM: GUIDANCE OF THE YOUNG CHILD (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ECE 6 and Department of Social Services Title XXII, Section 101216B requires current TB clearance*  
*Corequisite: ECE 7*

Presents an opportunity for observation of and interaction with young children in order to study their behavior and development. Guidance techniques will be applied through supervised practical experience in a preschool setting. Meets Title XXII requirements: DS 3.  
**Transfer:** CSU.

## 9 PROGRAM: CURRICULUM AND ENVIRONMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: ECE 3 and ECE 7*  
*Corequisite: ECE 10*

Studies theories of play, creativity, and concept development as they relate to the preschool program. Develops the learning environment for young children including goals, curriculum, materials, equipment, and the interaction of children, staff, and families. Meets Title XXII requirements: DS 3.  
**Transfer:** CSU.

## 10 PRACTICUM: CURRICULUM AND ENVIRONMENT (4.0)

10.0 hours per week: (1.0 hours lecture, 9.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: ECE 8 and Department of Social Services Title XXII, Section 101215B requires current TB clearance*  
*Corequisite: ECE 9*

Applies principles of behavior and development which help to meet the needs of young children individually and in group settings. Includes theories of play, creativity, and concept development in planning, providing and evaluating the preschool program. Provides supervised practical experience in a preschool program. Meets Title XXII requirements: DS 3.  
**Transfer:** CSU.

## 11 MUSIC AND MOVEMENT ACTIVITIES FOR YOUNG CHILDREN (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligible for ENGL 56*

Presents techniques and guidelines for teaching movement exploration, physical education, and music to the preschool through third grade child. Examines the child's need for effective movement skills and musical experiences. Meets Title XXII requirements: DS 3, DS 5.  
**Transfer:** CSU.

## 14 PREKINDERGARTEN LEARNING & DEVELOPMENT GUIDELINES (0.5)

9.0 hours lecture per week\*  
Associate Degree Applicable

Presents the Prekindergarten Learning and Development Guidelines developed by the California Department of Education. The Guidelines represent the best practices as defined by NAEYC

# COURSES (CONTINUED)

for education appropriate for children ages' three through five, including children with disabilities and other special needs.

3.0 hours lecture per week  
Associate Degree Applicable

## 15 MULTICULTURAL/ANTI-BIAS CURRICULUM (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Eligibility for ENGL 56*

Explores issues of diversity and social justice and applies these concepts to early childhood education curriculum. Includes construction of educational materials and participation in a variety of experiential activities. Meets Title XXII requirements: DS 3, DS 5. Acceptable for ES 114, Cal Poly.

**Transfer:** CSU.

Examines the characteristics of children with special needs and how to effectively meet their individual needs. Presents the identification, educational needs, behavior management, family relationships, children's rights and community resources of/for the child with special needs.

## 41 INTERNSHIP (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ECE 10, an interview and Department of Social Services Title XXII, Section 101216B requires current TB clearance*

Provides selected advanced students an opportunity to experience the responsibilities of being intern staff members in a preschool program. Meets Title XXII requirements: DS 3.

**Transfer:** CSU.

## 20 ART FOR CHILDREN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents the study of the developmental sequence of children's art and the teaching implications for children from age two through age eight with an emphasis on creative expression, aesthetic development, cultural and art heritage. Introduces a variety of media including drawing, painting, collage, printmaking, clay, assemblage, mask and puppet making. Meets Title XXII requirements: DS 3, DS 5.

**Transfer:** CSU.

## 42 INFANT-TODDLER CAREGIVING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the materials, equipment and activities appropriate for children from infancy through age three. Examines the special needs of infants and toddlers with regard to health and safety, nutrition, rest and toileting. Meets Title XXII requirements: DS 4.

**Transfer:** CSU.

## 22 CRAFTS FOR SCHOOL AGE CHILDREN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents the universal nature of crafts including their historical origins and current applications. Introduces a variety of crafts appropriate for school age children including weaving, dyes, embroidery and appliqué, quilting, candle making, jewelry and paper creations. This class fulfills part of the 12 units required for teachers in early childhood education programs.

**Transfer:** CSU.

## 42A INFANT-TODDLER CAREGIVING MODULE I (0.5)

9.0 hours lecture per week\*

Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the principles of caregiving for infants and toddlers, caregiving routines and group care, caregiving as curriculum, and cross cultural communication.

**Transfer:** CSU.

## 34 CHILDREN'S LITERATURE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: ENGL 1A*

Presents a survey of literature for children from infancy through elementary school with an emphasis on a diversity perspective. Introduces the genre: picture books, traditional literature, fantasy, poetry, historical fiction, realistic fiction, biography and informational books. Emphasizes understanding, analysis, appreciation and application through an in-depth examination of a variety of children's books. Meets Title XXII requirements: DS3, DS5.

**Transfer:** CSU.

## 42B INFANT-TODDLER CAREGIVING MODULE II (0.5)

9.0 hours lecture per week\*

Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines play as curriculum, development of attachment, implications of early brain development, and adult caregiving roles.

**Transfer:** CSU.

## 36 UNDERSTANDING THE CHILD WITH SPECIAL NEEDS (3.0)

## 42C INFANT-TODDLER CAREGIVING MODULE III (0.5)

# COURSES (CONTINUED)

9.0 hours lecture per week\*  
Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the development of perception and motor skills.

**Transfer:** CSU.

## 42D INFANT-TODDLER CAREGIVING (0.5) MODULE IV

9.0 hours lecture per week\*  
Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the development of cognition, the development of language and communication and their importance in the development of the brain. Explores the impact of culture on communication and special considerations for special needs children.

**Transfer:** CSU.

## 42E INFANT-TODDLER CAREGIVING (0.5) MODULE V

9.0 hours lecture per week\*  
Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the development of emotions and social skills. Explores the development of self esteem, fears, trust, security, and autonomy. Presents guidance techniques appropriate for infants and toddlers.

**Transfer:** CSU.

## 42F INFANT-TODDLER CAREGIVING (0.5) MODULE VI

9.0 hours lecture per week\*  
Associate Degree Applicable

Presents theories, techniques, and guidelines for the appropriate care, nurturing and guidance of infants and toddlers. Examines the physical environment: equipment, safety, and group size. Explores the social environment: culture and self image, parental background and cultural perspectives, communication between parent and caregiver, and staff development.

**Transfer:** CSU.

## 44 SUPERVISION AND ADMINISTRATION OF (3.0) PARENT PROGRAMS

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* ECE 5 or one year of Early Childhood Education teaching experience

Explores the interdependent relationship between the teacher and the parent(s) of a young child. Investigates the wide range of activities in parent involvement, parent participation, and parent education in early childhood education. Presents techniques for working with parent(s), including: development of long-range plans, interview and guidance skills, and the ability to work with

small and large groups. Meets Title XXII requirements: DS 6 Basic.

**Transfer:** CSU.

## 45 ADULT SUPERVISION, EVALUATION AND (3.0) STAFF RELATIONS IN ECE

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* ECE 7 or one year of Early Childhood Education teaching experience

Presents principles and practices in staff relations and the supervision and evaluation of staff in early childhood programs. Includes the study of the method of clinical supervision and performance evaluation, leadership styles, group dynamics, conflict resolution, staff development, staff diversity, staff roles and responsibilities. Meets Title XXII requirements: DS 6 Advanced: DS 6 Advanced

**Transfer:** CSU.

## 46 ADMINISTRATION AND SUPERVISION OF (3.0) EARLY CHILDHOOD SCHOOLS

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* ECE 44 or ECE 45

Presents principles and practices in supervision and management of preschools, child care centers, and other programs. Includes the study of program planning, organizing, budgeting requirements, developing personnel policy, doing record keeping, following legal requirements and establishing relationships with community, parents, and regulatory agencies. Meets Title XXII requirements: DS 6 Advanced.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: (0.5 to 2.0) EARLY CHILDHOOD EDUCATION

6.0 hours laboratory per week  
Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of early childhood education under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 50 EARLY CHILDHOOD EDUCATION (0.5 to 3.0) SEMINAR

3.0 hours lecture per week  
Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Examines current issues in the field of early childhood education affecting children from infancy through age twelve. Meets Title XXII requirements: DS 3, DS 5.

# COURSES (CONTINUED)

Course may be taken 4 times.

## 51 FUNDAMENTALS OF CHILD GROWTH AND DEVELOPMENT (2.0)

2.0 hours lecture per week  
Associate Degree Applicable

Presents a study of human development from conception to adolescence. Examines cognitive, language, moral, physical, social, and emotional development, both typical and atypical. Fosters the understanding of human behavior and self-awareness.

## 52 ORIENTATION TO CHILD CARE AND DEVELOPMENT PROGRAMS (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

Presents an overview of center based child care and development programs, philosophies, hours of operation, regulatory laws, licensing and permit regulations. Introduces child care as a profession with a career ladder for advancement: The California Child Development Permit.

## 53 KEY CONCEPTS IN OBSERVING AND RECORDING (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

Explores key concepts in observing and recording the development and behavior of children. Includes observation techniques, types of observations, and analysis of observations.

## 54 ESSENTIALS OF CHILD SAFETY, HEALTH AND NUTRITION (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

Presents an overview of children's safety, health, and nutritional needs in group care situations. Physical safety, emergency preparedness, prevention of infectious diseases, and nutrition will be addressed. Meets Title XXII requirements for health and safety training (other than pediatric CPR and first aid).

## 55 INTRODUCTION TO CHILD, FAMILY, SCHOOL AND COMMUNITY (2.0)

2.0 hours lecture per week  
Associate Degree Applicable

Introduces family living patterns in contemporary society, emphasizing the influences of the family and community on the developing child. Presents the interaction of family members and factors both in and outside the family that affect family life. Studies economic, social, cultural, ethnic, and racial differences.

## 56 DISCIPLINE AND CLASSROOM MANAGEMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Presents developmentally appropriate techniques for guiding young children's behavior in an early childhood education setting. Common developmental guidance problems will be explored as well as schedules, routines and general classroom management.

**Transfer:** CSU.

## 57 DEVELOPING THE LEARNING ENVIRONMENT: PROGRAM AND CURRICULUM (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Presents methodology used in planning, presenting and evaluating developmentally appropriate curriculum used in early childhood education. Meeting group and individual needs in the areas of play, science, social studies, music, movement, nutrition, language, literature, and creative expression will be explored. Presents criteria for the identification and selection of materials and equipment used in the classroom.

**Transfer:** CSU.

## 58 SUPERVISED FIELD EXPERIENCE (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite: ECE 3 and Department of Social Services Title XXII, Section 1012168 requires current TB clearance*  
*Advisory: ENGL 56*

Applies curriculum planning to create a learning environment appropriate for young children. Provides for observation of and interaction with children including planning and implementing developmentally appropriate activities. The emphasis will be on using a diversity/anti-bias perspective to meet the needs of individual children and children as a group. Provides supervised practical experience in a child development lab/Children's Center. Course may be taken 2 times.

## 59 TEACHING RESOURCE MATERIALS (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

*Advisory: ECE 3*

Provides an opportunity to create teaching materials for use with young children using a diversity/anti-bias approach. Explores themes and a webbing approach to describe developmentally appropriate activities in all areas of the curriculum. Includes creating lesson plans that meet the cognitive, social, emotional, creative and physical needs of children.

## 60 FAMILY CHILD CARE SEMINAR (0.5 to 3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Examines current issues in child care affecting children from infancy through age 12 in Family Child Care, center based care or out-of-school care.

Course may be taken 4 times.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 64 FAMILY CHILD CARE: FOCUS ON THE PROVIDER (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

This course is one of a series designed to promote and enhance quality in family child care. The focus of the course is on the provider: identifying characteristics of the successful provider, practicing effective communication skills, developing strategies to avoid stress and burnout and professionalism in family child care.

## 65 FAMILY CHILD CARE: FOCUS ON THE BUSINESS (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

This course is one of a series designed to promote and enhance quality in family child care. The focus of this course is on the business aspects of family child care. Topics covered include: professional support systems, resources for small businesses, developing a business plan, marketing strategies and ongoing operating procedures.

## 66 FAMILY CHILD CARE: FOCUS ON THE FAMILY (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

This course is one of a series designed to promote and enhance quality in family child care. The focus of the course is on the families in family child care: both the client's and the provider's. Topics include: diversity, parenting styles, provider family concerns, client family concerns, and creating successful relationships.

## 67 FAMILY CHILD CARE: FOCUS ON THE CHILDREN (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

This course is one of a series designed to promote and enhance quality in family child care. The focus of the course is on the children in care. Topics include: principles of child development, creating learning environments, planning developmentally appropriate activities, child guidance techniques and quality care indicators for family child care.

## 93 EARLY CHILDHOOD EDUCATION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### ECONOMICS - ECON

## 1A PRINCIPLES OF ECONOMICS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 23, MATH 23SI or equivalent*  
*Advisory: Eligibility for ENGL 56*

Introduces the concepts and tools of macroeconomic analysis, especially as they apply to the United States economy. Includes the economizing problem; resource allocation between the private and public sectors; national income determination; fiscal and monetary policies as they relate to business cycles; and alternative views of Keynesians, Monetarists and supply-siders as they relate to solving economic problems.

**Transfer:** CSU; UC. (CAN ECON 2)

## 1B PRINCIPLES OF ECONOMICS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Presents a continuation of ECON 1A with emphasis on the concepts and tools of microeconomic analysis as they pertain to the economics of the firm and resource allocation; current economic problems such as antitrust regulations, rural economics, urban economics, income distribution, the radical critique; international economics and the world economy.

**Transfer:** CSU; UC. (CAN ECON 4)

## 11 GLOBAL ECONOMICS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ECON 1A*

Examines international trade patterns and the underlying economic theory. Issues to be investigated include trade policies, the emergence of developing nations, and international mobility. Included will be an exploration of past and present international financial relations.

**Transfer:** UC.

## 47 INDEPENDENT STUDIES: ECONOMICS (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Economics under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

## 93 ECONOMICS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### EDUCATIONAL SERVICES - EDSER

# COURSES (CONTINUED)

## 120 EDUCATIONAL SERVICES EDUCATION (0.5 to 8.0) SEMINAR

8.0 hours lecture per week\*  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Examines current issues in the field of study relating to the educational program sponsoring the training/workshop seminar. Course may be taken 3 times.

## ELECTRONICS TECHNOLOGY - ELTECH

### 10 INTRODUCTION TO ROBOTICS (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Introduces basic principles of robot operation, applications, and programming. Students will analyze basic robot configurations and industrial applications, as well as proper uses, safety and workplace environment. Students will configure trainer robots for various applications, and program them with script language for process automation. Team robot design and competition will integrate many of the course concepts.

### 13 INTRODUCTION TO ELECTRONICS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 23 or MATH 23SI*  
*Advisory: MATH 24A*

Introduces fundamental topics in electricity and electronics. Principles and theory of DC and AC electronics are studied with heavy emphasis on basic concepts. Circuit analysis, test, measurement, and troubleshooting methods will be studied using computer simulation software.

### 15 COMPUTER MAINTENANCE SEMINAR (2.0)

36.0 hours lecture per week\*  
Associate Degree Non-Applicable

Prepares the student for the "A+" computer service technician certification. The course covers basic concepts of computer maintenance. Troubleshooting techniques, fault isolation, software configuration, hardware configuration, and PC maintenance will be some of the topics addressed.

### 30L TECHNICAL PHYSICS LAB (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: MATH 23 or MATH 24A*  
*Corequisite: PHYS 30*

Presents applied physics concepts and experiments that support Technical Physics (PHYS 30) lecture material. The experiments form the basis of a well-balanced course in physics for the student

who plans a career in a technical or vocational field. Experiments cover topics such as measurement systems, acceleration, friction, forces, power, work, levels, gears, simple machines, gas laws, pressure, volume, flow, heat, and waves. Physics concepts will be taught using industrial equipment whenever practical to show relationship between real world applications and physical laws.

### 47 INDEPENDENT STUDIES: ELECTRONICS TECHNOLOGY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the technical field in which the study is to be undertaken*

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic in the Electronics Technology area with support and direction from an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).  
**Transfer:** CSU.

### 93 ELECTRONICS TECHNOLOGY SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 111 LABORATORY TECHNIQUES I (1.0)

6.0 hours laboratory per week\*  
Associate Degree Applicable

Presents safety instruction for industrial situations, schematic interpretation, test equipment utilization, and circuit construction. Signal generators, test meters and oscilloscopes will be used. Students also will learn circuit board production techniques including soldering.

### 113 ELECTRONICS FUNDAMENTALS (6.0)

8.0 hours per week: (5.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in MATH 24A, MATH 27 or MATH 27SI*

Introduces a broad range of topics in electricity and electronics. Fundamentals of DC, AC, transistors, and digital logic are all addressed with heavy emphasis on basic concepts. Circuit analysis methods and troubleshooting will be studied using a hands-on approach.  
**Transfer:** CSU.

### 115 ANALOG DEVICES (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: ELTECH 113*  
*Advisory: ELTECH 124*

## COURSES (CONTINUED)

Presents fundamental concepts in: transistor amplifiers, silicon controlled rectifiers, and op-amp circuits. Class and lab projects will include the building and troubleshooting of circuits using both schematic/simulator tools and actual hardware.

### 116 DIGITAL CIRCUITS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 13 and ELTECH 111 or ELTECH 113*

Presents basic digital logic concepts, binary, octal, hexadecimal numbers used in digital logic systems, logic gates, counters, registers, sequential logic, integrated and programmable logic devices. These concepts will be expanded to include design applications.

**Transfer:** CSU.

### 118 WIRELESS COMMUNICATION AND CONNECTIVITY (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 112*

*Advisory: ELTECH 113*

Course includes topics related to wireless network communications systems. This is an introductory course with broad exposure to the wireless communication field. General coverage of topics include: network communication channels, bandwidth and channel capacity, modulation and demodulation of digital information, transmission mediums, digital encoding and decoding, data communication protocols, wireless network topologies, and wireless connectivity.

**Transfer:** CSU.

### 120 MICROCOMPUTER ARCHITECTURE AND PROGRAMMING (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: CIS 114 and ELTECH 116*

Presents basic microprocessor concepts including internal architecture, memory, addressing, and control through the use of assembly language. Students will write a variety of assembly language programs to perform logic functions and hardware control operations. The use of assemblers, linkers, and debugging tools will be explored.

**Transfer:** CSU.

### 122 LOGICAL TROUBLESHOOTING TECHNIQUES (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: ELTECH 113*

*Advisory: ELTECH 124*

Presents basic troubleshooting techniques at both the system and component levels. Covers logical and systematic troubleshooting processes; interpretation of block diagrams, flow charts, and

schematics for use in fault isolation; determining signal flow paths in schematic diagrams; fault isolation methods such as bracketing, and half splitting; fault isolation in parallel systems and multiple channel systems; troubleshooting tools and techniques using: extender boards, chip clips, jumpers, piggyback IC's, and applications of heat and cold.

### 124 INDUSTRIAL ELECTRONICS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 13 and ELTECH 111 or ELTECH 113*

*Advisory: ELTECH 116*

Course includes basic topics related to industrial electronics. A brief review of analog circuits is expanded upon to develop more advanced circuit concepts. Topics include FET's, SCR's, basic components involved in motor control, DC and AC motors, and their controller circuits will be covered. Operational amplifiers will be covered, and their applications to sensor instrumentation. Transducers and applications to various sensors for heat, flow, force, etc. will be developed. Troubleshooting techniques for the above topics will be incorporated with each section.

**Transfer:** CSU.

### 127 FLUID AND PNEUMATIC TECHNOLOGY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: PHYS 10*

Presents basic topics related to fluid and pneumatic systems and devices. Basic physics relating to fluid hydraulics and pneumatics will lead into applied topics such as tanks, pumps, pump filters, accumulators, actuators, valves, compressors, and pressure regulators. Some advanced topics such as accumulator circuits, directional control valves, sequencers, accumulator circuits, directional control valves, sequencers, pilots and solenoid controlled valves, and servo flow controlled valves will be addressed.

**Transfer:** CSU.

### 128 PROGRAMMABLE LOGIC CONTROLLERS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 113*

*Advisory: CIS 14 or CIS 114 and ELTECH 120 or ELTECH 124*

Course includes basic topics related to Programmable Logic Controllers (PLC). Topics include a discussion of the PLC's purpose, basic operation, functions, and applications. PLC architecture and hardware will be investigated including I/O structures and configurations, central processing unit, and power supplies. PLC programming basics including relay ladder logic, extended relay instructions, timers and counters, math functions, data and bit manipulation will be studied. Programs will be written and debugged in a laboratory environment that interface to electromechanical, hydraulic, and pneumatic equipment. PLC peripherals and accessories will also be studied.

**Transfer:** CSU.

## COURSES (CONTINUED)

### 135 ROBOTICS TECHNOLOGY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: CIS 14, ELTECH 113 and PHYS 30*

Introduces the history and use of robots in industry. Standard arm configurations and hardware including principles of path control, motion sensing, speed and position control, and servo-actuators are examined. Arm configuration, basic mechanics and kinematics of arm structure and hardware are investigated. End-effectors, supplemental tooling hardware, and sensors are studied in workcell applications. Includes programming the controller in a high level language using a teach pendant.

**Transfer:** CSU.

### 138 NUMERICAL CONTROL SYSTEMS (2.5)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: ENGR 26*

*Advisory: CIS 14 or CIS 114*

Students will study CAD and CAM software and its application to manufacturing processes. Software will be utilized to design components that will be produced on CNC machinery. The basics of CNC hardware and operation, as well as programming will be studied. The mathematics of controlling tool paths, the integration of software and hardware, and the manufacturing of products using CNC machines will be applied to lab experiments.

### 139 COMPUTER NUMERICAL CONTROLS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: CIS 14 and ENGR 26*

Presents basic concepts in CAD and CAM software and its application to manufacturing processes. Software will be utilized to design components that will be produced on CNC machinery. The basics of CNC hardware and operation, as well as programming in one, two, and three dimensions will be studied. The mathematics of controlling tool paths, the integration of software and hardware, and the manufacturing of products using CNC machines will be applied to lab experiments. CNC as a component of Computer Integrated Manufacturing will also be addressed.

**Transfer:** CSU.

### 144 COMPUTER INTEGRATED MANUFACTURING (2.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 138*

*Advisory: ELTECH 128 and ELTECH 135*

This course combines the concepts of robotics, computer numerical control, and automation programming into an integrated manufacturing setting. Control of manufacturing processes by both centralized and distributed computer systems

will be studied. The manufacturing processes using CAD design, CAM implementation and finished CNC product, will be integrated into a robotic assembly line utilizing a vision inspection system for quality control. Broader CIM concepts of Just In Time (JIT) manufacturing, Database Management System (DBMS), Manufacturing Resource Planning (MRP), and OSI-based Manufacturer's Automation Protocol (MAP) will be discussed or implemented in labs settings.

### 150 INDUSTRY INTERNSHIP (2.0 to 4.0)

10.0 hours per week: (1.0 hours lecture, 9.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 144*

Students obtain and complete a cooperative work placement with emphasis on development and use of technical, analytical, report writing and presentation skills. Students complete work term logs, employment-related technical reports and presentations. Course may be taken 4 times.

### 152 AUTOMATION PROJECT (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 144*

The course will develop the students' ability to plan, schedule, self-direct, evaluate, build communication skills, and develop team building techniques. Students are required to undertake a large manufacturing and automation project, simulating as nearly as possible the integration of advanced technologies. Course may be taken 4 times.

### 153 MICROCOMPUTER FUNDAMENTALS FOR TECHNICIANS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ELTECH 113*

Introduces fundamental concepts involved with upgrading and repairing personal computer systems. Includes topics on the "A+" computer service technician certification. Lectures and labs will cover internal microcomputer operation, operating systems, primary and secondary storage methods (system memory modules and disk drives), adapter cards, serial and parallel ports, and power supplies. Different components and subsystems will be compared and evaluated based on performance specifications and design considerations.

Course may be taken 4 times.

**Transfer:** CSU.

### 154 ADVANCED MICROCOMPUTER MAINTENANCE (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: ELTECH 153 or equivalent*

*Advisory: MATH 24A*

Prepares the student for the COMPTIA "A+", and "SERVER+"

## COURSES (CONTINUED)

computer service technician certifications. The course builds on basic concepts taught in the Microcomputer Fundamentals course, and incorporates digital troubleshooting practices taught in the Digital Circuits course. PC hardware, internal architecture, Multiple OS's, advanced software tools, storage devices, RAID controllers, Dual Processor systems, hard disk recovery, communications devices, video and audio will be studied. Troubleshooting techniques, fault isolation, software configuration, hardware configuration, and PC maintenance will also be addressed.

**Transfer:** CSU.

### 155 NETWORK CABLING CERTIFICATION (2.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory: MATH 24A*

Addresses topics on the BICSI LEVEL I industry standard network cabling certification test. Presents basic concepts in network cabling and its application to network infrastructure. Basic terminology, cable types, wiring structures, installation factors and techniques will be discussed. LAN topologies, wiring technology, management, and standards will be investigated and applied to lab practice. Termination techniques for twisted pair and fiber optic cables and connectors will be studied and applied. Fiber optic theory, cable design, and cabling techniques will be investigated. Testing of network cabling and terminations using conductivity, bandwidth, attenuation, and time domain reflectivity will be explored.

Course may be taken 4 times.

**Transfer:** CSU.

### 156 ADVANCED NETWORK CABLING CERTIFICATION (2.0)

3.0 hours per week: (1.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory: ELTECH 113, ELTECH 155, MATH 23*

Presents advanced network connectivity topics included in the BICSI Level 2 and Technician certifications. Includes advanced copper cabling and terminations, fiber optic theory, cabling, and termination techniques. Grounding and bonding, performance testing, and inspection of copper and fiber systems will also be covered.

Course may be taken 4 times.

**Transfer:** CSU.

### 157 COMPUTER INSTRUMENTATION AND CONTROL (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ELTECH 124*

Course includes topics related to basic process instrumentation and control developed in conjunction with Pacific Gas and Electric's (PG&E's) I&C technician training program. A brief review of industrial electronics is expanded upon to develop more advanced process instrumentation and control concepts. Topics

include advanced applications of components used in both DC and AC motor control, recorders, control valves and actuators, temperature sensors, pressure sensors, level sensors, flow sensors and instrumentation maintenance techniques.

**Transfer:** CSU.

### 167 POWER SYSTEMS AND ROTATING ELECTRICAL MACHINERY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ELTECH 124*

Course includes topics related to fundamental industrial electrical maintenance training developed in conjunction with Pacific Gas and Electric's (PG&E's) Electrical Maintenance Training Program. A brief review of electrical theory and practical troubleshooting is expanded upon to develop comprehensive electrical power system concepts. Topics include power drawings and circuit diagrams, grounding-cabling and conduit, meters, power transformers, circuit protection, relays, rotating electrical machinery, electrical testing equipment, bolting practices, controllers, safety and fire protection.

**Transfer:** CSU.

## EMERGENCY MEDICAL TECHNOLOGY

### - EMT

#### 1 EMERGENCY MEDICAL TECHNICIAN I (6.0)

7.0 hours per week: (6.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: California Code of Regulations, Title 22 Section 100066 (2) requires verifying CPR training equivalent to the American Heart Association's Guidelines at the Healthcare Provider level.*

*Advisory: Eligibility for ENGL 56*

Presents the techniques of emergency medical care presently considered within the responsibilities of the Emergency Medical Technician 1. Includes laboratory practice of selected skills. Students must be 18 years of age or older to be certified.

**Transfer:** CSU.

#### 2 EMERGENCY MEDICAL TECHNICIAN I REFRESHER (1.5)

7.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite: Emergency Medical Technician 1 certificate*

Reviews and updates knowledge and skills required to qualify for the State of California Emergency Medical Technician Level 1 certification. EMT Basic certificate and social security numbers will need to be received in the nursing office in order to register online for this course.

#### 3 HAZARDOUS MATERIALS FIRST RESPONDER OPERATIONAL (1.5)

9.0 hours lecture per week\*

# COURSES (CONTINUED)

Associate Degree Applicable

Presents the theory to be used in an emergency medical response to hazardous materials incidents, a guide for first responders. After successful completion of this course, the student will receive a California State certificate for Hazardous Materials First Responder "Operational" and Emergency Medical Response to Hazardous Materials Incidents. Course may be taken 4 times.

## 4 EMERGENCY VEHICLE OPERATORS - AMBULANCE (0.5)

5.5 hours per week: (4.0 hours lecture, 1.5 hours laboratory)\*

Associate Degree Applicable

*Prerequisite: Valid CA driver's license and be 18 years or older*

Presents ambulance operators with knowledge and skills to operate vehicles so that vehicle, equipment, crew, and patients will be delivered safely and efficiently. The safety of the public will be assured during all phases of the delivery of Emergency Medical Services (EMS) involving the ambulance. Course may be taken 4 times.

## 93 PARAMEDICAL SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## EMERITUS COLLEGE - EMCOLL

## 400 LITERATURE BY LOCAL AUTHORS (0.0)

3.0 hours lecture per week\*

Presents discussion of selected novels, short story collections, and poetry by San Luis Obispo area writers. These works are considered in the context of contemporary fiction and poetry using techniques of reading, analysis, and discussion.

## 401 WRITING BITS AND PIECES OF PERSONAL HISTORY (0.0)

3.0 hours lecture per week\*

Introduces the use of memoirs, essays, vignettes, and letters to write small incidents of personal history after reading and discussing examples of these genres. Student writing is read, discussed, revised, and edited.

## 406 COMPOSING YOUR LIFE STORY (0.0)

3.0 hours lecture per week\*

Presents the process of ordering and developing chronologically a personal history, including introductory genealogical research and preservation of family historical materials.

## 407 FUNDAMENTAL MUSIC THEORY FOR SENIORS (0.0)

3.0 hours lecture per week\*

Presents the fundamentals of music theory in an overview of classical and popular music from the earliest recorded to the present. This class includes the study of musical themes, melodic and bass lines, and orchestra instruments as well as participation in music games and singing.

## 408 BEGINNING MUSIC ARTS FOR SENIORS (0.0)

3.0 hours lecture per week\*

Develops critical listening ability and enriches musical experiences with the study of style, intonation, and lyrical content of musical selections. Attendance at concerts and preliminary and follow-up discussions help students to become more critical listeners.

## 409 SENIOR CHORUS (0.0)

3.0 hours lecture per week\*

Studies choral literature including selections from the 16th century to the present, encompassing numerous musical styles. The class presents vocal exercises, fundamentals of music theory, and the aesthetics of music. A performance for family and friends may conclude the class.

## 411 CREATIVE WRITING FOR SENIORS (0.0)

3.0 hours lecture per week\*

Introduces the writing of creative nonfiction, plays, poetry, OR short fiction. Students read and discuss published writing and workshop their own writing.

## 413 PASTEL DRAWING AND PAINTING FOR SENIORS (0.0)

3.0 hours lecture per week\*

Introduces the techniques and materials of pastel with emphasis on color, form, value, composition, perspective, and visual creativity. Subjects covered include landscape components, still life, and the human form.

## 415 YOGA FOR SENIORS (0.0)

3.0 hours laboratory per week\*

Presents yoga to enhance health and well-being. Instruction and practice includes passive exercise adapted for students over the age of 50, relaxation while stretching, strengthening, deep breathing, postural alignment, yoga asanas (postures) to enhance and develop full range of motion, flexibility of muscles, strengthening of musculature while holding poses.

## 420 FINANCE: WILLS AND TRUSTS (0.0)

3.0 hours lecture per week\*

Presents the pros and cons of wills and trusts, the process of probate, the types of trusts and of powers of attorney. Students

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

# COURSES (CONTINUED)

find out what they need to know to make informed estate-planning decisions.

**421 GREAT LITERATURE: SELECTED READING (0.0)**  
3.0 hours lecture per week\*

Presents a guided reading of a selected great work of literature such as Dante's *Inferno* or Virgil's *Aeneid* or a play by William Shakespeare. Reading selection changes each session. Discussion of theme, setting, characterization occurs in class; in addition, students read aloud portions of the work and learn about the historical and cultural context of its writing.

**422 ACCOUNTING: FINANCIAL STATEMENTS (0.0)**  
3.0 hours lecture per week\*

Presents the content and construction of financial statements, and the interpretation and application of their contents.

**423 ART: WATERCOLOR (0.0)**  
3.0 hours lecture per week\*

Introduces the fundamentals of watercolor. Planning and preparation, color mixing and theory, design and composition, perspective are included. Several painting techniques and criteria for evaluation are taught as students create and critique their work.

**424 ART: PAINTING/OIL PAINTING (0.0)**  
3.0 hours lecture per week\*

Presents theories of color mixing and composition, and the process of critiquing. Students create a piece of work in oil or acrylic.

**425 ART HISTORY (0.0)**  
3.0 hours lecture per week\*

Presents an overview of art emphasizing historical development and cultural influences. Discussion and evaluation of works may center on a particular period or type of art such as modernism or impressionism or folk art, or may be a more general presentation spanning several centuries.

**426 DRAMA: READER'S THEATRE (0.0)**  
3.0 hours lecture per week\*

Presents an opportunity to analyze, interpret, and perform orally a work of literature. Selections may be chosen from drama, poetry, short stories or novels, and are adapted specifically for in-class dramatic readings.

**427 NUTRITION AND HEALTH FOR ADULTS OVER FIFTY (0.0)**  
3.0 hours lecture per week\*

Presents the basics of nutrition, how older adults' nutritional needs differ, and how to meet those needs. Students learn about

shopping in today's marketplaces and how to eat to aid recovery from surgery and illness.

**428 FILM APPRECIATION (0.0)**  
3.0 hours lecture per week\*

Studies major films to consider historical context, dramatic issues, artistic and technical objectives, and the process and elements of filmmaking.

**429 PHOTOGRAPHY: EQUIPMENT AND TECHNIQUES (0.0)**  
3.0 hours lecture per week\*

Presents camera choices, developing and printing techniques available through commercial developers, light and composition, and traveling with a camera.

**431 TRANSITIONS: MIDLIFE AND BEYOND (0.0)**  
3.0 hours lecture per week\*

Examines the changes of midlife and beyond such as retirement, bereavement, travel, community involvement, and grandparenting, with the intent to discuss, anticipate, and respond to concerns and challenges.

**432 GENEALOGICAL RESEARCH (0.0)**  
3.0 hours lecture per week\*

Provides an introduction to and overview of genealogical research, including the collection of genealogical information from a variety of sources and the composition of pedigree charts and history sheets.

## ENGINEERING - ENGR

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**1 PLANE SURVEYING (3.0)**  
5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: MATH 29 or equivalent*

Introduces the principles and practices of surveying, including the use of the engineer's tape, level, transit, and the use of an EDM (Electronic Distance Measurement). This equipment will be used to perform computations for horizontal and vertical distances, profiles, azimuths and bearings, traverse closures, topographic mapping, earthwork and land grading, and horizontal and vertical curves. Maps and land description also will be discussed.

**Transfer: CSU; UC. (CAN ENGR 10)**

**17 INTRODUCTION TO ELECTRONIC CIRCUIT ANALYSIS (4.0)**  
6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: PHYS 8B*

Presents an integrated transient and steady-state analysis of

# COURSES (CONTINUED)

linear DC and AC circuits by use of the mesh and node approach. Examines network theorems, phasors, complex-frequency concepts, and computer circuit analysis.

**Transfer:** CSU; UC. (CAN ENGR 6)(CAN ENGR 12)

## 19 LOGIC AND SWITCHING CIRCUITS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* CIS 17 or CIS 31

Introduces digital circuits and logic design for computer science and electrical engineering students. Topics include numbering systems and binary mathematics, Boolean algebra and circuit minimization techniques, combinational and sequential circuit analysis and design.

**Transfer:** CSU.

## 25 AUTOCAD (1.0)

6.0 hours per week: (4.0 hours lecture, 2.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* CIS 10 or basic knowledge of a Windows operating environment

Introduction to AutoCAD. Topics include all basic drawing commands, layers, dimensioning, and editing objects. Intended for those students wanting to learn the software and not necessarily how to draw. Ideal for professional engineers and architects or students in architecture or interior design. This course is exactly the same material as the first six weeks of ENGR 26 (18 week course).

Course may be taken 2 times.

## 26 ENGINEERING DRAWING I (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

Introduction to engineering drawing using AutoCAD. Topics include geometric construction, orthographic projection, isometrics, sectionals, auxiliaries, descriptive geometry, dimensioning, and working drawings. The first six weeks of this course are the same as ENGR 25.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 27 ENGINEERING DRAWING II (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* ENGR 25 or ENGR 26

Presents advanced subjects in engineering drawing using AutoCAD and Inventor. Course topics include 3D, macros, customization, and an introduction to AutoLisp.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 45 MATERIALS ENGINEERING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* CHEM 1A

Presents the fundamentals of the structure of matter. Introduces physical and mechanical properties of materials including metals, alloys, ceramics, insulating materials, semi-conductors, and polymers. Provides a study of heat treatments, materials selection, corrosion phenomena, and equilibrium diagrams.

**Transfer:** CSU; UC. (CAN ENGR 4)

## 47 INDEPENDENT STUDIES: ENGINEERING (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the technical field in which the study is to be undertaken

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic in the engineering area with support and direction from an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 48 INTRODUCTION TO ENGINEERING (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56 or ENGL 65

Broad overview of the field of engineering, including professional societies and their student chapters, professional licensing and registration, professional codes of ethics, the elements of engineering design, and the scope of analysis and design activities undertaken by private and public sector civil design professionals.

**Transfer:** CSU; UC.

## 50 ENGINEERING STATICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* PHYS 8A

Analyzes forces on structures in equilibrium, properties of forces, moments, couples and resultant, conditions for equilibrium, friction, centroids, and area moments of inertia. Introduces mathematical modeling and problem-solving utilizing vector mathematics.

**Transfer:** CSU; UC. (CAN ENGR 8)

## 51 ENGINEERING DYNAMICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGR 50

Analyzes the dynamics Associated with motion of rigid bodies and particles, including velocity, acceleration, relative motion, energy, work, momentum, and impulse. Utilizes vector mathematics.

# COURSES (CONTINUED)

**Transfer:** CSU; UC.

## 52A STRENGTH OF MATERIALS I (2.0)

4.0 hours lecture per week\*  
Associate Degree Applicable  
*Prerequisite:* ENGR 50

Study of stresses, strains, and deformations Associated with axial, torsional, and flexural loading of bars, shafts, and beams. Includes analysis of elementary determinate and indeterminate mechanical and structural systems.

**Transfer:** CSU; UC.

## 52B STRENGTH OF MATERIALS II (2.0)

4.0 hours lecture per week\*  
Associate Degree Applicable  
*Prerequisite:* ENGR 52A

Study of stress and strain transformations, analysis of beam deflection and rotation, indeterminate beams, and column buckling.

**Transfer:** CSU; UC.

## 60 STRUCTURAL SYSTEMS FOR ARCHITECTS (2.0)

2.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGR 50

Introduces the concepts of structural integrity and stability, structural subsystems, and methods of analysis.

**Transfer:** CSU.

## 70 NUCLEAR POWER PLANT SYSTEMS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGR 26

Presents a description of systems and major components, their function, materials of construction design, operating characteristics, limits of operation, system interfaces, and where applicable, control systems and limits associated with a Pressurized Water Reactor (PWR) commercial nuclear power plant. Access to the course requires current employment at PG&E Diablo Canyon Power Plant.

## 72 BASIC RADIATION PROTECTION TECH & RADIATION MEASUREMENTS LAB (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* ENGR 70 and PHYS 5B

Introduces the principles and applications of health physics covering radiation sources, biological effects of radiation and radiation dosimetry fundamentals. Presents a description of radiation detection instrumentation, external personnel monitoring systems, and internal dosimetry techniques used in industry. Environmental survey techniques including standards, contamination, control, air sampling, waste management and

emergency planning are examined.

## 74 REACTOR CORE FUNDAMENTALS (2.0)

2.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGR 70 and PHYS 5B

Introduction to the basic concepts of nuclear reactor core physics. Topics include: neutron sources and energies; flux, cross-sections, reaction rates; power and energy. Neutron life cycle, six factor formula and reactivity are defined and examined. Reactivity defects for given reactivity coefficients and temperature changes are calculated. Applications to various reactor designs involving different core geometrics for heterogeneous and homogeneous systems are made.

## 93 ENGINEERING SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## ENGLISH - ENGL

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### 1 TECHNICAL WRITING AND ORAL COMMUNICATION (4.0)

4.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGL 50, ENGL 56 or ENGL 65 with a grade of C or better

Presents work in effective written communication, including persuasive letters and memos, informative short reports, comprehensive and clear instructions, and an analytical formal report. Introduces students to basic oral communication for the workplace.

**Transfer:** CSU.

### 1A ENGLISH COMPOSITION (4.0)

4.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGL 50, ENGL 56 or ENGL 65 with a grade of C or better

Provides a study of and practice in the use of language and writing of argumentative/analytical essays and research papers.  
**Transfer:** CSU; UC. (CAN ENGL 2)(ENGL 1A + ENGL 1B = CAN ENGL SEQ A)

### 1B ENGLISH COMPOSITION: INTRODUCTION TO LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* ENGL 1A with a grade of C or better

Provides an introduction to the study of literature with further training in writing and critical thinking. Emphasis is placed on

# COURSES (CONTINUED)

analysis of selected literary forms and types, specifically the short story, drama, and poetry.

**Transfer:** CSU; UC. (CAN ENGL 4)(ENGL 1A + ENGL 1B = CAN ENGL SEQ A)

## 1C ENGLISH COMPOSITION: CRITICAL THINKING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

Presents a composition course beyond ENGL 1A which emphasizes critical thinking and reading in order to develop further logical reasoning and analytical and argumentative writing skills.

**Transfer:** CSU; UC.

## 5 INTRODUCTION TO POETRY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

*Advisory:* ENGL 1B

Introduces the study of poetry with emphasis on understanding, analysis, and appreciation of poetry through an in-depth examination of a variety of literary works.

**Transfer:** CSU; UC.

## 6 INTRODUCTION TO THE NOVEL (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

*Advisory:* ENGL 1B

Introduces the study of the novel with emphasis on understanding, analysis, and appreciation of the novel through an in-depth examination of a variety of literary works.

**Transfer:** CSU; UC.

## 7 INTRODUCTION TO THE SHORT STORY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

*Advisory:* ENGL 1B

Introduces the study of the short story with emphasis on understanding, analysis, and appreciation of the short story through an in-depth examination of a variety of literary works.

**Transfer:** CSU; UC.

## 12A AMERICAN LITERATURE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

Presents a survey of American literature from the pre-colonial period to the Civil War. Introduces the study of major American writers against their historical backgrounds. Such writers as

Bradstreet, Paine, Franklin, Jefferson, Poe, Cooper, Irving, Bryant, Melville, Hawthorne, Longfellow, Emerson, Thoreau, Whitman, and Dickinson are studied.

**Transfer:** CSU; UC. (CAN ENGL 14)(ENGL 12A + ENGL 12B = CAN ENGL SEQ C)

## 12B AMERICAN LITERATURE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

The study of major American writers from the Civil War up through contemporary times. Includes writers such as Twain, Howells, Crane, London, Hemingway, Steinbeck, Faulkner, Wright, Dos Passos, Frost, Pound, Eliot, Stevens, Cummings, O'Neill, Tennessee Williams, Arthur Miller, O'Connor, Alice Walker, Berryman, Lowell, Sexton and Plath.

**Transfer:** CSU; UC. (CAN ENGL 16)(ENGL 12A + ENGL 12B = CAN ENGL SEQ C)

## 13 MULTICULTURAL VOICES IN AMERICAN LITERATURE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

Introduces current literary study which focuses upon issues of race, gender, class, sexual orientation, and ethnicity in American literature. Surveys American history and culture in the context of its multicultural literary tradition from the early Native American tradition to present day. Emphasizes the formation of minority discourse against and within American mainstream culture and its literary tradition. Uses poems, novels, short stories, and essays for study.

**Transfer:** CSU; UC.

## 15 SHAKESPEARE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

Introduces Shakespeare's works with emphasis on analysis of character and structured scene and requires preparation of critical papers based on analytical reading and investigation.

**Transfer:** CSU; UC.

## 16 LITERATURE AND FILM (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 1A with a grade of C or better

Presents the techniques of literary criticism to analyze films and the literary works that inspired them. Examines narrative in film and the criteria for evaluating films and literature emphasizing objective analysis and comparison and contrast.

**Transfer:** CSU; UC.

## 17 LITERATURE BY WOMEN (3.0)

# COURSES (CONTINUED)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a grade of C or better*

Presents a survey of literature by women of English-speaking countries from the Middle Ages to the 21st century, with an emphasis on comparing historically oppressed women writers (including African-American and lesbian writers) to those in the mainstream. Authors covered include Phillis Wheatley, Anne Bradstreet, Mary Wollstonecraft, Jane Austen, Sojourner Truth, Harriet Beecher Stowe, Kate Chopin, Willa Cather, Gertrude Stein, Virginia Woolf, Zora Neale Hurston, Anne Sexton, Maya Angelou, Adrienne Rich, Toni Morrison, Sylvia Plath, Audre Lorde, Alice Walker, and Louie Erdrich.

**Transfer: CSU; UC.**

## 31 CREATIVE WRITING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a grade of C or better*

Presents an opportunity for creative literary expression and emphasizes techniques in writing poems, and/or short stories, and/or plays for informal discussion and criticism by the class and by the instructor. Provides the opportunity to discover one's talent and to practice writing skills.

**Transfer: CSU; UC. (CAN ENGL 6)**

## 42H HONORS SEMINAR: ENGLISH COMPOSITION (1.0)

1.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in ENGL 1A*

Provides the opportunity for broadening a student's background in general education and for providing study and practice in greater depth in writing. Emphasis is on discussion and analysis of subject matter, issues related to the field of study and current advancements in the field. Open only to students admitted to the honors program.

**Transfer: CSU; UC.**

## 44A EUROPEAN LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a grade of C or better*

Presents a survey of European literature from the early Greeks up through the Renaissance of the 15th and 16th centuries. Major works and authors covered include Homer, Sophocles, Aristophanes, Plato, Aristotle, Virgil, Ovid, Catullus, "The Song of Roland," Dante, Boccaccio, Petrarch, Rabelais, Cellini, Erasmus, Machiavelli, and Cervantes.

**Transfer: CSU; UC.**

## 44B EUROPEAN LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a grade of C or better*

Presents a survey of European literature from the Neo-classical Age up into the moderns of the 20th century. Major authors covered include Moliere, Racine, Voltaire, Rousseau, Goethe, Flaubert, Tolstoy, Ibsen, Chekhov, Baudelaire, Kafka, Sartre, and Camus.

**Transfer: CSU; UC.**

## 46A SURVEY OF BRITISH LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a grade of C or better*

Presents a survey of British literature from the Middle Ages through the 18th century. Introduces the study of major British writers against their historical backgrounds. Such writers as Chaucer, Spenser, Shakespeare, Jonson, Donne, Milton, Dryden, Swift, Pope, Johnson, and Boswell will be studied.

**Transfer: CSU; UC. (CAN ENGL 8)(ENGL 46A + ENGL 46B = CAN ENGL SEQ B)**

## 46B SURVEY OF BRITISH LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 1A with a C or better*

Presents a survey of major British writers extending from the Romantic Period through the 20th century, focusing on such writers as Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson, Browning, Arnold, Hopkins, Yeats, Lawrence, Eliot, Auden, Thomas, and Woolf.

**Transfer: CSU; UC. (CAN ENGL 10)(ENGL 46A + ENGL 46B = CAN ENGL SEQ B)**

## 47 INDEPENDENT STUDIES: ENGLISH (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of English under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU; UC.**

## 56 COLLEGE READING AND WRITING (4.0)

4.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 100 with a C or better or equivalent*

Provides a basic course in college reading and writing with individual attention to sentence structure, paragraph and essay structure, grammar, and critical thinking skills.

## 65 BASIC TECHNICAL COMMUNICATION (4.0)

# COURSES (CONTINUED)

4.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite: ENGL 100 or equivalent*

Provides a basic course in technical communication with attention to the fundamentals of written and verbal communication in business and industry.

## 93 ENGLISH SPECIAL TOPICS (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## 100 BASIC READING AND WRITING (4.0)

4.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: ACASK 36 and ACASK 50 with a C or better or ESL 6A and ESL 6B with a C or better or qualifying score on the Assessment test or equivalent*

Introduces students to the language arts through intensive reading, writing, and critical thinking. Emphasizes the process approach to reading and writing. Provides a basic course in sentence and paragraph construction, with limited introduction to the essay.

## ENGLISH SECOND LANGUAGE - ESL

### 1 ESL READING, WRITING, AND GRAMMAR, LEVEL 1 (6.0)

6.0 hours lecture per week  
Associate Degree Non-Applicable  
*Prerequisite: ESL Placement Test*

Focuses on building English language skills for speakers of other languages with an emphasis on reading, writing, grammar, listening and speaking at the beginning level. May be taken concurrently with ESL 15, ESL 25, or ESL 35.

### 1A ESL READING AND CONVERSATION, LEVEL 1 (0.5 to 3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable  
*Prerequisite: ESL placement test*

Focuses on reading and conversation for the non-native speaker at the beginning level. No English is required.

### 1B ESL WRITING AND GRAMMAR, LEVEL 1 (3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable  
*Prerequisite: ESL placement test*

Focuses on writing and grammar for the non-native speaker at the beginning level. No English is required.

### 2 ESL READING, WRITING, AND GRAMMAR, LEVEL 2 (6.0)

6.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: High-beginning score on the ESL placement test or successful completion of ESL 1*

Focuses on building English language skills for speakers of other languages with an emphasis on reading, writing, grammar, listening and speaking at the high-beginning level. May be taken concurrently with ESL 15, ESL 25 or ESL 35.

### 2A ESL READING AND CONVERSATION, LEVEL 2 (3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: High-beginning score on the ESL placement test or completion of ESL 1A with a grade of C or better*

Focuses on reading and conversation at the high-beginning level.

### 2B ESL WRITING AND GRAMMAR, LEVEL 2 (3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: High-beginning score on the ESL placement test or completion of ESL 1B with a grade of C or better*

Focuses on writing and grammar at the high-beginning level.

### 3 ESL READING, WRITING, AND GRAMMAR, LEVEL 3 (6.0)

6.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: Low-intermediate score on the ESL placement test or successful completion of ESL 2*

Focuses on building English language skills for speakers of other languages with an emphasis on reading, writing and grammar at the low-intermediate level. May be taken concurrently with ESL 15, ESL 25 or ESL 35.

### 3A ESL READING AND CONVERSATION, LEVEL 3 (3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: Low-intermediate score on the ESL placement test or completion of ESL 2A with a grade of C or better*

Provides group and individual instruction for improvement of reading and conversation skills in English for non-native speakers at the low-intermediate level.

### 3B ESL WRITING AND GRAMMAR, LEVEL 3 (3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: Low-intermediate score on the ESL placement test or completion of ESL 2B with a grade of C or better*

# COURSES (CONTINUED)

Provides group and individual instruction for improvement of writing and grammar skills in English for non-native speakers at the low-intermediate level.

## **4 ESL READING, WRITING, AND GRAMMAR, LEVEL 4 (6.0)**

6.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: High-intermediate score on the ESL placement test or completion of ESL 3 with a grade of C or better*

Focuses on building English language skills for speakers of other languages with an emphasis on reading, writing and grammar at the high-intermediate level. May be taken concurrently with ESL 15, ESL 25 or ESL 35.

## **4A ESL READING AND CONVERSATION, LEVEL 4 (3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: High-intermediate score on the ESL placement test or completion of ESL 3A with a grade of C or better*

Provides group and individual instruction for improvement of reading and listening/speaking skills in English for non-native speakers at the high-intermediate level. Special focus is on developing vocabulary and idiomatic expression in reading and speaking English.

## **4B ESL WRITING AND GRAMMAR, LEVEL 4 (3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: High-intermediate score on the ESL placement test or completion of ESL 3B with a grade of C or better*

Provides group and individual instruction for improvement of writing and grammar in English for non-native speakers at the high-intermediate level.

## **5 ESL READING, WRITING, AND GRAMMAR, LEVEL 5 (6.0)**

6.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Low-advanced score on the ESL placement test or completion of ESL 4 with a grade of C or better*

Focuses on building English language skills for speakers of other languages with an emphasis on reading, writing and grammar at the low-advanced level. May be taken concurrently with ESL 15, ESL 25 or ESL 35.

## **5A ESL READING AND CONVERSATION, LEVEL 5 (3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Advanced score on the ESL placement test or completion of ESL 4A with a grade of C or better*

Provides group and individual instruction for improvement of reading comprehension and oral expression skills in English for non-native speakers at the advanced level.

## **5B ESL WRITING AND GRAMMAR, LEVEL 5 (3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Advanced score on the ESL placement test or completion of ESL 4B with a grade of C or better*

Provides group and individual instruction for improvement of writing and grammar skills in English for non-native speakers at the advanced level.

## **6A ENGLISH AS A SECOND LANGUAGE, WRITING AND GRAMMAR, LEVEL 6 (6.0)**

6.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: High-advanced score on the ESL placement test or completion of Level 5 with a grade of C or better*

Focuses on building English language skills for speakers of other languages with an emphasis on writing and grammar at the high-advanced level. May be taken concurrently with ESL 6B and ESL 15, ESL 25, or ESL 35.

## **6B ENGLISH AS A SECOND LANGUAGE, READING, LEVEL 6 (3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: High-advanced score on the ESL placement test or completion of Level 5 with a grade of C or better*

Focuses on building English language skills for speakers of other languages with an emphasis on reading at the high-advanced level. May be taken concurrently with ESL 6A and ESL 15, ESL 25, or ESL 35.

## **15 ESL 15 BEGINNING LEVEL CONVERSATION (2.0 to 3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Beginning-level score on the oral component of the ESL placement test*

Focuses on basic communication skills in listening comprehension and speaking for speakers of other languages and enables the beginning-level student to function in common English-speaking situations. Prepares students for ESL 25.

## **25 ESL 25 INTERMEDIATE LEVEL CONVERSATION (2.0 to 3.0)**

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Intermediate-level score on the oral component of the ESL placement test or completion of ESL 15 with a grade of C or better*

## COURSES (CONTINUED)

Focuses on communication skills in listening comprehension and speaking for speakers of other languages and enables the intermediate-level student to function in everyday English speaking situations. Prepares students for ESL 35.

### 35 ESL 35 ADVANCED LEVEL CONVERSATION (2.0 to 3.0)

3.0 hours lecture per week  
Associate Degree Non-Applicable

*Prerequisite: Advanced-level score on the oral component of the ESL placement test or completion of ESL 25 with a grade of C or better*

Focuses on communication skills in listening comprehension and speaking for speakers of other languages and enables the advanced-level student to function in academic, professional and everyday English speaking situations.

### 93 ENGLISH AS A SECOND LANGUAGE SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 101 ENGLISH AS A SECOND LANGUAGE SKILLS LABORATORY-BEGINNING (0.5)

1.5 hours laboratory per week  
Associate Degree Non-Applicable  
*Prerequisite: ESL placement test*

Provides English as a Second Language students with specialized programs designed to improve reading, vocabulary, listening comprehension, pronunciation, grammar, idiomatic expression, conversation, and writing at the beginning level. NOTE: Students may register for two sections of lab.

### 102 ENGLISH AS A SECOND LANGUAGE SKILLS LAB - INTERMEDIATE (0.5)

1.5 hours laboratory per week  
Associate Degree Non-Applicable  
*Advisory: ESL 2A and ESL 2B*

Provides ESL students with specialized programs designed to improve reading, vocabulary, listening comprehension, pronunciation, grammar, idiomatic expression, conversation, word processing and writing at the intermediate level.

### 103 ENGLISH AS A SECOND LANGUAGE SKILLS LABORATORY - ADVANCED (0.5)

1.5 hours laboratory per week  
Associate Degree Non-Applicable  
*Advisory: ESL 4A and ESL 4B*

Provides ESL students with specialized programs designed to improve reading, vocabulary, listening comprehension, pronunciation, grammar, idiomatic expression, conversation,

word processing and writing at the advanced level.

## FAMILY STUDIES - FAMST

### 2 CHILD, FAMILY AND COMMUNITY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: ENGL 56*

Studies patterns of family living in contemporary society, emphasizing the varying roles and interaction of family members and factors which affect family life. Discusses cultural, social, economic, racial, and ethnic differences. Focuses on the developing child and emphasizes the influences of family and community. Same as ECE 2. Meets Title XXII requirements: DS 2.

**Transfer: CSU; UC.**

### 5 LIFE MANAGEMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Life Management provides individuals with skills for understanding and using internal and external resources to function effectively in society now and in the future. Major topics covered in the course include: the effects of cultural forces and future trends on values, standards, and goals; skills for decision making, time, personal energy, stress, and conflict management; and techniques for improving self-esteem and self-understanding, values clarification, and interpersonal relationships.

**Transfer: CSU.**

### 10 INTRODUCTION TO HUMAN SERVICES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents an overview and history of the human services, with emphasis on the groups needing services in contemporary society. Acquaints students with career opportunities in, and the education and job requirements of the different services.

**Transfer: CSU.**

### 11 INTRODUCTION TO THE TEACHING PROFESSION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: ENGL 56*

Provides a minimum of 45 hours of supervised observation and participation in cooperating public schools. Discussion focuses on instructional practice and subject matter taught in the grades observed, as well as the historical, philosophical and social foundations of American public education. Examines opportunities, requirements, responsibilities, new directions, and rewards in teaching. Places students in a more informed position

# COURSES (CONTINUED)

regarding the decision to pursue a career in education.

**Transfer:** CSU; UC.

## 12 HUMAN DEVELOPMENT: LIFE SPAN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Integrates the physical, social, emotional and cognitive aspects of human development throughout the lifespan. Discusses the developmental tasks facing people at various points in the life cycle. Explores the way social interaction and cultural institutions shape the development of the individual. Meets Title XXII requirements: DS 1.

**Transfer:** CSU; UC.

## 14 FAMILY, RELATIONSHIPS AND INTIMACY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents sociological, psychological and cross-cultural concepts of intimate relationships and the family unit. Focuses on diversity within and the development of committed relationships and the family unit. Emphasizes intimacy dynamics, communication processes, and assessment of functionality and wellness.

**Transfer:** CSU. (CAN HEC 12)

## 15 DEVELOPMENTAL PATTERNS OF WOMEN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Studies the biological, social, and emotional development of women through the lifespan. Focuses on central issues affecting women.

**Transfer:** CSU; UC.

## 16 PARENTING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents background for understanding parent-child relationships in the changing social environment. Examines common problems in child rearing and emphasizes development of a philosophy of parenthood and development of effective parenting behavior.

**Transfer:** CSU.

## 18 HUMAN SEXUALITY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents an overview of the complex social, psychological, and psychological aspects of human sexuality. Examines responsible

use of sexuality as a part of life adjustment.

**Transfer:** CSU; UC.

## 20 AGING IN THE 21ST CENTURY: SOCIAL GERONTOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Provides an introduction to the rapidly changing field of gerontology - the study of aging. Aging and the end of life are explored from a multidisciplinary perspective that views aging as not only a biological, but also a psychological, emotional and social process. Includes the effect on family members, ways of adapting living and working environments, and decisions that need to be made to prepare for death. Introduces local, state, and federal programs that can assist in meeting the needs of the aged and their families. Provides students with tools to better prepare for their parents' and their own later years.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: FAMILY STUDIES (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of family studies under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 93 FAMILY STUDIES SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## FASHION DESIGN AND MERCHANDISING - FDM

### 10 INTRODUCTION TO FASHION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Explores the fashion industry and careers related to design, production, and merchandising of fashion products.

**Transfer:** CSU.

### 12 TEXTILES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

# COURSES (CONTINUED)

Introduces fibers, yarns, fabric constructions, and finishes which affect textile selection, uses, and care; provides experiences in textile testing and fabric identification; and relates textile science to consumer textile product selection. Same as INTDES 12.

**Transfer:** CSU; UC.

## 14 APPAREL EVALUATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Analyzes components of apparel and related fashion accessories. Develops evaluation techniques for quality comparison.

**Transfer:** CSU.

## 15 DESIGN ANALYSIS AND COLOR THEORY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents the design elements and principles as they apply to interior design, clothing, textiles, jewelry and accessories. Includes a wide variety of creative applications with special emphasis on color theory and use. Same as INTDES 15.

**Transfer:** CSU.

## 16 FASHION ILLUSTRATION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Presents techniques of "quick sketch" using pencil, pen, art markers, and watercolors. Students will also learn how to show fabric texture and pattern in their finished drawings which may become part of their design portfolio.

## 18 COMMERCIAL FASHION DESIGN (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: FDM 16*

Provides an opportunity for an in-depth study of fashion design as applied to the commercial apparel industry. Presents the concept of designing "collections" or coordinated groups of themed designs. A wide variety of creative applications will be utilized solving problems related to fashion design. Students will create original fashions using a croquis. Developing "flats" for commercial specifications is also explored.

**Transfer:** CSU.

## 20 FASHION ANALYSIS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Studies the psychological and sociological significance of clothing styles. Applies elements and principles of design of apparel and figure types to project a desired image.

**Transfer:** CSU.

## 25 HISTORY OF FASHION: CLASSIC THROUGH 19TH CENTURY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

A survey of the evolution of apparel and accessory styles from the classic civilizations, medieval, Renaissance, Baroque, and the various periods of the 19th Century. Emphasizes the relationship of recurring styles of the past to contemporary trends. Includes the impact of sociological, technological, economic and political factors on fashion.

**Transfer:** CSU.

## 26 20TH CENTURY TRENDS AND DESIGNS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Surveys the evolution of apparel and accessory styles from the late 19th century through the present. Explores the relationship of recurring style trends between decades within the century as well as any from previous centuries. Includes sociological, technological, economic, cultural, and political factors affecting the design.

**Transfer:** CSU.

## 30 FASHION BUYING (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56 and MATH 23 or MATH 23SI*

Principles of buying for resale in independent stores, department stores and chain stores with centralized buying. Includes buying for fashion merchandise, staples, hard and soft merchandise lines, merchandise planning and selection, resource relations, legal trade regulations, pricing, merchandise management and control. Emphasizes quantitative merchandising techniques as applied to pricing, mark-downs, discounts, stock control, budgets, income statements and balance sheets.

**Transfer:** CSU.

## 35 FASHION PROMOTION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Principles of fashion promotion and coordination. Study of the psychology of fashion, functions of the fashion coordinator and techniques and procedures for presenting fashion. Observation and participation in an area of the fashion industry. Studies the functions of fashion coordinators and directors in retail and wholesale fields.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 40 VISUAL MERCHANDISING AND DISPLAY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56 and FDM 15*

Presents a study of the visual approach to selling with emphasis on the how and why of display. Includes a brief history of display, contemporary visual merchandising, art principles, and sales theory. Experience in designing and constructing visual displays for merchandising strategies to increase sales and store image.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: FASHION DESIGN AND MERCHANDISING (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of fashion design or fashion merchandising under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 60 APPAREL PRODUCT DEVELOPMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: FDM 14*

Explores the dynamic facets of Apparel Product Development from Line Development through Production. Evaluates garment silhouettes, fabrication, construction, and quality. Demonstrates how to develop a Bill of Materials, Cost Sheets, and Specification Sheets. Presents sizing, fit, and sourcing options.

**Transfer:** CSU.

## 63 CLOTHING CONSTRUCTION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Provides lecture, demonstration, and laboratory experience in the techniques of garment construction. Includes sewing equipment use and care, pattern selection and adjustments, and garment fitting and alterations. Students will construct at least one garment.

Course may be taken 2 times.

**Transfer:** CSU.

## 65 PATTERN DEVELOPMENT (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: FDM 63*

Presents the flat pattern method of pattern designing with emphasis on bodices, collars, sleeves, skirts, pants, and selected

design variations. Develops an understanding of pattern adjustments, garment fitting, and the use of fabric grain. Course may be taken 2 times.

## 70 FASHION PORTFOLIO PRESENTATION (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: FDM 18*

Preparation of a fashion design portfolio and apparel collection flats. Portfolio and contents based on research and analysis of industry trends and utilizing professional formats and techniques.

**Transfer:** CSU.

## 93 FASHION MERCHANDISING & DESIGN (0.5 to 4.0) SPECIAL TOPIC

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## FRENCH - FR

### 1 ELEMENTARY FRENCH (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable

Presents an introductory, topic-based course in contemporary French with an emphasis on listening comprehension, language acquisition, oral interaction, culture-centered reading and writing basic French. Social and cultural aspects of the French-speaking world are presented along with some of the most essential forms, structures and vocabulary in the language. Language laboratory practice required.

**Transfer:** CSU; UC. (CAN FREN 2)(FR 1 + FR 2 = CAN FREN SEQ A)

### 2 FRENCH (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: FR 1 or equivalent*

Presents a continuation of FR 1 with intensive, topic-centered practice in listening comprehension, language acquisition, conversations and composition. Selected cultural readings from the French-speaking world including cultural vignettes, prose, and poetry. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN FREN 4)(FR 1 + FR 2 = CAN FREN SEQ A)

### 3 FRENCH (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: FR 2 or equivalent*

Presents a continuation of FR 2 with more intensive, topic-centered practice in grammatical structures including the subjunctive, future, conditional, past conditional and past perfect

## COURSES (CONTINUED)

tenses. Practice includes group discussions, cultural readings from the French-speaking world including cultural vignettes, and more advanced prose and poetry, and oral presentations in French.

**Transfer:** CSU; UC. (CAN FREN 8)(FR 3 + FR 4 = CAN FREN SEQ B)

### 4 FRENCH (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* FR 3 or equivalent

Presents a topic-centered, in-depth study of French structures at an intermediate level through interactive activities, extensive readings and authentic recordings, and compositions. Students learn to deal orally and in written form with complex situations. Language lab use is required.

**Transfer:** CSU; UC. (CAN FREN 10)(FR 3 + FR 4 = CAN FREN SEQ B)

### 10 BEGINNING FRENCH CONVERSATION AND READING (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

Emphasizes basic vocabulary and pronunciations needed to converse in French. Students will also develop listening comprehension, reading skills and knowledge and understanding of French-speaking cultures. Language laboratory practice required.

### 20 FRENCH CONVERSATION AND READING (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* FR 1 or equivalent

Presents intensive practice of oral communication skills. Students will also develop reading strategies to access authentic cultural information. Language laboratory practice is required.

### 47 INDEPENDENT STUDIES: FRENCH (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for in-depth study by an individual student in a selected topic of French under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

### 63 FRENCH REVIEW (2.0)

3.0 hours per week: (2.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* FR 1 or equivalent

Presents a topic-centered review of French structures through

listening comprehension, interactive activities and compositions. Cultural readings include an historical perspective to contrast with the contemporary and authentic literary selections.

Language laboratory practice, including use of the CD-ROMs and the Internet, is required.

Course may be taken 4 times.

**Transfer:** CSU.

### 93 FRENCH SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## GEOGRAPHY - GEOG

### 1 PHYSICAL GEOGRAPHY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Studies human interaction with the basic elements of the physical environment. Includes climate, vegetation, soils, landforms, and their patterns of distribution.

**Transfer:** CSU; UC. (CAN GEOG 2)

### 2 CULTURAL GEOGRAPHY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Studies human interaction with the basic elements of the cultural environment. Includes language, religion, economy, and other cultural phenomena and their patterns of distribution.

**Transfer:** CSU; UC. (CAN GEOG 4)

## GEOLOGY - GEOL

### 10 PHYSICAL GEOLOGY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 23 or MATH 23SI

*Advisory:* ENGL 56 or ENGL 65

Introduces the concepts and principles upon which geologic knowledge is based including the composition, structure, and description of the earth's external and internal processes and features.

**Transfer:** CSU; UC. (CAN GEOL 2)

### 11 HISTORICAL GEOLOGY (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* GEOL 10 or equivalent and MATH 23 or MATH 23SI or equivalent

*Advisory:* Eligibility for ENGL 1A

# COURSES (CONTINUED)

Presents the theory of the origin and evolution of the earth and its lifeforms; emphasizing the tectonic development of North America and its biological evolution through time.

**Transfer:** CSU; UC. (CAN GEOL 4)

## 12 GEOLOGIC HAZARDS, MAN, AND THE ENVIRONMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56 or ENGL 65

Studies geologic hazards as they relate to human interaction with the environment. Emphasizes the cause of earthquakes, their recording, location, and measurement. Also covers flooding, landslides, subsidence, and volcanic hazards.

**Transfer:** CSU; UC.

## 20 GEOLOGY OF CALIFORNIA (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Introduces the principles and processes of the physical and historical geology of California.

**Transfer:** CSU; UC.

## 29A GEOLOGICAL SCIENCE FIELD STUDIES (1.0)

49.0 hours per week: (9.0 hours lecture, 40.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite:* Completion of or concurrent enrollment in GEOL 10, GEOL 11 or GEOL 20

Presents an on-site field study of Yosemite, the Sierra Nevada, Mono Basin, Long Valley Caldera, and Owens Valley area.

**Transfer:** CSU; UC.

## 29B GEOLOGICAL SCIENCE FIELD STUDIES (1.0)

49.0 hours per week: (9.0 hours lecture, 40.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite:* Completion of or concurrent enrollment in GEOL 10, GEOL 11 or GEOL 20

Presents an on-site field study of the Transverse Ranges, central San Andreas fault, Mojave desert, and the Death Valley area.

**Transfer:** CSU; UC.

## 93 GEOLOGY SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## GERMAN - GER

### 1 ELEMENTARY GERMAN (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable

Presents a topic-centered introduction to contemporary German language and culture. Students will achieve basic functional proficiency in oral and written communication skills and develop knowledge and understanding of German-speaking cultures based on social and historical contexts. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN GERM 2)(GER 1 + GER 2 = CAN GERM SEQ A)

### 2 GERMAN (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* GER 1 or equivalent

Presents a continuation of GER 1 with topic-centered intensive practice of oral and written communication skills. Students will develop strategies to access authentic cultural information including prose, poetry and current events. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN GERM 4)(GER 1 + GER 2 = CAN GERM SEQ A)

### 3 GERMAN (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* GER 2 or equivalent

Reviews grammar, including discussion of grammatical features beyond the elementary level including intensive oral and written drills in idiomatic construction, composition, conversation, cultural readings and language laboratory practice.

**Transfer:** CSU; UC.

### 4 GERMAN (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite:* GER 3 or equivalent

A continuation of GER 3 with extensive practice in composition, conversation, and comprehension, with readings from classical and contemporary writers and with language laboratory practice.

**Transfer:** CSU; UC.

### 10 BEGINNING GERMAN CONVERSATION AND READING (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory by arrangement)  
Associate Degree Applicable

Emphasizes basic vocabulary and pronunciations skills needed to converse in German. Students will also develop listening comprehension, reading skills and knowledge and understanding of German-speaking cultures. Language laboratory practice required.

### 20 GERMAN CONVERSATION AND READING (4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory by arrangement)  
Associate Degree Applicable

## COURSES (CONTINUED)

*Prerequisite: GER 1, GER 10 or equivalent*

Presents a continuation of GER 10 with intensive practice of oral communication skills. Students will also develop reading strategies to access authentic cultural information. Language laboratory practice is required.

### 47 INDEPENDENT STUDIES: GERMAN (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for in-depth study by an individual student in a selected topic of German under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU; UC.**

### 93 GERMAN SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## HEALTH EDUCATION - HEED

### 2 HEALTH EDUCATION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents a broad-based survey of major health topics, emphasizing the prevention of chronic conditions, promotion of health and fitness throughout the lifespan, and the application of current trends in health to affect behavior and lifestyle changes in the student. Health issues will be discussed from a multi-dimensional perspective using relevant examples from a variety of diverse populations, including predominant ethnic minority groups.

**Transfer: CSU; UC.**

### 3 WOMEN'S HEALTH ISSUES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents major health issues of special significance to women cross culturally. Emphasis will be placed on current trends in the prevention of chronic diseases and health disorders, the promotion of a positive body image, and self-empowerment. Identification of significant cultural obstacles of access for women's health care by non-dominant groups are presented. In addition, traditional, as well as, experiential and cooperative teaching/learning strategies will be used to explore the application of lifestyle changes to individual health beliefs and practices.

**Transfer: CSU; UC.**

### 4 STANDARD FIRST AID AND CPR (CARDIOPULMONARY RESUSCITATION) (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents information and training in the immediate and temporary emergency care in case of accident or illness. Prepares the student for first-aid and C.P.R. certificate examinations.

**Transfer: CSU; UC.**

### 6 HEALTH ASPECTS OF DRUG USE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents an in depth analysis of the major health problems associated with the use, misuse, and abuse of drugs including herbs/plants, ergogenics, over-the-counter, prescription, controlled, and designer drugs. Emphasizes the metabolism of drugs, drug-drug and herb-drug interactions, addiction from an age, gender, and ethnic perspective, and the impact of substance use and abuse on a variety of cultures.

**Transfer: CSU; UC.**

### 8 MULTICULTURAL HEALTH (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents the major health problems facing non-dominant/minority ethnic groups related to acculturation, assimilation, and biological variations. Various health beliefs systems, folk remedies, health practices, and attitudes toward health will be analyzed to promote prejudice reduction and understanding of cultural differences. A variety of non-traditional and experiential teaching/learning strategies will be used to examine alternative approaches to healthy lifestyles.

**Transfer: CSU; UC.**

### 93 HEALTH EDUCATION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## HISTORY - HIST

### 3A HISTORY OF WORLD CIVILIZATIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Surveys the major world civilizations from antiquity to the early sixteenth century. Explores the people, ideas, and events that have shaped the ancient world, including the social, economic, and political institutions that have made significant contributions

# COURSES (CONTINUED)

to the human experience.

**Transfer:** CSU; UC.

## 3B HISTORY OF WORLD CIVILIZATIONS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Surveys the major world civilizations from the early sixteenth century to the present. Explores the people, ideas, and events that have shaped the modern world, including the social economic, and political institutions that have made significant contributions to the human experience.

**Transfer:** CSU; UC.

## 4A HISTORY OF WESTERN CIVILIZATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the history of Western Civilization from Mesopotamia (ca. 3000 B.C.) to the Elizabethan Age (1603 A.D.). Emphasizes historical methodology, physical environment, religious beliefs, and social, political and economic factors. Explores the diverse antecedents of Western Civilization.

**Transfer:** CSU; UC. (CAN HIST 2)(HIST 4A + HIST 4B = CAN HIST SEQ A)

## 4B HISTORY OF WESTERN CIVILIZATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the history of Western Civilization from the Stuart dynasty in England (1603) to the present. Emphasizes historical methodology as well as the physical environment, religious beliefs, and social, political, and economic factors.

**Transfer:** CSU; UC. (CAN HIST 4)(HIST 4A + HIST 4B = CAN HIST SEQ A)

## 7A HISTORY OF THE UNITED STATES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Presents a survey of the political, economic, social and cultural developments of the United States to 1865 with emphasis on development which have conditioned and characterized the American way of life.

**Transfer:** CSU; UC. (CAN HIST 8)(HIST 7A + HIST 7B = CAN HIST SEQ B)

## 7B HISTORY OF THE UNITED STATES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the political, social and cultural development of the United States from 1865 to the present. Emphasizes those

developments which have conditioned and characterized the American way of life.

**Transfer:** CSU; UC. (CAN HIST 10)(HIST 7A + HIST 7B = CAN HIST SEQ B)

## 8A HISTORY OF LATIN AMERICA (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Examines the colonial history of Latin America from discovery to independence in 1821. Emphasizes the impact of European and non-European contributions to a distinctive Latin American culture. Includes a review of pre-1492 European, African, and New World cultures.

**Transfer:** CSU; UC.

## 8B HISTORY OF LATIN AMERICA (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Examines the rise of Latin American social, economic and political institutions from the Age of Independence to the present. Emphasizes the trends and themes which compose a collective Latin American historical identity.

**Transfer:** CSU; UC.

## 10 HISTORY OF CALIFORNIA (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Introduces the concepts and issues that have shaped the history of California. Emphasizes the physical environment, the indigenous Indian culture, the Hispanic culture, and the American culture.

Analyzes political, social, and economic factors.

**Transfer:** CSU; UC.

## 12 HISTORY OF THE MEXICAN-AMERICAN (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the major social and cultural events of people of Mexican descent north of Mexico. Presents their history in relation to the broad background of Hispanic-Mexican history. Emphasizes the history of the Southwest United States since 1848.

**Transfer:** CSU; UC.

## 19 HISTORY OF THE FAR EAST (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the social, political, and economic history of China, Japan, and other Asian countries. Emphasizes themes and

## COURSES (CONTINUED)

concepts resulting in the current problems of the Far East and how they relate to the United States.

**Transfer:** CSU; UC.

### 33 HISTORY OF THE AFRO-AMERICAN (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the political, economic and social history of the Afro-Americans from the early 17th century to the present with emphasis on the contributions of Afro-Americans to American culture.

**Transfer:** CSU; UC.

### 35 HISTORY OF AFRICAN CIVILIZATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys the history of Africa from antiquity to the present. Emphasizes the ancient African kingdoms, societies, and cultures before Arabic and European invasions. Studies the impact of European colonization leading to contemporary African demands for self-determination and nation-building.

**Transfer:** CSU; UC.

### 39 HISTORY OF THE ROLE OF WOMEN (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* ENGL 56

Surveys woman's place historically and sociologically in specific cultures throughout the ages. Assesses how womankind is perceived in her role, status, limitations, and opportunities in various historic and periods and analyzes the dynamics of change in role from one person to another.

**Transfer:** CSU; UC.

### 47 INDEPENDENT STUDIES: HISTORY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite:* The student must have completed preparatory course work in the field for which the study is undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of history under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## HOSPITALITY - HOSP

### 5 FRONT OFFICE OPERATIONS (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the

*industry*

Provides knowledge and skills to supervise a hotel front office including reservations, registration, check-out, settlement, security, accounting, and audits through study and practical application.

### 10 HOSPITALITY MARKETING AND SALES (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the *industry*

Introduces the student to effective sales and customer service techniques in such areas as service encounters, guest behavior, data, pricing strategies, selling and entrepreneurship.

### 15 HOUSEKEEPING OPERATIONS (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the *industry*

Provides students with the competencies necessary to successfully supervise housekeeping operations of a hotel. Presents the responsibilities of the Housekeeping Department in relation to other hotel departments and the skills necessary to supervise housekeeping and laundry staff.

### 20 SUPERVISION IN THE HOSPITALITY INDUSTRY (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the *industry*

Introduction supervisory skills necessary in the hospitality industry such as effective communications, training, coaching, evaluating, disciplining, and managing conflict, through study and practical application.

### 25 HOSPITALITY LAW (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the *industry*

Presents a wide range of laws regulating hotel responsibilities to guests, guest rights, hotel facility regulations, and employee rights.

### 30 FOOD AND BEVERAGE OPERATIONS (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56 and employment in the *industry*

Provides the skills necessary to successfully supervise a hotel Food and Beverage Department. Includes department

## COURSES (CONTINUED)

responsibilities and staff supervision issues in addition to the knowledge and practices of a variety of food and beverage operations including menu development, food and beverage services, scheduling and costs control.

### 35 HOSPITALITY SECURITY AND LOSS PREVENTION (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56 and employment in the industry*

Introduces hospitality security systems and strategies to address hospitality security concerns and emergency situations, through study and practical application.

### 40 HOSPITALITY TRAINING AND DEVELOPMENT SKILLS (3.0)

7.0 hours per week: (1.0 hours lecture, 6.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56 and employment in the industry*

Prepares students to assess training and development needs, mentor and train staff and evaluate training initiatives through study and practical application in a hospitality setting.

### 47 INDEPENDENT STUDIES: HOSPITALITY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Hospitality under the direction of an instructor.  
Course may be repeated 4 times (only if each time has a different topic emphasis).

### 93 HOSPITALITY SPECIAL TOPICS (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## HUMANITIES - HUMAN

### 118 HISTORY OF VISUAL AND PERFORMING ARTS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56 is recommended*

Introduces the history of visual and performing arts. The main objective of this course is to increase understanding of painting, sculpture, theatre, and music and their roles in society. The students will explore different styles and types of works of

cultural production from various cultures, eras, and locations. Students will demonstrate an understanding of the basic elements of these art forms and apply this knowledge to analyze and evaluate works of art. Particular emphasis will be placed on discussions and interpretations of the value of the arts to the individual and society.  
**Transfer: CSU; UC.**

## INTERIOR DESIGN - INTDES

### 10 INTERIOR DESIGN (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents an overview of interior design as a profession. Includes the basics of color and design elements necessary to plan functional, personalized interiors.  
**Transfer: CSU.**

### 11 DESIGN AND HISTORY OF FURNISHINGS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56 and INTDES 10*

Summarizes the development of furniture styles in France, England, and America from ancient times through the 20th century. Discusses the evolution of design based on historical foundations.  
**Transfer: CSU.**

### 12 TEXTILES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Introduces fibers, yarns, fabric constructions, and finishes which affect textile selection, uses, and care; provides experiences in textile testing and fabric identification; and relates textile science to consumer textile product selection. Same as FDM 12.  
**Transfer: CSU; UC.**

### 15 DESIGN ANALYSIS AND COLOR THEORY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Presents the design elements and principles as they apply to interior design, clothing, textiles, jewelry and accessories. Includes a wide variety of creative applications with special emphasis on color theory. Same as FDM 15.  
**Transfer: CSU.**

### 17 RENDERING AND RAPID VISUALIZATION FOR INTERIOR DESIGN (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Corequisite: INTDES 10*

## COURSES (CONTINUED)

Presents the methods, techniques and tools used for illustrating interior spaces and products with an emphasis placed on rapid design and production. Various illustration techniques in light, shade, fabric and texture will be practiced and assignments may become part of a design portfolio.

**Transfer:** CSU.

### 19 INTERIOR ARCHITECTURAL DRAFTING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

Presents the tools and techniques for drafting for Interior Design including: lettering, measuring techniques, scale problems, dimensioning, plans, elevations and sections. Students will develop and draft a residential or commercial floor plan, compose a drawing for furniture layout and develop specifications to accompany a full set of drawings.

**Transfer:** CSU.

### 20 MATERIALS AND PRODUCTS OF INTERIOR DESIGN (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* INTDES 10

*Advisory:* INTDES 22 and MATH 7

Explores the materials and products used in interior design. Demonstrates how to calculate the amount of merchandise that is needed to place an order for the materials and products. Applies design and drafting skills to create floor plans and an interior specification folder for a residential project. Examines a variety of personal and professional communication skills.

**Transfer:** CSU.

### 22 INTERIOR SPACE AND LIGHT PLANNING (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* INTDES 10

Presents techniques of planning successful interior spaces in residential and commercial buildings. Evaluation of interior space for functions of lifestyle, workstyle, human factors, standard accesses, clearances, traffic flow and ADA laws. Demonstrates the process to develop viable space plans beginning with the schematic design phase through final design drawing phase using common presentation methods. Addresses barrier free interiors, space planning of kitchens and baths, and the beginning principles of interior lighting.

**Transfer:** CSU.

### 28 RESIDENTIAL AND COMMERCIAL DESIGN (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* INTDES 10 and INTDES 22

*Advisory:* CTECH 111

Studies interior design as it relates to personal and family living spaces plus business and public spaces. Emphasis is placed on the design process; gathering information, analyzing the space,

solving design problems and presenting the solution to the problem. Included will be the study of different aspects of homes and businesses such as space planning, scale, traffic flow, human factors, lighting, barrier free design, codes and regulations, furnishings, appropriate fabrics, finishes and materials used for residential and commercial structures.

### 35 PROFESSIONAL PRACTICES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Presents the business practices commonly found in the field of both residential and commercial interior design. Defines the various types of interior design business formations. Examines methods of compensation for design services, contract writing, billing, purchasing, project management, marketing, professional liability, and communication skills. Explores the different professional organizations and the qualification tests. Emphasis is placed on professional and ethical practice.

### 47 INDEPENDENT STUDIES: INTERIOR DESIGN (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of interior design under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

### 55 INTERIOR DESIGN: CALIFORNIA EXCURSIONS (0.5)

19.0 hours per week: (5.0 hours lecture, 14.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* INTDES 10 and INTDES 11

Emphasizes observations and techniques used to appreciate, evaluate, and sketch original art, decorative arts and/or attend seminars conducted by professionals in the design field. Excursions may include: museums, galleries, manufacturing facilities, showrooms, showcase houses and/or historical sites in California. Food and other expenses will be the responsibility of the students.

Course may be taken 2 times.

### 60 INTERIOR DESIGN: EUROPEAN EXCURSIONS (2.0)

36.0 hours per week: (9.0 hours lecture, 27.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* INTDES 11

Emphasizes observations and techniques used to appreciate, evaluate, and sketch original art, decorative arts and design in museums, castles, manor houses, galleries, showrooms, and other historical sites in Europe. Airfare, food, accommodations, and

## COURSES (CONTINUED)

other expenses will be the responsibility of the students.  
Course may be taken 2 times.

### 93 INTERIOR DESIGN SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 555 INTERIOR DESIGN: CALIFORNIA EXCURSIONS (0.0)

19.0 hours per week: (5.0 hours lecture, 14.0 hours laboratory)\*

*Advisory: INTDES 11*

Emphasizes observations and techniques used to appreciate, evaluate, and sketch original art, decorative arts and/or attend seminars conducted by professionals in the design field. Excursions may include: museums, galleries, manufacturing facilities, showrooms, showcase houses and/or historical sites in California. Food and other expenses will be the responsibility of the students.

### 560 INTERIOR DESIGN: EUROPEAN EXCURSIONS (0.0)

36.0 hours per week: (9.0 hours lecture, 27.0 hours laboratory)\*

*Advisory: INTDES 11*

Emphasizes observations and techniques used to appreciate, evaluate, and sketch original art, decorative arts and design in museums, castles, manor houses, galleries, showrooms, and other historical sites in Europe. Airfare, food, accommodations, and other expenses will be the responsibility of the students.

## JOURNALISM - JOUR

### 1A NEWS WRITING AND REPORTING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Introduces techniques of news reporting and writing. Provides intensive practice in gathering and evaluating information and writing basic news stories. Considers ethical and legal aspects of publications. Concentrates on the lead and simple story types, organization and structure of news stories, and the language and style of journalism.

**Transfer:** CSU. (CAN JOUR 2)

### 1B INTRODUCTION TO MASS COMMUNICATION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

Presents a survey of the field of journalism, media, and opportunities, including an introduction to journalism literature, news analysis, comparison of journalistic styles, and an introduction to the writing and structure of news stories.

**Transfer:** CSU; UC. (CAN JOUR 4)

### 1C JOURNALISM FIELD STUDIES (0.5 to 1.0)

18.0 hours lecture per week\*

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Presents on-site studies of local, state, or national government entities, and/or publications and broadcasting stations. Students must pay their proportional part of the expenses resulting from transportation, meals, and lodging.

Course may be taken 4 times.

**Transfer:** CSU.

### 2A INTRODUCTION TO NEWS PRODUCTION (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces hands-on preparatory news production using state-of-the-art technology to produce "The Cuestionian," the student newspaper. Presents all aspects of the newspaper business including reporting, writing, photography, word processing, typesetting, editing, graphic design, composition, layout, desk-top publishing, and distribution.

**Transfer:** CSU.

### 2B NEWS PRODUCTION (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory: JOUR 2A*

Involves students in editorial positions using state-of-the-art computer technology to produce "The Cuestionian," the student newspaper. Continues the study of all aspects of the newspaper business.

**Transfer:** CSU.

### 2C NEWS PRODUCTION (4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Advisory: JOUR 2B*

Involves students in major hands-on editorial positions and leadership in using state-of-the-art computer technology to produce "The Cuestionian," the student newspaper. Continues the study of all aspects of the newspaper business.

Course may be taken 2 times.

**Transfer:** CSU.

### 3 FEATURE WRITING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 1A*

Introduces feature writing techniques. Presents critical analysis of markets for nonfiction articles and practice in research and preparation of articles for both magazines and newspapers.

**Transfer:** CSU.

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

## COURSES (CONTINUED)

### 47 INDEPENDENT STUDIES: JOURNALISM (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of journalism under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

### 93 JOURNALISM SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## LEADERSHIP - LEADER

### 47 INDEPENDENT STUDIES: LEADERSHIP (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or skill development experience by an individual student in a selected topic of Leadership under the direction of an instructor. Course may be taken 4 times.

**Transfer:** CSU.

### 50 PEER EDUCATOR - ORIENTATION LEADER (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: LEADER 53*

This course is designed for students who are interested in or who have been invited to be an orientation leader. Students will become knowledgeable in campus policies, procedures, and services. Leadership theory, diversity awareness and appreciation are also explored, as well as the psychological and personal issues facing college students. Students will have the opportunity to lead group discussions, make presentations, and be trained to be SLO Days counselors, as well as peer educators on campus. Course may be taken 4 times.

**Transfer:** CSU.

### 53 PEER COUNSELING (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Completion of or concurrent enrollment in ENGL 56 or ENGL 65*

Peer Counseling is a practicum experience that helps to address

positive mental health concepts. It prepares students to assist other students with issues and problems facing many college students, including self-acceptance, problem solving/decision making, and interpersonal relationships.

**Transfer:** CSU.

### 55 COMMUNITY INTERNSHIP (1.0 to 3.0)

8.0 hours per week: (0.5 hours lecture, 7.5 hours laboratory)

Associate Degree Applicable

*Advisory: LEADER 53*

Provides students the opportunity to explore life goals. Training helps guide students to complete learning objectives. Internship experience provides a structured, on-the-job opportunity in a human services setting, elementary school, and/or college. Students also participate in a training program at their on-site placement.

Course may be taken 4 times.

**Transfer:** CSU.

### 56 CAMPUS PEER EDUCATOR (1.0)

3.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LEADER 53*

This course is designed for students who are interested in or who have been invited to be a campus peer educator. Peer education is a leadership program which takes the knowledge gained from LEADER 53 and applies it in a way to promote healthy behaviors and wellness among all members of the Cuesta College community.

**Transfer:** CSU.

### 57 CAMPUS PEER INTERNSHIP (2.0)

5.0 hours per week: (0.5 hours lecture, 4.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LEADER 56*

*Advisory: LEADER 53*

This course provides structured, on-the-job experience on campus with the opportunity to serve as a peer counselor in a student services setting. The required seminar is scheduled during the 1st, 4th, 8th, 12th, and last week of the semester.

Course may be taken 4 times.

**Transfer:** CSU.

### 60 COMMUNITY PARTNERSHIP THROUGH APPLIED VOLUNTARISM (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: Completion of or concurrent enrollment in SOC 1A or FAMST 10*

Integrates public service experience through community volunteer work with instruction on voluntarism. Presents historical perspective of volunteer work for improving human conditions. Develops interpersonal skills, awareness of civic

# COURSES (CONTINUED)

responsibility, and sensitivity to economic conditions.

**Transfer:** CSU.

## 61A PHILOSOPHY OF LEADERSHIP (1.5)

3.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* Completion of or concurrent enrollment in ENGL 56 or ENGL 65

Studies group and individual leadership techniques. Identifies, classifies, and analyzes the components essential to the development of leadership. Includes definitions, traits and behaviors of leadership, personal considerations in leadership, listening skills, personal values, and problem solving. Recommended for all first-time elected or appointed officers in the Student Senate; and recommended for officers of other organizations with a voting position on the Student Senate.

**Transfer:** CSU.

## 61B LEADERSHIP: SUCCESS STRATEGIES SEMINAR (1.5)

3.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* Completion of or concurrent enrollment in ENGL 56 or ENGL 65

This course is designed to help students create greater success in college and in life. In so doing, discover those inner qualities necessary to become an effective leader. Such qualities touched on include personal responsibility; motivating purpose; taking effective action; building mutually supportive relationships; gaining heightened self awareness; developing emotional maturity; and believing in yourself.

**Transfer:** CSU.

## 62 STUDENT LEADERSHIP (1.0 to 3.0)

9.0 hours laboratory per week

Associate Degree Applicable

*Advisory:* Completion of or concurrent enrollment in LEADER 61A or LEADER 61B for first time elected or appointed officers in the Student Senate

Provides membership experience in the Student Senate with additional leadership experiences in the planning and implementation of student activities and services. Allows students to initiate on-campus and off-campus community projects and programs.

Course may be taken 4 times.

**Transfer:** CSU.

## 63 EXPLORING LEADERSHIP-MAKING A DIFFERENCE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Evaluates how purpose in life influences goals and leadership in a rapidly changing world. Analyzes responsibilities and commitments in the context of leadership for the common good

and for purposeful change. Examines leadership potential. Explores how leaders and participants mutually shape the environment of an organization and/or community.

**Transfer:** CSU.

## 93 LEADERSHIP SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## LEGAL

### 17 INTRODUCTION TO LAW (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Introduces the student to the study of law and the interrelationship between law and society as a whole. Addresses the fundamental but seemingly contradictory functions the law serves as an instrument of both social control and social change. Also examines the critical role the law plays in conflict resolution, especially with regard to conflicts between majority and minority interests in society. Explores the evolution and social impact of different legal systems, competing sources of the law, and conflicting theories of the law. Integrates an examination of selected procedural and substantive areas of the law with a critical analysis of these areas as sources of social control, social change, and conflict mediation among various social groups.

**Transfer:** CSU; UC.

### 20 LEGAL RESEARCH AND WRITING (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

An introduction to the fundamental aspects of legal research by an in-depth analysis of case law, statutory law, and administrative law on both a federal and state level. Students will learn to locate authority relevant to selected legal issues. This skill is applied to writing clear and concise briefs, memoranda, and points and authorities employing the IRAC (issue, rule, analysis, conclusion) legal analytical formula.

**Transfer:** CSU.

### 22 TORT AND INSURANCE LAW (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

An introduction to the causes of action, defenses, and remedies in the major categories of tort law. Topics include various intentional torts, negligence, strict liability, insurance law, and workers' compensation.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 23 ESTATE PLANNING AND ADMINISTRATION (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56, Concurrent enrollment with PARAL 2B*

Overview of the fundamental principles of estate planning and administration. Topics include estate administration, including probate proceedings and disposition of estates outside of probate, in preparation of wills, trusts, and other estate planning documents.

## 24 FAMILY LAW (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56, Concurrent enrollment in PARAL 2A*

Overview of the substantive and procedural aspects of California Family Law, including community property, marriage agreements, prenuptial, postnuptial, and separation, dissolutions, support, custody, paternity and adoption, annulment, and domestic violence.

## 47 INDEPENDENT STUDIES: LEGAL (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected legal topic under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

## 93 LEGAL SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examine a special topic in the field of study related to the discipline offering this course.

## LIBRARY/INFO TECHNOLOGY - LIBINF

### 1 INTRODUCTION TO LIBRARY SERVICES (1.0)

3.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in ONLINE 1*

*Advisory: ENGL 56 with a grade of C or better*

Surveys the history, organization, services, personnel and functions of libraries and information centers. Provides beginning library/information technology students with an introduction and overview to the field and identifies job opportunities.

### 2 INTRODUCTION TO WEB TECHNOLOGIES AND CONCEPTS (1.0)

1.0 hours lecture per week

Associate Degree Applicable

This class introduces students to the wide range of concepts and technologies involved in web publishing, and management as well as employment opportunities. Topics will include the discussion and demonstration of multimedia and web technologies, web development languages, Internet publishing ethics, network fundamentals, marketing, management, and industry employment outlook.

### 4 ORGANIZING INFORMATION (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LIBINF 1*

*Advisory: Eligibility for ENGL 56*

A practical introduction to the tasks involved with cataloging book and nonbook library materials. Includes descriptive cataloging using AACR2, subject cataloging, and classification. Covers MARC formats as well as their use in the OCLC bibliographic utility and local automated library systems.

### 5 LIBRARY/INFORMATION CENTER COLLECTIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LIBINF 1*

Provides an overview of how to select, purchase, and organize print, electronic, and other materials to stock library/information center collections.

### 6 INTRODUCTION TO THE INTERNET (1.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

Designed to prepare students to use the Internet in a research environment. Emphasis is on concepts of the global network and on use of the basic features such as electronic mail, Telnet, FTP, Gopher, World Wide Web. Hands-on exploration of these resources, evaluation of search strategies, and analysis of data located.

### 7 WEB PAGE DEVELOPMENT WITH HTML (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: LIBINF 6*

Designed to prepare students to understand HTML and the steps necessary to the effective design and development of a web site. All elements of web page design will be covered including such topics as content, navigation and aesthetics. The student will

\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.

# COURSES (CONTINUED)

have the opportunity to demonstrate mastery of the subject by working on a collaborative web site project. This class is for the student who is new to web page development. Course may be taken 2 times.

**8 LIBRARY SUPERVISORY SKILLS (1.0)**  
3.0 hours lecture per week\*  
Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in LIBINF 1*

Introduces supervisory skills within the context of a library department or branch. Covers how to train, motivate, counsel and evaluate employees, time management, delegation of work, preparation of memos and statistical reports.

**9 LIBRARY PUBLIC SERVICES (3.0)**  
3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in LIBINF 1*

Surveys all major library services provided to the public. Focuses on the philosophy, policies and procedures Associated with reference/information and circulation services. Major emphasis is placed on skill building in defining and executing search strategies that answer information questions from the public.

**10 SCHOOL LIBRARY/MEDIA CENTER SERVICES (2.0)**  
3.0 hours lecture per week\*  
Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in LIBINF 1*

Explores the role of the school library media program in the educational community. Introduces students to the basic skills and competencies necessary to provide effective school library media programs for grades K-12.

**11 JAVASCRIPT FUNDAMENTALS (1.0)**  
2.0 hours per week: (0.5 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: LIBINF 7 with a grade of C or better or consent of instructor*

Introduces the fundamentals of JavaScript and web page design techniques. Course may be taken 2 times.

**12 RESEARCH SKILLS FOR INFORMATION AGE (1.0)**  
1.0 hours lecture per week  
Associate Degree Applicable

An information literacy course for students wishing to improve their research skills. This course will prepare students to effectively address different information questions, problems or issues by providing them with the skills to locate, interpret,

analyze, synthesize, evaluate and communicate information.  
**Transfer: CSU.**

**14 INFORMATION TECHNOLOGY INTERNSHIP (2.0)**  
5.0 hours per week: (0.5 hours lecture, 4.5 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: Completion of with a grade of C or better or concurrent enrollment in 10 Library/Information Technology units from LIBINF 1, LIBINF 4, LIBINF 5, LIBINF 6, LIBINF 8, LIBINF 9, LIBINF 15, or LIBINF 17 or ten Web Development Technologies units from ART 120, BUS 43, BUS 48, LIBINF 2, LIBINF 6, LIBINF 7, LIBINF 11, LIBINF 16 or LIBINF 17 and Consent of the Instructor*

Provides structured on-the-job experience in an appropriate information technology environment. (e.g., information center, library, business, etc.)

**15 TECHNOLOGY IN THE WORKPLACE (2.0)**  
4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

This course offers a practical look at proper approaches and techniques used to understand, utilize and troubleshoot workplace technology - particularly computer and multimedia technology.

**16 MULTIMEDIA APPLICATIONS FOR THE WEB (2.0)**  
4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: LIBINF 7*

Focus is on the various ways of creating, editing, and presenting multimedia content for use on the web.

**17 ETHICS IN THE INFORMATION AGE (1.0)**  
1.0 hours lecture per week  
Associate Degree Applicable

Focuses on ethical and legal issues of information access and publishing as applicable to the Internet. Include a basic knowledge of copyright laws, security and privacy issues, Internet advertising, and the appropriate use of the Internet as an information delivery system.

**18 CONNECTING ADOLESCENTS WITH LITERATURE AND LIBRARIES (3.0)**  
3.0 hours lecture per week  
Associate Degree Applicable

Explores the literature and electronic resources essential for library technicians to work effectively with adolescents in the information age. Issues of materials selection, evaluation and youth programming will be related to teenage trends, popular culture, multiculturalism and other contemporary subjects of importance to adolescents.

**47 INDEPENDENT STUDIES: LIBRARY/ INFORMATION TECHNOLOGY (0.5 to 2.0)**

# COURSES (CONTINUED)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: LIBINF 1 and other preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Library/Information Technology (more specialized than is covered in the curriculum) under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

## 93 LIBRARY INFORMATION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## MATHEMATICS - MATH

### 3 ARITHMETIC (3.0)

3.0 hours lecture per week

Associate Degree Non-Applicable

Provides a review of the basic skills of arithmetic. Designed as a transitional course for students who have either not taken a mathematics course for a considerable period of time or who have been in a tutorial program. This course is organized in a regular classroom setting to prepare students for a pre-algebra course.

### 7 PREALGEBRA (3.0)

3.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: MATH 3 or equivalent with a grade of C or better*

Presents the mathematical concepts and arithmetic skills necessary for success in elementary algebra and for further work in mathematics. The concepts are applied to numerous practical problems in order to demonstrate their applicability to real life situations. Not open to students with credit in MATH 23 or its equivalent or any course for which MATH 23 is the prerequisite.

### 8 INTRODUCTION TO FACTORING (1.0)

1.0 hours lecture per week

Associate Degree Non-Applicable

*Prerequisite: Completion of MATH 7 or equivalent*

Introduces the student to methods of factoring polynomials. Presents the topic from geometric, numeric and algebraic perspectives. Multi-sensory approaches will include manipulatives and graphing. Students should have proficiency in whole number arithmetic skills, including positives and negatives and knowledge of procedures for solving simple linear equations. Course may be taken 2 times.

### 10 INTRODUCTION TO GRAPHING (1.0)

## CALCULATORS

1.0 hours lecture per week

Associate Degree Applicable

*Advisory: MATH 23 or MATH 23SI*

Introduction to the capabilities of a scientific graphing calculator. Emphasis will be on the operation of a graphing calculator to perform computations, to analyze functions, and to use as a tool in solving problems chosen from a variety of disciplines.

### 12 CONVERTING MEASUREMENTS (1.0)

1.0 hours lecture per week

Associate Degree Applicable

Introduces the student to methods of converting from one measurement unit to another. Emphasis will be on basic applications from nutrition, nursing, chemistry, physical sciences and other disciplines.

### 14 WORD PROBLEMS (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in MATH 23, MATH 23SI, MATH 27 or MATH 27SI*

This course presents strategies for successfully solving word problems such as distance, mixture, work and others at the elementary and intermediate algebra level. This course is intended to help students with word problems in MATH 23 and MATH 27.

### 15 INTERNSHIP: MATHEMATICS (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in MATH 65A*

Provides an opportunity for a tutorial experience by an individual student in selected topics in mathematics under the direction of an instructor.

Course may be taken 4 times.

### 19 ELEMENTARY COLLEGE MATHEMATICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 7 or equivalent with a grade of C or better*

Presents a course in college mathematics for the student without any algebraic background. Topics include solving linear equations, including applications; geometry; probability and descriptive statistics; and finance.

### 21 TWO-SEMESTER BEGINNING ALGEBRA: PART 1 (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 7 or equivalent with a grade of C or better*

# COURSES (CONTINUED)

Presents the first half of a two-semester course in beginning algebra for the student who has no algebraic background. This course enables students to complete the equivalent of Elementary Algebra, (MATH 23) at a slower pace. Successful completion of MATH 21 or equivalent and MATH 22 is equivalent to MATH 23.

## 22 TWO-SEMESTER BEGINNING ALGEBRA: PART 2 (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: Math 21 or equivalent with a grade of C or better (two-semester beginning algebra, part I)*

Presents the second half of a two-semester course in beginning algebra for the student who has no algebraic background. This course enables the students to complete the equivalent of Elementary Algebra (MATH 23) at a slower pace. Successful completion of MATH 21 or equivalent and MATH 22 is equivalent to MATH 23.

## 23 ELEMENTARY ALGEBRA (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 7 or equivalent with a grade of C or better*

Presents a first course in algebra for the student without any algebraic background. Topics include solving linear equations and inequalities, solving quadratic equations by factoring, polynomial expressions, factoring, graphing linear equations and inequalities in the variables, solving systems of two linear equations and radical expressions and equations.

## 23SI ELEMENTARY ALGEBRA WITH SUPPLEMENTAL LEARNING (5.0)

6.0 hours per week: (5.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 7 or equivalent with a grade of C or better*

Presents a first course in algebra for the student without any algebraic background. Topics include solving linear equations and inequalities, solving quadratic equations by factoring, polynomial expressions, factoring, graphing linear equations and inequalities in the variables, solving systems of two linear equations and radical expressions and equations. The one hour of lab per week will utilize Supplemental Instruction to practice problem solving.

## 24A TECHNICAL MATH (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 23, MATH 23SI or equivalent with a grade of C or better*

Presents a course in technical math for students majoring in electronics, computer networking and robotics. Topics include algebra and trigonometry, necessary for the study of DC and AC electronics. Vectors, phasors, computer number systems,

Boolean algebra and logic circuits are discussed.

## 25 PLANE GEOMETRY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 23, MATH 23SI or equivalent course with a grade of C or better*

Presents a study of the geometry of two-dimensional Euclidean space with an emphasis on proof using deductive reasoning. An introduction to three dimensional geometry and applications of both two- and three-dimensional geometry is also presented.

## 26A INTERMEDIATE ALGEBRA-PART 1 (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 20D, MATH 22, MATH 23 or MATH 23SI or equivalent with a grade of C or better or a recommending score on the Cuesta College Assessment Test*

Presents the first half of a two-semester course in intermediate algebra. This course enables students to complete the equivalent of Intermediate Algebra (MATH 27) at a slower pace. Topics include factoring polynomial expressions, simplifying rational expressions, absolute value equations and inequalities, functions and relations, and solving systems of linear equations and inequalities.

## 26B INTERMEDIATE ALGEBRA-PART 2 (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 26A or equivalent with a grade of C or better*

Presents the second half of a two-semester course in Intermediate Algebra. This course enables students to complete Intermediate Algebra (MATH 27) at a slower pace. Topics include functions and relations, quadratic equations, exponential and logarithmic functions, inverse functions, and sequences and series.

## 27 INTERMEDIATE ALGEBRA (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 20D, MATH 22, MATH 23 or Math 23SI or equivalent with a grade of C or better or a recommending score on the Cuesta College Assessment Test*

Broadens and adds to the concepts of elementary algebra. Such additions include rational expressions, quadratic equations, functions, exponential and logarithmic functions, inverse of functions, solving systems of two or more linear equations, and sequences and series.

## 27SI INTERMEDIATE ALGEBRA WITH SUPPLEMENTAL LEARNING (5.0)

6.0 hours per week: (5.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: MATH 20D, MATH 22, MATH 23, MATH 23SI or*

# COURSES (CONTINUED)

*equivalent with a grade of C or better or a recommending score on the Cuesta College Assessment Test*

Broadens and adds to the concepts of elementary algebra. Such additions include rational expressions, quadratic equations, functions, exponential and logarithmic functions, inverse of functions, solving systems of two or more linear equations, and sequences and series. The one hour of lab per week will utilize Supplemental Instruction to practice problem solving.

## 29 TRIGONOMETRY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27 or MATH 27SI and MATH 25 or equivalent with a grade of C or better*

*Advisory: MATH 42*

Presents trigonometry from a function approach using both right triangle and circular relationships. The relationships between the angles and sides of triangles and relationships between central angles and the coordinates of points on a circle are developed. The course is designed to prepare the student for further study in the mathematics required in the sciences and technical areas.

**Transfer:** CSU. (CAN MATH 8)

## 30 COLLEGE MATHEMATICS FOR THE HUMANITIES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*

Presents applications of intermediate algebra and critical thinking to solving contemporary problems in mathematics. Topics include mathematical reasoning with four additional topics selected from number systems, number theory, finance, computer applications, probability, statistics and mathematical modeling.

**Transfer:** CSU; UC.

## 31 TRIGONOMETRY WITH GEOMETRIC FOUNDATIONS (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*

Presents the entire content of MATH 29 Trigonometry with topics from MATH 25 Geometry. Topics include trigonometric functions, equations, graphs, identities, and solution of triangles. Also includes geometric congruence, properties of polygons, parallel lines, similarity, areas, and volumes.

**Transfer:** CSU.

## 32 COLLEGE ALGEBRA (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*

Presents a study of college algebra and analytic geometry with an emphasis on mathematical modeling. Covers such topics as algebraic equations and inequalities, functions and graphs, zeros of functions rational functions, exponential and logarithmic functions, conic sections, systems of equations, matrices and determinants.

**Transfer:** CSU; UC.

## 36 INTRODUCTION TO APPLIED STATISTICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*

Presents an introduction to the study of basic descriptive and inferential statistical methods, with an emphasis on applications, to prepare students for work in the disciplines of psychology, sociology, education, life sciences, and applied science.

**Transfer:** CSU; UC.

## 42 PRECALCULUS ALGEBRA (5.0)

5.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*

Presents a study of precalculus algebra and analytic geometry. Covers such topics as algebraic equations and inequalities, functions and graphs, zeros of functions, polynomial functions, rational functions, exponential and logarithmic functions, parametric equations, conic sections, systems of equations and inequalities, matrices, determinants, sequences and series, and probability. The course is designed to prepare the student for calculus.

**Transfer:** CSU; UC.

## 42G PRECALCULUS ALGEBRA: GRAPHING CALCULATOR COMPONENT (1.0)

1.0 hours lecture per week

Associate Degree Applicable

Supports the MATH 42 Precalculus Algebra course by presenting the features and use of a graphing calculator to solve problems specific to that course. Topics covered will parallel the development of concepts in MATH 42. A TI-83 or TI-83 Plus graphing calculator is required. (Other models not supported.)

## 45 FINITE MATHEMATICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MATH 42 or equivalent with a grade of C or better*

Presents a study of sets, counting problems, probability theory and distributions, vectors and matrices with applications, Gaussian elimination, linear programming, Markov chains and selected topics from the area of business finance.

**Transfer:** CSU; UC. (CAN MATH 12)

# COURSES (CONTINUED)

- 47 INTRODUCTION TO STATISTICS (4.0)**  
4.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 27, MATH 27SI or equivalent with a grade of C or better*
- Presents a study of basic descriptive and inferential statistics designed to prepare students for work in the fields of economics, business, psychology, education, mathematics and applied science. Not open to students with credit in MATH 39 or MATH 49.  
**Transfer: CSU; UC. (CAN STAT 2)**
- 49 STATISTICS FOR BUSINESS (5.0)**  
5.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: CIS 10 and MATH 45 or MATH 55 or equivalent with a grade of C or better*
- Presents a study of descriptive and inferential statistics designed for use in the field of business. Includes hypothesis testing, chi-square analysis, regression, correlation, time series, and forecasting.  
**Transfer: CSU; UC.**
- 55 CALCULUS FOR BUSINESS AND MANAGEMENT (3.0)**  
3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 42 or equivalent with a grade of C or better*
- Presents a study of the techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. The applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions are studied.  
**Transfer: CSU; UC. (CAN MATH 34)**
- 63 PRECALCULUS MATHEMATICS (5.0)**  
5.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 29 with a grade of C or better*
- Presents a study of college algebra, trigonometry, and an introduction to analytic geometry. The course is designed to prepare the student for calculus.  
**Transfer: CSU; UC. (CAN MATH 16)**
- 65A ANALYTIC GEOMETRY AND CALCULUS (5.0)**  
5.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 42 and MATH 29 or MATH 63 or equivalent with a grade of C or better*
- Presents a study of analytic geometry, limits, continuity, the calculus of algebraic, trigonometric, exponential and logarithmic functions as well as applications of the derivative and integral. Every topic will be taught geometrically, numerically, and algebraically.  
**Transfer: CSU; UC. (CAN MATH 18)(MATH 65A + MATH 65B = CAN MATH SEQ B)(MATH 65A + MATH 65B + MATH 83 = CAN MATH SEQ C)**
- 65B ANALYTIC GEOMETRY AND CALCULUS (5.0)**  
5.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 65A or equivalent with a grade of C or better* **NOTE: If you are transferring from a college on the quarter system the prerequisite for Math 65B is two quarters of Calculus. From Cal Poly it is Math 142 with a grade of C or better.**
- 83 CALCULUS (4.0)**  
5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: MATH 65B (Analytic Geometry and Calculus) or equivalent with a grade of C or better*
- Presents a study of differentiation and integration of multiple variable functions, parametric curves in two and three dimensions, optimization, line integrals, and the calculus of vector fields. Specific topics include vector functions, partial derivatives, surfaces, parametric equations, multiple integrals (with rectangular, polar, cylindrical, and spherical coordinates), and vector calculus (including line integrals, flux integrals, Greens Theorem, the Divergence Theorem, and Stokes Theorem). Every topic will be taught geometrically, numerically, and algebraically.  
**Transfer: CSU; UC. (CAN MATH 22)(MATH 65A + MATH 65B + MATH 83 = CAN MATH SEQ C)**
- 85 DIFFERENTIAL EQUATIONS (4.0)**  
4.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 65B or equivalent with a grade of C or better*  
*Advisory: MATH 83*
- Presents an introduction to ordinary differential equations and their applications: linear differential equations, Laplace transforms, series and numerical methods.  
**Transfer: CSU; UC. (CAN MATH 24)**
- 87 LINEAR ANALYSIS (5.0)**  
5.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 65B or equivalent with a grade of C or better*

## COURSES (CONTINUED)

Presents a study of separable and linear ordinary differential equations with selected applications; numerical and analytical solutions; second order differential equations; Laplace transforms. Delves into Linear Algebra with a study of vectors in n-space, matrices, linear transformations, eigenvalues, eigenvectors, diagonalization; applies linear algebra in the study of systems of linear differential equation.

**Transfer:** UC.

### 93 MATH SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## MEDICAL ASSISTING - MEDAST

### 6 INTRODUCTORY MEDICAL CODING (4.0)

4.0 hours lecture per week

Associate Degree Applicable

*Corequisite:* NRAD 22

*Advisory:* MATH 3, BIO 12 and ENGL 56

A medical coding course designed to teach principles and techniques for successful coding of diagnosis and procedures. This course will include ICD-9-CM/DRG, CPT-4/HCPCS, using the correct terminology and procedure books. Both forms of coding will encompass in-patient and out-patient coding as it applies to the patient's medical record.

### 7 MEDICAL INSURANCE CLAIM MANAGEMENT (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MEDAST 6

*Advisory:* ENGL 56

Introduces a medical insurance claim management course including management responsibilities, legal issues, managed care, third-party payers, and application of diagnostic and procedural coding required for insurance claim completion.

**Transfer:** CSU.

### 9 PHLEBOTOMY (3.0)

9.0 hours per week: (4.5 hours lecture, 4.5 hours laboratory)\*

Associate Degree Applicable

*Prerequisite:* Health Care Provider CPR Card

*Advisory:* Standard First Aid

Designed to prepare the student in essential blood specimen collecting skills to fulfill state phlebotomy certificate requirements.

Course may be taken 2 times.

### 10 MEDICAL ASSISTING BASICS (2.0)

2.0 hours lecture per week

Associate Degree Applicable

Introduces the medical assisting role and responsibilities, professionalism, and medical terminology. Concepts of anatomy, physiology, and computer basics are presented to facilitate entry level medical assisting practice.

### 11 MEDICAL ASSISTING FAST TRACK (12.0)

14.0 hours per week: (11.5 hours lecture, 2.5 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Completion of with a grade of C or better or concurrent enrollment in MEDAST 10

*Corequisite:* Current Health Care Provider CPR and Standard First Aid

Designed to prepare the student for an entry-level position as a medical assistant. The content includes verbal and written communication, basic and advanced clinical skills, medical office management techniques, and professional employment marketing skills. Includes preceptorship experience.

### 93 MEDICAL ASSISTING SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## MUSIC - MUS

### 3A MUSIC THEORY (5.0)

6.0 hours per week: (5.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Completion of MUS 39, MUS 58 or equivalent background

Presents a correlated course with two areas of music study: traditional harmonic practice studied through the principles of writing of the Common Practice era including scales, tonality, chords and four-part writing in root position; and aural skills which include solfege with movable do, sight-singing, and aural recognition and dictation of intervals and rhythm. This course is the first in a sequence of three. Required of all music majors.

**Transfer:** CSU; UC. (CAN MUS 2)(MUS 3A + MUS 3B = CAN MUS SEQ A)

### 3B MUSIC THEORY (5.0)

6.0 hours per week: (5.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MUS 3A or equivalent

A continuation of MUS 3A. Written theory pursues further part - writing and study of the principles of the Common Practice era, including six-chords, six-four chords, major-minor sevenths, melodic embellishments and modulation. Aural skills are further developed through sight-singing chromatics using movable do, and melodic and harmonic dictation. This course is the second in a sequence of three. Required of all music majors.

**Transfer:** CSU; UC. (CAN MUS 4)(MUS 3A + MUS 3B =

# COURSES (CONTINUED)

## CAN MUS SEQ A)

### 3C MUSIC THEORY/COUNTERPOINT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MUS 3A*

A continuation of MUS 3B, with contrapuntal harmonic practices of the 18th, 19th and 20th centuries. The course explores ninth chords, diminished sevenths, half-diminished sevenths, augmented sixth chords, chord beyond the ninths, whole-tone systems and current practices through four-part writing analysis, essays and discussion. Required of all music majors.

**Transfer:** CSU; UC.

### 6 COMPOSING MUSIC FOR MOTION PICTURES AND TELEVISION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MUS 3A, MUS 3B, MUS 3C, or consent of instructor*

*Advisory: Knowledge of piano/keyboard technique is desirable*

A study of the various aspects of composing for video, motion pictures, and television, including appropriate compositional techniques, stylistic considerations and an in-depth study of the uses and application of computer technology in writing, scoring, and synchronizing music for video and film.

**Transfer:** CSU.

### 12 APPLIED MUSIC (PRIVATE LESSONS) (2.0)

7.0 hours per week: (2.0 hours laboratory, 5.0 hours laboratory by arrangement)  
Associate Degree Applicable  
*Prerequisite: Audition and/or consent of instructor*  
*Corequisite: MUS 3A, MUS 3B, MUS 23, MUS 25, MUS 28, MUS 31, MUS 32A, MUS 50, MUS 51 or MUS 61*

A workshop/recital class and a private one-hour lesson per week. The student is required to practice on campus a minimum of five hours per week, and to enroll and participate in a large performing music ensemble. Applied lessons are available in voice, piano, strings, guitar, woodwinds, brass, and percussion. Course may be taken 4 times.

**Transfer:** CSU.

### 20 ELEMENTARY VOICE (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

Presents a study of the techniques of voice training for solo singing. Music will range through appropriate song repertoire and selections from musicals. Class performance required.

**Transfer:** CSU; UC.

### 22 INTERMEDIATE VOICE (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: MUS 20 or equivalent or audition and/or consent of*

*instructor*

Provides an opportunity for students to continue with advanced study of singing and preparation of song repertoire on an individual basis. Public performance required. Course may be taken 4 times.

**Transfer:** CSU; UC.

### 23 VOCAL JAZZ ENSEMBLE (2.0 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: Audition and/or consent of instructor*  
*Advisory: Eligibility for ENGL 56*

Presents the study and performance of literature in the vocal jazz and popular music genre with emphasis upon vocal improvisation in the jazz and scat style. Student compositions and arrangements will be encouraged. Attendance at scheduled performances is required.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 24 VOCAL JAZZ WORKSHOP (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: Audition and/or consent of instructor*

Practice and study vocal jazz literature and techniques. Introduce vocal jazz improvisation and vocal jazz harmonies.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 25 WIND ORCHESTRA (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: Audition and/or consent of instructor*

Study and public performance of music written specifically for large wind orchestras (woodwinds, brass, and percussion). Limited to those students who have had experience with wind and percussion instruments.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 26 BAND (1.0 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: Ability to play a band instrument and audition and/or consent of instructor*

Presents the study and performance of appropriate wind ensemble literature with emphasis on developing repertoire for required public performances.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 27 INSTRUMENTAL SMALL ENSEMBLE (1.0 to 3.0)

9.0 hours laboratory per week

# COURSES (CONTINUED)

Associate Degree Applicable

*Prerequisite: Ability to play a musical instrument and audition and/or consent of instructor*

Presents the study and performance of appropriate literature for limited, carefully balanced ensembles with emphasis on developing repertoire for required public performances.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 28 MIXED CHORUS (1.0 to 3.0)

9.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

*Advisory: Knowledge of music notation*

Presents the study and performance of appropriate choral literature selected from the wide variety of historic eras and musical styles from the 16th Century to the present. Public performance required.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 29 CHAMBER SINGERS (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

*Advisory: Previous choral experience*

A small group ensemble specializing in madrigals and vocal chamber music of all cultures and time periods. Frequent performances on and off campus will be a large part of the class.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 30A MUSIC HISTORY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: MUS 39 or MUS 3A*

Studies the history of music in western civilization from the Ancient period to the culmination of the Baroque period.

**Transfer:** CSU; UC.

## 30B MUSIC HISTORY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: MUS 30A, MUS 39 or MUS 3A*

Presents a study of the history of music in the Western civilization from the end of the Baroque period to the current period, including Avant Garde and Serial Techniques.

**Transfer:** CSU; UC.

## 31 JAZZ ENSEMBLE (1.0 to 3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Ability to play an instrument and to read music at*

*sight and audition and/ or consent of instructor*

Provides for reading, preparing, and performing of music arranged for a dance band. Presents the opportunity to arrange and compose for the band as well as to direct. Attendance at scheduled performances is required.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 32A CONCERT JAZZ ENSEMBLE (1.0 to 3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

*Advisory: Ability to play an instrument*

The concert jazz ensemble is a performance organization designed to acquaint the student with a wide variety of jazz and swing compositions, arrangers and guest soloists. This course will stress stylistic interpretation and ensemble playing. It will be limited to students with considerable experience.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 33 JAZZ IMPROVISATION (2.0)

3.0 hours per week: (2.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Ability to read music and play an instrument or sign and audition and/or consent of instructor*

*Advisory: Completion of or concurrent enrollment in MUS 3A or MUS 39*

Provides an opportunity for performance and analysis of jazz improvisation. Public performances may be required.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 34 ARRANGING, SCORING, AND ORCHESTRATION (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite: MUS 3A and MUS 3B or equivalent and knowledge of jazz literature and styles and some ability to play the piano*

*Advisory: Concurrent enrollment in MUS 23, MUS 28, MUS 32A, MUS 33, MUS 45 or MUS 51*

Provides an opportunity for composing, arranging and orchestrating for jazz ensembles and orchestras. Focuses on the analysis of jazz and classical harmonic practices, relation of contemporary melodic and rhythmic concepts to instrumentation.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 35 MUSIC APPRECIATION: CLASSICAL MUSIC (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Introduces classical music in its evolution from the earliest

# COURSES (CONTINUED)

recorded through the 20th century. Includes the study and analysis of significant works.

**Transfer:** CSU; UC.

## 37 MUSIC APPRECIATION: AMERICAN POPULAR MUSIC (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Introduces the non-music major to the history and literature of the popular music movement in the United States. Emphasizes musical styles and personalities from the late forties to the present.

**Transfer:** CSU; UC.

## 38 MUSIC APPRECIATION: JAZZ HISTORY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Introduces the history and literature of jazz music in the United States. Emphasizes the styles and musical personalities involved from 1900 to the present. Designed for the non-music major.

**Transfer:** CSU; UC.

## 39 FUNDAMENTALS OF MUSIC (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: No previous musical experience necessary*

Provides a thorough foundation in fundamentals of music for the non-major or the potential music major who does not have an adequate background.

**Transfer:** CSU; UC.

## 40 RECORDING ARTS I (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

First in a sequence of four recording arts courses offering an overview of music technology. Recording Arts I is an introduction to the physics of sound, sound recording, and sound reproduction.

**Transfer:** CSU.

## 41 RECORDING ARTS II (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: MUS 40*

Second in a sequence of four recording arts courses offering an overview of music technology. Covers the latest recording technology, such as digital tape recording, hard disk recording, digital work stations, and MIDI. Students will have access to the recording studio to fulfill assignments and/or record their own projects.

**Transfer:** CSU.

## 45 JAZZ WORKSHOP (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite: Audition*

*Advisory: Ability to play an instrument*

The jazz workshop is a performance organization designed to acquaint the student with a wide variety of jazz and swing compositions, arrangers and guest soloists. Stresses stylistic interpretation and ensemble playing.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 47 INDEPENDENT STUDIES: MUSIC (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of music under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 50 MUSICAL THEATRE WORKSHOP (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

*Corequisite: Completion of or concurrent enrollment in MUS 3A or MUS 39*

*Advisory: Previous choral or dance experience is recommended*

Develops skills for performance in Musical Theatre, including singing, acting, stage movement and choreography. Public performance may be required. Same as DRA 50.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 51 MUSICAL THEATRE PERFORMANCE (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in DRA 50 or MUS 50 or audition and/or consent of instructor*

Studies the techniques involved in the production of a full length musical with emphasis on acting, singing, dancing, costuming, makeup, stagecraft, and publicity. Produces one musical each semester. Public performance will be required. Same as DRA 51.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 53 MASTER CHORALE (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Audition and/or consent of instructor*

# COURSES (CONTINUED)

Presents the study and performance of major historical choral works. Public performance is required.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 55 WORKSHOP IN INSTRUMENTAL ENSEMBLE (3.0) MUSIC

9.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* Ability to play a musical instrument and audition and/or consent of instructor

Presents the study and performance of appropriate instrumental ensemble and orchestral music selected from standard repertoires leading to a series of public performances.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 56 ORCHESTRA (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Ability to play an orchestral instrument and audition and/or consent of instructor

Presents the study and performance of appropriate combined string and wind ensemble literature with the emphasis upon developing repertoire for required public performances.

Course may be taken 4 times.

**Transfer:** CSU.

## 58 ELEMENTARY PIANO (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

Introduces the student to practical keyboard facility, sight reading, harmony and performance of elementary piano repertoire. Required for music majors.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 59 INTERMEDIATE PIANO (1.0 to 2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MUS 58 or equivalent or audition and/or consent of instructor

The study and performance of concert piano literature from Baroque, Classic, Romantic, and 20th Century time periods. The student will develop and improve pianistic skills and repertoire.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 60 JAZZ PIANO TECHNIQUES (1.0 to 2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MUS 58 or equivalent or audition and/or consent of instructor

This course provides the student with basic jazz piano playing skills including voicings of 9th, 11th, and 13th chords applied to arranging lead sheets for piano.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 61 CHORAL MUSIC I: RENAISSANCE AND BAROQUE PERIOD (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Audition and/or consent of instructor

Presents the study and performance of major historical choral works with concentration on the Renaissance and Baroque periods (1400-1600). Students will develop and improve choral music techniques and repertoire. Auditions will be scheduled at the beginning of each semester.

Course may be taken 4 times.

## 62 CHORAL MUSIC II: CHORAL MUSIC OF THE CLASSICAL PERIOD (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Audition and/or consent of instructor

Presents the study and performance of major historical choral works with concentration on the Classical Period. Students will develop and improve choral music techniques and repertoire. Auditions will be scheduled at the beginning of each semester.

Course may be taken 4 times.

## 63 MUSIC III: CHORAL MUSIC OF THE ROMANTIC TO EARLY 20TH CENT (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Audition and/or consent of instructor

Presents the study and performance of major historical choral works with concentration on the Romantic Period from the end of the Classical Period to the early 20th century. Students will develop and improve choral techniques and repertoire. Auditions will be scheduled at the beginning of each semester.

Course may be taken 4 times.

## 64 MUSIC IV: MODERN PERIOD (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Audition and/or consent of instructor

Presents the study and performance of major historical choral works with concentration on the Modern Period (Post World War I to present). Students will develop and improve choral music techniques and repertoire. Auditions will be scheduled at the beginning of each semester.

Course may be taken 4 times.

## 93 MUSIC SPECIAL TOPIC (0.5 to 4.0)

# COURSES (CONTINUED)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## NURSING ASSISTANT - NRAST

### **25 EKG MONITOR OBSERVER (1.0)**

6.0 hours lecture per week\*

Associate Degree Applicable

Provides the student with the skills to analyze and interpret basic cardiac rhythms. Emphasis is on recognition of clinically significant rhythms. Treatment is not covered. Concepts include basic cardiac anatomy and physiology, electrical conduction through the heart, components of the EKG waveform, and identification of normal and abnormal cardiac rhythms.

### **45 ACUTE CARE NURSE ASSISTANT (3.0)**

12.0 hours per week: (5.0 hours lecture, 7.0 hours laboratory)\*

Associate Degree Applicable

*Prerequisite:* Be a certified nursing assistant and have current "health care provider" card

*Advisory:* ENGL 56

Prepares the certified nurse assistant to function at a competent level in the acute care setting. Provides guidelines for acute clinical experiences. Facilitate an understanding of human beings as integrated physiological, social, and psychological organisms. Course may be taken 2 times.

### **48 NURSING ASSISTANT (5.0)**

18.0 hours per week: (6.0 hours lecture, 12.0 hours laboratory)\*

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents theory and practice skills necessary for basic nursing care. Requires supervised clinical experiences in a skilled nursing facility. Upon completion of this course, students are eligible to take the Nurse Assistant Training and Assessment Program Test (NATAP). This will allow the candidate to obtain a certificate as a nurse assistant in the state of California. Must be able to lift 20 pounds. Course may be taken 4 times.

### **51 HEALTH UNIT COORDINATOR (2.5)**

3.5 hours per week: (2.0 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

Introduction to basic skills required of a Health Unit Coordinator in today's health care environment.

Course may be taken 2 times.

### **93 NURSING ASSISTANT SPECIAL TOPIC (0.5 to 4.0)**

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## NURSING REGISTERED ASSOCIATE DEGREE - NRAD

### **1 FOUNDATIONS OF NURSING/CARING (2.0)**

2.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 1A

Introduces caring theory as the essence of nursing. Foundational concepts include communication, teaching/learning, nursing process, life-span. Self-care and academic success principles are introduced. Surveys historical, social, legal, economic and ethical aspects of nursing, emphasizing critical thinking, patient advocacy and caring in a multicultural society.

**Transfer:** CSU.

### **1A NURSE CARING CONCEPTS (2.0)**

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Admittance into the registered nursing program

*Corequisite:* NRAD 1B

Applies the foundational caring concepts of communication, teaching, learning, nursing process, caring, energy and life span as a structure for nursing practice. Provides a foundation for health promotion in a multicultural society. Introduces independent learning modules.

**Transfer:** CSU.

### **1B NURSE CARING PRACTICUM I (5.0)**

11.0 hours per week: (2.0 hours lecture, 9.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Admission to the registered nursing program and Current Health Care Provider CPR card is required

*Corequisite:* NRAD 1D

Applies nursing concepts to the practice of nursing. Presents related nursing procedures. Provides opportunities for student practice of procedures. Provides skill practice in lab setting for the student to perform nursing care for adults and geriatric clients through structured experiences in long-term care settings and acute care hospital settings. Student will identify personal biases as they relate to the provision of culturally sensitive nursing care. Application of nursing process and cultural concepts to individual nursing care.

**Transfer:** CSU.

### **1D DECISION MAKING DATA I (2.0)**

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Admittance into the registered nursing program

*Corequisite:* NRAD 1A

Presents fundamental concepts and nursing care problems related to pharmacology, nutrition, fluid and electrolyte balance, diagnostic testing, and acute pain for the adult and geriatric client.

## COURSES (CONTINUED)

Introduces math calculations for medication administration. Explores application of nursing process to nursing care problems. Cultural concepts pertinent to nursing care problems are presented.

**Transfer:** CSU.

### 2A NURSE CARING FAMILY CONCEPTS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* NRAD 1B and/or admission to the nursing program  
*Corequisite:* NRAD 2B

Continues the study of caring concepts in greater depth and complexity. Teaches nursing care of the childbearing family, children and young through middle adulthood. Introduces family considerations in establishing short-term and long-term goals for health promotion. Continues focus on the individual assuming responsibility for health promotion and learning. Emphasizes planning, implementation and evaluation of nursing process in a multicultural society.

**Transfer:** CSU.

### 2B NURSE CARING PRACTICUM II (8.0)

20.0 hours per week: (2.0 hours lecture, 18.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite:* NRAD 1B and/or admission to the nursing program and Current Health Care Provider CPR card is required  
*Corequisite:* NRAD 2D

Applies nurse caring concepts to the clinical practice of nursing in a wide variety of health care settings. Presents related nurse caring skills. Provides opportunity to deliver planned culturally relevant nursing care for maternity clients, infants, children, and young/middle-aged adults in moderately structured clinical practice.

**Transfer:** CSU.

### 2D DECISION MAKING DATA II (2.0)

2.0 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* NRAD 1B and/or admission to nursing program  
*Corequisite:* NRAD 2A

Builds on fundamental concepts related to pharmacology, nutrition, diagnostic testing across the life span. Emphasis is placed on the role of the nurse in client education. Cultural concepts pertinent to nursing care problems are presented.

**Transfer:** CSU.

### 2E CRITICAL THINKING SKILLS FOR DATA DECISION MAKING (1.5)

1.5 hours lecture per week  
Associate Degree Applicable

*Prerequisite:* Admission to the Registered nursing program  
*Corequisite:* NRAD 2A

Emphasizes the application of critical thinking skills to realistic clinical situations involving medication management, food-drug

and drug-drug interactions and diagnostic test interpretation. Provides an interactive format for the presentation of moderately complex scenarios requiring analysis and problem solving.

### 3 NURSING TRANSITIONS (1.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* 30 Unit Option Program Admission  
*Corequisite:* NRAD 3A

Introduces caring theory as the essence of nursing. Self care and academic success principles are introduced. Surveys legal and ethical aspects of nursing, emphasizing critical thinking, patient advocacy and caring in a multicultural society. Provides an 8-week transition course required for 30 unit option students.

**Transfer:** CSU.

### 3A NURSE CARING CONCEPTS III (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* NRAD 2D and/or admission to the nursing program  
*Corequisite:* NRAD 3B

Applies nurse caring concepts to care of child, adult, and elderly clients with goal setting, energy, and caring problems. Includes cultural diversity and ethnic considerations, men and women's health, musculoskeletal, nutrition and elimination, degenerative nervous system, liver, skin, acute oxygenation, hematologic, and vascular problems. Emphasizes nursing intervention.

**Transfer:** CSU.

### 3B NURSE CARING PRACTICUM III (5.0)

11.0 hours per week: (2.0 hours lecture, 9.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* NRAD 2D and/or admission to the nursing program and Current Health Care Provider CPR card is required  
*Corequisite:* NRAD 3D

Applies nurse caring concepts to the clinical practice of nursing in a variety of health care settings. Presents advanced nursing skills. Provides opportunity to implement culturally relevant nursing care to clients with varied health problems.

**Transfer:** CSU.

### 3D NURSE CARING FOR MEDICAL-SURGICAL CLIENTS (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* NRAD 2D and/or admission to the nursing program  
*Corequisite:* NRAD 3A

Applies nursing interventions of prevention, maintenance, restoration and caring to a variety of health problems: neurologic, genitourinary, renal, endocrine. Content is related to pathophysiology, life span, barriers to goal-setting, nursing process and teaching/ learning. Emphasis is also placed on the impact that this situational crisis has on the client and families ability to cope.

# COURSES (CONTINUED)

**Transfer:** CSU.

## 3G CRITICAL THINKING SEMINAR (1.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Admission to the nursing program

For the third semester nursing student. An analysis of complex patient scenarios that require independent critical thinking for the entry level nurse. Incorporates advanced assessment skills to modify and revise the care plan for complex clients. Course may be taken 2 times.

## 3H THIRD SEMESTER NURSING READINESS (0.5)

4.5 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Admission to the nursing program

*Corequisite:* NRAD 3A

A course designed for registered nursing students entering the third semester. Nursing concepts necessary for success in the third semester are reviewed.

## 4 NURSE LEADERSHIP/MANAGEMENT (1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* NRAD 3D and/or admission to the nursing program

*Corequisite:* NRAD 4A

Continues to develop leadership and management content at the Associate Degree level as required for beginning practice. Includes the management process, assertion skills, organizational skills, decision making, and change theory. Explores work-role relationships and collegiality, including conflict resolution, reality shock and strategies to deal with burnout.

**Transfer:** CSU.

## 4A NURSE CARING CONCEPTS FOR CLIENTS PSYCHIATRICALY AT RISK (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* NRAD 3D and/or admission to the nursing program

*Corequisite:* NRAD 4B

Applies nurse caring concepts to planning nursing care for clients at risk from mental illness, dysfunction and crisis. Presents assessment techniques, nursing diagnoses and specific nursing interventions.

**Transfer:** CSU.

## 4B NURSE CARING FOR PEOPLE AT RISK PRACTICUM (6.0)

18.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* NRAD 3D and/or admission to the nursing program and Current Health Care Provider CPR card is required

*Corequisite:* NRAD 4D

Applies culturally sensitive nursing care for people at risk in health care settings, which are varied and more complex. Provides client care experiences in a less structured environment and with increasing independence. Includes preceptorship experience, which covers a designated period of time and a variety of clients across the life span in a variety of settings.

**Transfer:** CSU.

## 4D NURSE CARING FOR PEOPLE AT RISK CONCEPTS (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* NRAD 3D and/or admission to the nursing program

*Corequisite:* NRAD 4

Applies nurse caring concepts to develop nursing care for clients at risk. Presents the critical care environment and how to establish priorities for clients with altered homeostasis. Emphasis is on clients with cardiovascular problems and crisis. Coping strategies, life style issues to promote health, and culturally relevant care are presented.

**Transfer:** CSU.

## 4E NCLEX PREPARATION (0.5)

2.0 hours lecture per week

Associate Degree Non-Applicable

*Corequisite:* NRAD 4B

This course is to help prepare the RN student for the state licensing exam. Critical thinking strategies required to answer the NCLEX questions are presented. A portion of this class will be hands-on computer testing to simulate the state board testing format.

## 17 SELF-CARE STRATEGIES (2.0)

2.0 hours lecture per week

Associate Degree Applicable

Introduces self-care concepts from a holistic viewpoint as a primary area of an individual's responsibility. Relates stress management, humor, psychological and spiritual well-being, personal safety and social support to interpersonal and work-role relationships. Problem solving, planning and stress reduction strategies are presented.

**Transfer:** CSU.

## 18 SURVEY OF ALTERNATIVE MEDICINE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* ENGL 56

Explores various cultural perspectives on alternative medicine. Chinese Medicine, Ayurvedic Medicine, Native and Latin American Folk Medicines, Homeopathy, Naturopathy, Herbal Medicine, Mind/Body Medicine, Chiropractic Medicine, Environmental Medicine and other approaches. These approaches are analyzed and discussed within the context of the current medical model of health care in the United States.

**Transfer:** CSU.

# COURSES (CONTINUED)

## 19A BEGINNING STUDENT INTERN (1.0 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: NRAD 2B*

Provides the opportunity to practice selected nursing skills learned during the first year of Associate Degree Nursing course work under the supervision of a preceptor. Offers work experience in a participating agency.

Course may be taken 2 times.

**Transfer:** CSU.

## 19B ADVANCED STUDENT INTERN (1.0 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: NRAD 3B*

Provides the opportunity to practice selected nursing skills learned during the first, second and third semesters of Associate Degree Nursing course work under the supervision of a preceptor. Offers work experience in a participating agency.

Course may be taken 2 times.

**Transfer:** CSU.

## 20 SUPPLEMENTARY NURSING SKILLS PRACTICE (0.5 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Corequisite: Enrollment in the nursing program*

Provides the opportunity to practice nursing skills in a caring environment. Nursing skills will vary from the simple to the complex. Allows for demonstration and assessment of nursing skills and knowledge learned in nursing lecture and laboratory courses. Practice opportunities vary from highly structured to less structured simulated clinical situations. Note: 0.5 unit required in first, second, and third semester.

Course may be taken 4 times.

## 22 MEDICAL TERMINOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Introduces medical terminology for body structure, body systems, and diagnostic work. Prefixes, suffixes and combined root forms are used to identify medical terms.

Course may be taken 2 times.

**Transfer:** CSU.

## 23 BILINGUAL MEDICAL TERMINOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Introduces Bilingual Medical Terminology for body structure, body systems, and diagnostic work. Prefixes, suffixes and

combined root forms are used to form bilingual medical terms. Course may be taken 2 times.

## 24 INTRODUCTION TO EMERGENCY CARE (3.5)

4.5 hours per week: (3.0 hours lecture, 1.5 hours laboratory)  
Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in NRAD 4B or equivalent*

This course is designed for the Registered Nurse, Licensed Vocational Nurse, Paramedic, and graduating Registered Nursing student (a) who intends to make a career move into emergency care, or (b) who is working in the emergency department and seeks to develop a practical framework for practice. Licenses and/or certificates and social security numbers will need to be received in the nursing office in order to register online for this course.

Course may be taken 2 times.

## 25 HEALTH CAREER PREPAREDNESS (2.0)

2.0 hours lecture per week  
Associate Degree Applicable

An overview of opportunities and expectations in health care careers. Basic tools for success will be presented.

**Transfer:** CSU.

## 26 INTRODUCTION TO THE OPERATING ROOM EXPERIENCE (7.0)

11.0 hours per week: (5.0 hours lecture, 6.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite: RN, NRAD 4B, or equivalent*

An introduction to the operating room course, designed for registered nurses and fourth semester nursing students. Theory and clinical will introduce the preoperative, intraoperative and postoperative period and appropriate nursing care.

Course may be taken 2 times.

## 27 OBSTETRICAL NURSING (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable

*Prerequisite: RN license or registered nursing interim permit*

This obstetrical course is an introduction to the nursing health care needs of the laboring women, new mothers, newborns and their support systems. The strengths and needs of childbearing families are studied within their socioeconomic, ethnic, and cultural community contexts. The course has both classroom and clinical components. The student is expected to develop clinical objectives and arrange a preceptorship in an acute care setting. Course may be taken 2 times.

## 47 INDEPENDENT STUDIES: NURSING (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

# COURSES (CONTINUED)

*Advisory: Eligibility for ENGL 56*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of nursing under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

## 48 RADIATION PROTECTION FOR THE HEALTH WORKER (2.5)

5.0 hours lecture per week\*

Associate Degree Applicable

Basic radiation protection technology for people working in the health care setting. Upon successful completion of the course, students will be able to qualify as a Radiation Safety Officer.

**Transfer:** CSU.

## 93 NURSING SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Non-Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## NUTRITION - NUTR

### 10 NUTRITION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: Eligibility for ENGL 56*

Studies the nutritional needs of the human life cycle including interpretation of basic food groups and their chemical composition as applied to the utilization of nutrients in the body.

**Transfer:** CSU; UC. (CAN HEC 2)

### 11 INTRODUCTION TO NUTRITION FOR HEALTH PROFESSIONALS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56*

This course is designed for current or prospective members of health professions such as nurses, physicians, physician assistants, dietitians, dentists, dental hygienists, physical therapists and occupational therapists. Studies the nutritional needs of the human life cycle. Examines the biological function and chemical classification of nutrients. Relates nutrition concepts to health and disease.

**Transfer:** CSU.

### 12 PRENATAL NUTRITION (1.0)

3.0 hours lecture per week\*

Associate Degree Applicable

Examines the nutritional needs of the pregnant woman and

developing fetus, including interpretation of food groups and their chemical composition as applied to the utilization of nutrients in the bodies of these particular individuals.

**Transfer:** CSU.

### 14 INFANT NUTRITION (1.0)

3.0 hours lecture per week\*

Associate Degree Applicable

Examines the nutritional needs of the infant, including the importance of breastfeeding and its chemical composition as applied to the utilization of nutrients in the bodies of these particular individuals.

**Transfer:** CSU.

### 16 TODDLER/PRESCHOOLER NUTRITION (1.0)

3.0 hours lecture per week\*

Associate Degree Applicable

Examines the nutritional needs of the toddler/preschooler, including the interpretation of food groups and their chemical composition as applied to the utilization of nutrients in the bodies of these particular individuals.

**Transfer:** CSU.

### 18 MATERNAL & CHILD NUTRITION (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Examines the nutritional requirements of the pregnant woman, developing fetus, infant, toddler and child.

**Transfer:** CSU.

### 30 NUTRITION FOR FITNESS AND SPORT (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory: ENGL 56 and NUTR 10*

Presents a specialized course relating nutrition to physical performance and fitness. Explores current trends, controversies, and professional publications. Provides opportunity to analyze various dietary recommendations and relate them to specific physical needs.

**Transfer:** CSU.

### 47 INDEPENDENT STUDIES: NUTRITION (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of nutrition under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU.

# COURSES (CONTINUED)

## 93 NUTRITION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### ONLINE

## 1 INTRODUCTION TO ONLINE COURSES (0.5)

4.5 hours laboratory per week\*

Associate Degree Applicable

Presents different types of technologies essential to a distance education course. Topics will cover the effective use of e-mail, the Internet, and other technologies used in both online delivered classes or on-campus classes. Prepares student for succeeding in distance education courses and others that rely heavily on technology.

Course may be taken 2 times.

### PARALEGAL - PARAL

## 1 INTRODUCTION TO LAW OFFICE PROCEDURES FOR PARALEGALS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory: ENGL 56*

Introduces the professional responsibilities of the paralegal, including rules regarding ethical conduct and a basic overview of the legal system and research. Covers different law office management functions commonly performed by paralegals such as basic correspondence, billing and financial management, calendar and docket control management, file and record management, and library management.

## 2A LAW OFFICE PROCEDURES FOR FAMILY LAW (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LEGAL 24*

*Advisory: ENGL 56*

Introduces the terminology and procedures used in non-litigation matters and legal documents preparation in California Family Law matters.

Course may be taken 2 times.

## 2B LAW OFFICE PROCEDURES FOR ESTATE PLANNING AND ADMINISTRATION (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in LEGAL 23*

*Advisory: ENGL 56*

Introduces the terminology and procedures used in non-litigation matters and legal documents preparation in probate and estate planning matters.

## 3 PARALEGAL INTERNSHIP (1.0 to 3.0)

8.0 hours per week: (0.5 hours lecture, 7.5 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 31, CAO A 32, CAO A 35 and BUS 17*

Provides students an opportunity to experience the responsibilities of an employee in a legal setting related to their courses in paralegal studies.

Course may be taken 4 times.

**Transfer:** CSU.

## 5 CIVIL/LITIGATION PROCEDURES AND DOCUMENTS (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: CAO A 62, CAO A 20A or the ability to type 25 words per minute*

*Advisory: ENGL 56*

Introduces the terminology and procedures used in general civil procedure and litigation including pretrial procedures, discovery, trial, and post trial procedures. Covers specific areas such as landlord/tenant disputes and employment disputes and includes procedures used in alternative dispute resolution such as arbitration and mediation. Sample pleadings, forms, and documents will be processed in logical sequence and will be accompanied by definitions, background information and step by step instructions and statements of procedures.

Course may be taken 2 times.

## 6 BUSINESS ORGANIZATIONS (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Successful completion of or concurrent enrollment in BUS 18*

*Advisory: ENGL 56*

Introduces the terminology and procedures used in non-litigation matters and legal document preparation in a business law practice.

## 47 INDEPENDENT STUDIES: PARALEGAL (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Paralegal under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

## 93 PARALEGAL SPECIAL TOPIC (0.5 to 4.0)

# COURSES (CONTINUED)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## PHILOSOPHY - PHIL

### 5 INTRODUCTION TO THE BIBLE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Introduces the literature of the Hebrew scriptures and the Christian New Testament through their history, literary conventions, authors, and sources.

**Transfer: CSU; UC.**

### 6 INTRODUCTION TO PHILOSOPHY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents the scope, methods, and concepts of major philosophers. Analyzes their philosophies through the reading of selections from original texts.

**Transfer: CSU; UC. (CAN PHIL 2)**

### 8 INTRODUCTION TO LOGIC (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents a study of language and its functions, definitions, informal fallacies, inductive reasoning, and the fundamental concepts and techniques of traditional and modern logic.

**Transfer: CSU; UC. (CAN PHIL 6)**

### 9 WORLD RELIGIONS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 1A*

Presents the history, concepts, and cultures of the world's major religions. Emphasizes Judaism, Christianity, Islam, Hinduism, and Buddhism. Surveys Jainism, Confucianism, Taoism, Zoroastrianism, Shintoism, and Sikhism.

**Transfer: CSU; UC.**

### 12 PHILOSOPHICAL CLASSICS IN THEORY OF REALITY AND OF KNOWLEDGE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 1A*

Presents an in-depth study of problems in the theory of reality and the theory of knowledge by means of a critical analysis of a selection of classics in philosophy.

**Transfer: CSU; UC.**

### 13 PHILOSOPHICAL CLASSICS IN ETHICS AND SOCIAL PHILOSOPHY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 1A*

Studies problems in ethics and social philosophy by critically analyzing a selection of classic texts.

**Transfer: CSU; UC. (CAN PHIL 4)**

### 47 INDEPENDENT STUDIES: PHILOSOPHY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for in-depth study or a practicum experience by an individual student in a selected topic of philosophy under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU; UC.**

## PHYSICAL EDUCATION (ACTIVITY) - PEACT

### 40 SWIMMING (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable  
*Advisory: Meet the objectives of the preceding skill level before enrolling in the advanced levels*

Provides training for students wishing to improve swimming skills in order to increase recreational enjoyment, to improve stroke technique, and to increase endurance, strength, and stamina.

Course may be taken 4 times.

**Transfer: CSU; UC.**

### 41 SPRINGBOARD DIVING (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Provides instruction and practice in springboard diving with emphasis on coordination, body mechanics and mastery of diving techniques.

Course may be taken 4 times.

**Transfer: CSU; UC.**

### 42 WATER POLO (0.5 to 1.0)

3.0 hours laboratory per week  
Associate Degree Applicable

Provides the opportunity for swimmers to develop an interest in and knowledge of water polo. Presents the rules and fundamental

# COURSES (CONTINUED)

skills of the game.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 47 INDEPENDENT STUDIES: (0.5 to 2.0) PHYSICAL EDUCATION ACTIVITY

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or skill development experience by an individual student in a selected topic of physical education under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 50 WRESTLING (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents the basic skill techniques involved in freestyle, Greco-Roman and college-style wrestling. Emphasizes active participation in drill and scrimmage situations.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 64 STEP TRAINING (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents a total fitness program, including cardiovascular, muscular strength and flexibility fitness through a step training program.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 65 ADULT FITNESS (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents the opportunity, methods, materials, and knowledge for the student to begin a lifetime adult physical fitness program.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 66 ENDURANCE CONDITIONING (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents a programmed method of cardiovascular/respiratory fitness through walking, running, swimming and/or cycling.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 68 STRETCHING ROUTINES FOR FITNESS (0.5 to 1.0) AND SPORTS

3.0 hours laboratory per week

*\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk.*

*Asterisk coded courses are always taught in less than a full semester.*

Associate Degree Applicable

Presents a program of controlled stretch patterns to increase flexibility, relax tension, and help prevent injuries in sports activities.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 69 CIRCUIT WEIGHT TRAINING (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Introduces an open laboratory physical fitness course designed to develop muscular endurance and strength. Presents an opportunity to develop a positive attitude and work habits leading to cardiovascular efficiency, optimum body composition and flexibility.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 70 WEIGHT TRAINING (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents the different concepts of strength, endurance and muscle tone development of weight training. Students will use machine and free weights for fitness development.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 81 BADMINTON (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Emphasizes skill techniques, strategy of singles and doubles, rule interpretation, and court etiquette of badminton.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 83 GOLF (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents an opportunity to develop one's knowledge and skills in the sport of golf. Instruction emphasizes rules, strategy, etiquette and technique.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 85 TENNIS (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

*Advisory: Meet the objectives of the preceding skill level before enrolling in the advanced levels.*

Beginning Tennis: Introduces the basic skills and strokes used in controlling play, rules, and etiquette of the game. Intermediate Tennis: Reviews basic ground strokes, improves serving

## COURSES (CONTINUED)

technique, introduces advanced skills and starts on basic strategy patterns. Advanced Tennis: Presents individual instruction to develop player's own personal stroke pattern and refine skills in a competitive atmosphere.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 91 BASEBALL (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents the skills, drills, theory and practice of advanced baseball. Presents individual and team instruction to develop player's own personal skills in a competitive atmosphere.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 92 BASKETBALL (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Emphasizes basic skills, techniques, theories, strategems, and rule interpretations used in basketball.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 93 PHYSICAL EDUCATION SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 95 SOCCER (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Introduces techniques, tactics, skills, rules and attitudes inherent to the sport of soccer.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 96 SOFTBALL (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents theory, practice, and strategy of fastpitch softball.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 97 VOLLEYBALL (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents the theory, practice, history, and fundamentals of volleyball. Includes offensive and defensive aspects of the game.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 106 PILATES FOR HEALTH AND FITNESS (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Presents a progressive exercise program using the Pilates method. Exercises encompass the strength and flexibility fitness components, while focusing on alignment, efficiency of movement, balance and coordination.

Course may be taken 4 times.

**Transfer:** CSU.

## PHYSICAL EDUCATION (ADAPTED) - PEADPT

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### 100 ADAPTED AQUATICS (1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Provides an individualized aquatic exercise program for students with a disability. Improves flexibility, strength, and endurance using the water as a source of buoyancy and resistance. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.

Course may be taken 4 times.

**Transfer:** CSU; UC.

### 105 ADAPTED FITNESS: WEIGHT TRAINING (0.5 to 1.0)

3.0 hours laboratory per week

Associate Degree Applicable

Provides an individualized fitness program for students with a disability using resistive exercises and equipment. An appointment with a Disabled Student Programs and Services faculty member prior to enrollment is strongly advised.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## PHYSICAL EDUCATION (ATHLETICS) - PEATH

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### 25 INTERCOLLEGIATE BASEBALL: MEN (1.5 to 3.0)

10.0 hours laboratory per week

Associate Degree Applicable

Develops advanced knowledge and skills in the sport of baseball. Appropriate for students desiring the physical, mental, and emotional challenges inherent in intercollegiate baseball competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

### 26 INTERCOLLEGIATE BASKETBALL: MEN (1.5 to 3.0)

# COURSES (CONTINUED)

10.0 hours laboratory per week  
Associate Degree Applicable

Considers broad aspects of intercollegiate basketball competition with emphasis on offensive and defensive floor strategies. Attention is given to physical conditioning necessary for engaging in competitive sports and the responsibilities required of a player who participates in a team activity.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 27 INTERCOLLEGIATE BASKETBALL: (1.5 to 3.0) WOMEN

10.0 hours laboratory per week  
Associate Degree Applicable

Considers broad aspects of intercollegiate basketball. Emphasizes offensive and defensive floor strategies, the physical conditioning necessary for engaging in competitive sports, and the responsibilities required of a player who participates in a team activity.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 28 INTERCOLLEGIATE CROSS COUNTRY (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Presents the theory and practice of cross country running and includes participation in intercollegiate competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 31 INTERCOLLEGIATE SOFTBALL: (1.5 to 3.0) WOMEN

10.0 hours laboratory per week  
Associate Degree Applicable

Develops advanced knowledge and skill in the sport of women's softball. Provides the physical, mental, and emotional challenges inherent in intercollegiate competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 32 SWIMMING AND DIVING (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Presents an opportunity for physically advanced students to further develop knowledge and skill in the sport of swimming and diving. Appropriate for students desiring the physical, mental and emotional challenges that are inherent in competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 33 INTERCOLLEGIATE TENNIS (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Presents an opportunity for advanced tennis students to further develop a knowledge and skill in the sport. Appropriate for students desiring the physical, mental, and emotional challenge of intercollegiate competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 34 INTERCOLLEGIATE TRACK AND FIELD (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Presents the theory and practice of track and field athletics. Includes the rules and fundamentals of the track and field events and participation in intercollegiate track meets.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 35 INTERCOLLEGIATE VOLLEYBALL: (1.5 to 3.0) WOMEN

10.0 hours laboratory per week  
Associate Degree Applicable

Presents an opportunity for physically advanced students to further develop a knowledge and skill in the sport of volleyball. This offering is appropriate for students desiring the physical, mental and emotional challenges that are inherent in competition against students representing other colleges.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 36 INTERCOLLEGIATE WATER POLO (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Presents an opportunity for physically advanced students to further develop a knowledge and skill in the sport of water polo. This offering is appropriate for students desiring the physical, mental and emotional challenges that are inherent in competition against students representing other colleges.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 37 INTERCOLLEGIATE WRESTLING (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

Develops knowledge and skill in the sport of wrestling. Emphasizes skill instruction and conditioning techniques that prepare students for intercollegiate competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 38 INTERCOLLEGIATE WOMEN'S SOCCER (1.5 to 3.0)

10.0 hours laboratory per week  
Associate Degree Applicable

# COURSES (CONTINUED)

Develops advanced knowledge and skills in the sport of soccer. Appropriate for students desiring the physical, mental and emotional challenges inherent in intercollegiate soccer competition.

Course may be taken 3 times.

**Transfer:** CSU; UC.

## 39 WOMEN'S INTERCOLLEGIATE WATER (1.5 to 3.0) POLO

10.0 hours laboratory per week

Associate Degree Applicable

Presents an opportunity for physically advanced students to further develop a knowledge and skill in the sport of water polo. This offering is appropriate for students desiring the physical, mental and emotional challenges that are inherent in competition against students representing other colleges.

Course may be taken 4 times.

**Transfer:** CSU; UC.

## 93 PHYSICAL EDUCATION ATHLETICS (0.5 to 4.0) SPECIAL TOPIC

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## PHYSICAL EDUCATION (THEORY) - PETHRY

### 3 INTRAMURAL AND RECREATIONAL SPORT (3.0) PROGRAMMING

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Prerequisite:* Eligibility for ENGL 56

Presents philosophy, foundations, policy and techniques underlying intramurals and recreational sport programming in schools, public, private and commercial recreation settings. Analyzes program design for club, informal, league and tournament formats. Discusses appropriate means for promotion, safety and risk management and participant recognition. Detailed sport program plan created.

**Transfer:** CSU.

### 4 RECREATION PROGRAM PLANNING (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents a theoretical and practical approach to program planning, organization, implementation, and evaluation of recreation services in public, non-profit, private, and commercial settings. Emphasis on interrelationship of needs and interests of participants with goals and objectives, physical settings and activity content. Includes planning and conducting events under

direct supervision of instructor and local agency supervisor.

**Transfer:** CSU.

### 5 INTRODUCTION TO PHYSICAL EDUCATION (2.0)

2.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents the heritage, current programs and the future potential of the physical education profession.

**Transfer:** CSU; UC. (CAN KINE 2)

### 7 INTRODUCTION TO RECREATION AND LEISURE SERVICES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Introduces the history, philosophy, principles, organization and direction of recreation and leisure services in the public, voluntary, private and commercial sectors. Emphasizes functions, areas, facilities, clientele and career opportunities available within the profession.

**Transfer:** CSU. (CAN REC 2)

### 8 RECREATION LEADERSHIP (3.0)

4.0 hours per week: (2.5 hours lecture, 1.5 hours laboratory)

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents the history, the philosophy, and the theory of recreation leadership and the Associated techniques used by modern recreation and leisure professionals. Emphasizes leadership styles, characteristics and skills.

**Transfer:** CSU.

### 10 STUDENT/ATHLETE SUCCESS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Designed to increase the student's success in college by assisting the student in obtaining the knowledge of concepts necessary to reach educational objectives. Information and opportunities are provided for students to learn and adopt methods to be successful in college and life.

**Transfer:** CSU.

### 13 INTRODUCTION TO PREVENTION AND CARE OF ATHLETIC INJURIES (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Provides the student with basic exposure to the care and prevention of activity injuries. Includes general principles in sports medicine and athletic training.

# COURSES (CONTINUED)

**Transfer:** CSU; UC.

## 14 FOUNDATIONS FOR FITNESS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents the physiological principles and other factors that provide the foundations for the development and maintenance of optimal physical fitness.

**Transfer:** CSU.

## 15 THEORY OF BASEBALL (2.0)

2.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents all the fundamental phases of defensive and offensive baseball. Lectures, chalkboard discussion, demonstrations, and video studies are included in the course.

**Transfer:** CSU; UC.

## 16 THEORY OF TRACK AND FIELD AND CROSS COUNTRY (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Introduces the basic fundamentals, techniques, rules, regulations and organization of track and field and cross country.

**Transfer:** CSU; UC.

## 18 EXERCISE LEADERSHIP AND ASSESSMENT (3.0)

5.0 hours per week: (2.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Presents fundamentals of leading exercise with healthy populations, including adults, children, pregnant women and the elderly, and presents appropriate techniques of health and fitness appraisal for these populations.

**Transfer:** CSU.

## 21 WATER SAFETY INSTRUCTOR (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56 and successful completion of advanced swimming instructions and a health-screening examination.*

Provides instruction and practice in American Red Cross life-saving techniques. Reviews Red Cross swimming and life-saving courses. Red Cross certification as a Water Safety Instructor may be earned.

**Transfer:** CSU; UC.

## 22 LIFEGUARD TRAINING (2.0)

4.0 hours per week: (1.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: Successful completion of advanced swimming instruction and a health-screening examination are recommended*

Prepares individuals to effectively assume the duties and responsibilities of lifeguards at swimming pools and protected (no-surf) open water beaches.

**Transfer:** CSU; UC.

## PHYSICAL SCIENCE - PHYSICI

### 1A PHYSICAL SCIENCE: PHYSICS AND CHEMISTRY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 23, MATH 23SI or equivalent*  
*Advisory: ENGL 56 or ENGL 65*

Presents a survey of the physical sciences, physics and chemistry. Not open to students who have credit for any college chemistry or physics course.

**Transfer:** CSU; UC.

### 1A1 PHYSICAL SCIENCE LAB (1.0)

3.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: Completion of or concurrent enrollment in PHYSICI 1A or equivalent*

Applies laboratory principles developed in Physical Science: Physics and Chemistry.

**Transfer:** UC.

### 1B PHYSICAL SCIENCE: ASTRONOMY AND GEOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite: MATH 23, MATH 23SI or equivalent*  
*Advisory: ENGL 56 or ENGL 65*

Presents a survey of the physical sciences, astronomy and geology. Not open to students who have credit for any college geology or astronomy course.

**Transfer:** CSU; UC.

## PHYSICS - PHYS

### 5A GENERAL PHYSICS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)  
Associate Degree Applicable  
*Prerequisite: MATH 29 or MATH 31 or equivalent*

Presents the principles of statics and dynamics of particles and rigid bodies, harmonic motion, fluid mechanics, heat,

# COURSES (CONTINUED)

thermodynamics, wave motion and sound using trigonometry.

**Transfer:** CSU; UC. (CAN PHYS 2)(PHYS 5A + PHYS 5B = CAN PHYS SEQ A)

## 5B GENERAL PHYSICS (4.0)

6.0 hours per week: (3.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* PHYS 5A or equivalent

Presents the principles of geometric optics, physical optics, static and dynamic electricity and magnetism, introductory D.C. and A.C. circuit theory, relativity, particles and waves, atomic structure, radioactivity and nuclear reactions using trigonometry.

**Transfer:** CSU; UC. (CAN PHYS 4)(PHYS 5A + PHYS 5B = CAN PHYS SEQ A)

## 8A PRINCIPLES OF PHYSICS (5.0)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* MATH 65A or equivalent

Presents the principles of statics and dynamics of particles and rigid bodies, fluids, harmonic motion, heat and thermodynamics using calculus.

**Transfer:** CSU; UC. (CAN PHYS 8)

## 8B PRINCIPLES OF PHYSICS (5.0)

7.0 hours per week: (4.0 hours lecture, 3.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* PHYS 8A and MATH 65B

Presents the principles of wave motion, sound, geometric and physical optics, static and dynamic electricity and magnetism, D.C. and A.C. circuit theory and electromagnetic waves using calculus.

**Transfer:** CSU; UC.

## 8C MODERN PHYSICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* PHYS 8B

Presents the principles of relativity, waves and particles, Bohr theory, quantum mechanics and Schrodinger's equation, elementary atomic structure, nuclear structure and radioactivity using calculus and vector algebra.

**Transfer:** CSU; UC.

## 10 INTRODUCTION TO PHYSICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* MATH 23 or MATH 23SI

*Advisory:* ENGL 56 or ENGL 65

Presents a survey of physical laws and principles involved in classical and modern physics. Not open to students who have credit for PHYS 1A.

**Transfer:** CSU; UC.

## 30 TECHNICAL PHYSICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* MATH 24A or equivalent

*Corequisite:* MATH 24B or equivalent

Presents the basic physics principles of statics and dynamics of particles and rigid bodies, fluids, heat, gases, and waves.

## 93 PHYSICS SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## POLITICAL SCIENCE - POLSCI

### 1 INTRODUCTION TO POLITICAL SCIENCE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Surveys the scope, methods and theories of political science with special emphasis on contemporary political issues and problems.

**Transfer:** CSU; UC.

### 2 GOVERNMENT AND POLITICS OF THE UNITED STATES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Presents an introduction to the institutions, operation, and policy outputs of the American political system at the national, state, and local levels. The structures and functions of American government will be explored in the context of their historical development and their relation to political power and interest today.

**Transfer:** CSU; UC. (CAN GOVT 2)

### 4 WORLD POLITICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Examines the nature of relations among states. Analyzes the basic forces affecting the formulation of foreign policy and the dynamics of international politics. Emphasizes contemporary problems affecting the United States of America in relation to other nations of the world.

**Transfer:** CSU; UC.

### 5 LAW AND POLITICS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 1A

Introduces the political and constitutional context of major legal

# COURSES (CONTINUED)

controversies, including but not limited to civil rights, civil liberties, presidential versus congressional power, and national versus state and local power.

**Transfer:** CSU.

## 6 COMPARATIVE GOVERNMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: Eligibility for ENGL 56*

Studies and compares constitutional principles, institutions, governments, and political problems of selected foreign countries and regions. Emphasizes current political philosophies, developments, institutions, and practices on a regional basis.

**Transfer:** CSU; UC.

## 9 INTRODUCTION TO POLITICAL THEORY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: POLSCI 1 and Eligibility for ENGL 1A*

Surveys the diversity of ideas and concepts in political thought from the ancients to the present, from Plato to contemporary feminism.

**Transfer:** CSU; UC.

## 37 GOVERNMENT/POLITICS INTERNSHIP (1.0 to 3.0)

9.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: POLSCI 2 and approval of instructor*

Provides practical experience in the office of an elected representative, a government agency, or a non-governmental organization. Instructor will coordinate placement.

## 47 INDEPENDENT STUDIES: POLITICAL SCIENCE (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or practicum experience by an individual student in a selected topic of government under the direction of an instructor. Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## PSYCHIATRIC TECHNICIAN - PSYTEC

### 7 NURSING SCIENCE (18.5)

34.5 hours per week: (14.5 hours lecture, 20.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: PSYTEC 10*

Presents principles of mental health and physical health,

the maintenance of health, anatomy and physiology, and an understanding of disease and its treatment. Develops the ability to perform basic care activities, provides learning experiences in the care of children, adults, and aged patients with medical/surgical conditions.

**Transfer:** CSU.

### 8 CARE OF THE DEVELOPMENTALLY DISABLED (17.0)

33.5 hours per week: (12.5 hours lecture, 21.0 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: PSYTEC 7*

Studies the care of the developmentally disabled. Provides learning experiences in community facilities and continued practice in individual and group work.

**Transfer:** CSU.

### 9 PSYCHIATRIC NURSING (18.5)

34.5 hours per week: (14.0 hours lecture, 20.5 hours laboratory)\*  
Associate Degree Applicable  
*Prerequisite: PSYTEC 7*

Introduces psychological and mental health concepts. Presents the causes, prevention, and treatment of mental, emotional and behavioral disorders. Provides practice in interpersonal skills, self-understanding, problem solving, communication, and the use of rehabilitative methods in providing patient care.

**Transfer:** CSU.

### 10 INTRODUCTION TO PSYCHIATRIC TECHNICIAN (6.5)

40.0 hours lecture per week\*  
Associate Degree Applicable  
*Prerequisite: Admission to the Psychiatric Technician Program*

Introductory psychiatric technician training program. Concepts necessary to practice safely and legally in a forensic mental institution are presented. The effect of culture and its affect on the client and care are presented.

### 93 PSYCHIATRIC TECHNICIAN SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## PSYCHOLOGY - PSYCH

### 1A INTRODUCTORY PSYCHOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory: ENGL 56*

Introduces the field of psychology through a study of the facts and principles involved in learning, development, motivation, personality adjustment and the physiological and social bases of

## COURSES (CONTINUED)

behavior. Presents basic concepts, vocabulary and methods of psychology. Emphasis is placed on those concepts which relate to an understanding of human behavior

**Transfer:** CSU; UC. (CAN PSY 2)

### 2 INTRODUCTION TO BIOLOGICAL PSYCHOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* PSYCH 1A

Presents an analysis of the biological bases of behavior in terms of evolutionary, genetic, anatomical and physiological determinants. Examines heredity, development, sensory processes and the function of the nervous and endocrine systems.

**Transfer:** CSU; UC.

### 6 INTRODUCTION TO SOCIAL PSYCHOLOGY (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* PSYCH 1A

Introduces the basic concepts, principles, issues and methods useful in understanding social behavior. Emphasizes social thinking and influence, attitudes, biases, group structure and conflict.

**Transfer:** CSU; UC.

### 33 PERSONALITY AND ADJUSTMENT (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* PSYCH 1A

Presents theories in the study of personality. Includes a comparison of healthy and unhealthy developmental patterns. Emphasizes self-management techniques as a means of understanding and changing behavior.

**Transfer:** CSU; UC.

### 35 PSYCHOLOGICAL PRINCIPLES OF COMMUNICATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Presents a psychological study of communication in terms of its role in interpersonal relationships, groups, and society. Attention is focused on the development and function of various models of communication.

**Transfer:** CSU.

### 47 INDEPENDENT STUDIES: PSYCHOLOGY (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of psychology under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## REAL ESTATE - RE

### 47 INDEPENDENT STUDIES: REAL ESTATE (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Real Estate under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

### 60 REAL ESTATE PRINCIPLES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Presents basic real estate terminology and provides a general overview of the industry. Covers real estate law, finance, appraisal, construction, escrow, and career opportunities. Meets the Department of Real Estate's pre-licensing requirements.

### 62 REAL ESTATE PRACTICES (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* RE 60

Studies the activities of the broker and salesperson in the real estate business. Includes the real estate office, listings, various disclosure forms, evaluation of listings, prospecting, advertising, exchanges, property management and leasing, land utilization and development, public relations, supervision of sales force, and ethics of the real estate business.

### 63 LEGAL ASPECTS OF REAL ESTATE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Introduces the legal aspects and current laws pertaining to real estate.

### 64 REAL ESTATE FINANCE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Introduces principles and practices of real estate finance.

## COURSES (CONTINUED)

Emphasizes financing and techniques employed in originating and servicing home loans.

### 93 REAL ESTATE SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## SIGN LANGUAGE - SL

### 15A BEGINNING AMERICAN SIGN LANGUAGE (3.0)

3.0 hours lecture per week

Associate Degree Applicable

Introduces expressive and receptive skills used in American Sign Language (ASL) through vocabulary development, grammar, non-manual behaviors, and finger spelling. Provides exposure to Deaf Culture by reviewing the history of ASL, dynamics of the Deaf Community, varieties of manual communication, Deaf President Now protest, and cultural customs of communication.  
**Transfer:** CSU; UC.

### 15B AMERICAN SIGN LANGUAGE II (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* SL 15A with a grade of C or better or equivalent

Emphasizes sign language competency, vocabulary enlargement, and expressive and receptive skill development.

**Transfer:** CSU; UC.

### 15C AMERICAN SIGN LANGUAGE III (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* SL 15B with a grade of C or better or equivalent

Continues skills presented in SL 15B. Emphasizes fluency in communicating with the deaf as practiced in a variety of situational contexts. Explores creative uses of American Sign Language.

**Transfer:** CSU; UC.

## SOCIOLOGY - SOC

### 1A INTRODUCTION TO SOCIOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Introduces the basic principles of sociology including the study of the structure of human society, and the structure and process of group life.

**Transfer:** CSU; UC. (CAN SOC 2)

### 1B SOCIAL INSTITUTIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*\* All course hours (lecture & lab) in the catalog are listed as semester long courses except for those courses coded with an asterisk. Asterisk coded courses are always taught in less than a full semester.*

*Advisory:* SCO 1A and eligibility for ENGL 56

Studies the major social institutions (family, economy, religion, education, and politics) including their structures and functions. Considers major works and draws comparisons between our institutions and those of other societies.

**Transfer:** CSU; UC.

### 2 SOCIAL PROBLEMS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* SOC 1A and eligibility for ENGL 56

Examines current social problems and the sociological concepts, theories, and methods used in their analysis. Emphasis is on the role of power and ideology in the definition of social problems, the causes and consequences of social problems, and the methods of intervention. Topics include crime, poverty, gender inequality, race/ethnic inequality, and family problems.

**Transfer:** CSU; UC. (CAN SOC 4)

### 4 INTRODUCTION TO CRIMINOLOGY (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* SOC 1A and eligibility for ENGL 56

Introduces the basic principles of criminology including the various theories of criminal behavior and the processing of delinquency and crime including arrest, trial, detention, and release from prison.

**Transfer:** CSU.

### 6 MINORITY GROUP RELATIONS (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* SOC 1A and eligibility for ENGL 56

Surveys the characteristics of selected minority groups in America. Studies issues and social conflicts associated with minority-group dominant relationships.

**Transfer:** CSU; UC.

### 8 INTRODUCTION TO WOMEN'S STUDIES (3.0)

3.0 hours lecture per week

Associate Degree Applicable

*Advisory:* ENGL 56

Studies the interaction of gender and society. Introduces theories of gender differentiation, stratification, and gender roles. Discusses research methodology and examines current research on gender, both within and outside the United States. Investigates how social and cultural factors (e.g., race, class) have shaped the lives of men and women as well as how they have affected their social and cultural environments. Examines the role and status of U.S. women and men within the larger social structure. Women and men in varying cultural settings will be examined, with an emphasis on how social systems shape the roles of women and affect larger U.S. institutions.

# COURSES (CONTINUED)

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: SOCIOLOGY (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of sociology under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## SPANISH - SPAN

### 1 ELEMENTARY SPANISH

(4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

Presents a topic-based, introductory course in contemporary Spanish with emphasis on listening comprehension, language acquisition, oral interaction, culture-centered reading, and writing basic Spanish. Social and cultural aspects of the Spanish-speaking world are presented along with some of the most essential forms, structures, and vocabulary in the language. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN SPAN 2)(SPAN 1 + SPAN 2 = CAN SPAN SEQ A)

### 2 SPANISH

(4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* SPAN 1 or equivalent

Presents a continuation of SPAN 1 with a topic-centered, intensive practice in listening comprehension, language acquisition, oral interaction, and writing development. Selected readings from the Hispanic world include cultural vignettes, prose, and poetry. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN SPAN 4)(SPAN 1 + SPAN 2 = CAN SPAN SEQ A)

### 3 SPANISH

(4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* SPAN 2 or equivalent

Presents a continuation of SPAN 2 incorporating an intensive review with topic-centered intensive practice in listening comprehension, language acquisition, oral interaction, and paragraph writing. Selected readings from the Hispanic world include social, cultural, and history vignettes, prose, and poetry. Language laboratory practice is required.

**Transfer:** CSU; UC. (CAN SPAN 8)(SPAN 3 + SPAN 4 = CAN SPAN SEQ B)

### 4 SPANISH

(4.0)

5.0 hours per week: (4.0 hours lecture, 1.0 hours laboratory)

Associate Degree Applicable

*Prerequisite:* SPAN 3 or equivalent

Presents a continuation of SPAN 3 and gives extensive practice in composition, conversation and comprehension. Drawing from authentic sources, the course provides a comprehensive grammar review, extensive oral practice and an introduction to literary concepts. Competency reflects the students' emerging ability to perform both orally and in written form with complicated situations. Language lab practice is required. Lab material is computer-based and includes an interactive CD ROM, digitalized video and extensive on-line resources either created or organized by the instructor.

**Transfer:** CSU; UC. (CAN SPAN 10)(SPAN 3 + SPAN 4 = CAN SPAN SEQ B)

### 10 CONVERSATIONAL SPANISH WITH A FOCUS ON DAILY ACTIVITIES

(1.0)

2.0 hours lecture per week\*

Associate Degree Applicable

*Prerequisite:* SPAN 1 or equivalent

Presents an opportunity to practice and build upon previously acquired Spanish speaking and listening skills. Through topic-based conversations, guided discussions and skills building activities (both controlled and spontaneous), students will continue to develop their oral/aural abilities in Spanish. Course emphasis will include increasing speaking proficiency and adding to awareness of aspects of the diverse Hispanic culture. This course is offered in 9 week modules. The vocabulary component varies in accordance with the topic of the module. The grammar component is common to all modules. This course is taught in Spanish.

Course may be taken 4 times.

**Transfer:** CSU.

### 43 FACILITATOR ASSISTED LEARNING: SPANISH

(0.5)

9.0 hours lecture per week\*

Associate Degree Applicable

*Advisory:* Completion of or concurrent enrollment in ENGL 56

Develops interpersonal skills, understanding of the learning process, and effectiveness as a facilitator. Prepares students to facilitate in their subject area.

**Transfer:** CSU.

### 44A FACILITATOR ASSISTED LEARNING PRACTICUM: SPANISH

(1.0)

1.0 hours lecture per week

Associate Degree Applicable

*Prerequisite:* Completion of or concurrent enrollment in SPAN 43

*Advisory:* Completion of or concurrent enrollment in ENGL 56

Provides practical applications of facilitator assisted learning (FAL) in small groups of Spanish language students.

# COURSES (CONTINUED)

**Transfer:** CSU.

## 44B FACILITATOR ASSISTED LEARNING PRACTICUM: SPANISH (1.0)

1.0 hours lecture per week  
Associate Degree Applicable  
*Prerequisite:* Completion of or concurrent enrollment in SPAN 44A  
*Advisory:* Completion of or concurrent enrollment in ENGL 56

Provides practical applications of facilitator assisted learning (FAL) in small groups of Spanish language students.

**Transfer:** CSU.

## 47 INDEPENDENT STUDIES: SPANISH (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Spanish under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

## 93 SPANISH SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## SPEECH - SPCH

### 1A PUBLIC ADDRESS (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Introduces public speaking with an emphasis on clear, logical organization and effective delivery of expository and persuasive speeches.

**Transfer:** CSU; UC. (CAN SPCH 4)

### 2A ORAL INTERPRETATION OF LITERATURE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

Presents an introduction to the oral reading of prose, poetry, and dramatic literature. Emphasis is placed on techniques of delivery and literary analysis.

**Transfer:** CSU; UC.

### 10 SMALL GROUP DISCUSSION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable

*Advisory:* Eligibility for ENGL 56

Provides for an exploration of discussion techniques, personality interaction and group decision making. Students will select and research the topics for class discussions.

**Transfer:** CSU. (CAN SPCH 10)

### 12 INTERCULTURAL COMMUNICATION (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 56

Focuses on the importance of culture and its effect on communication. Examines interactive patterns of communication across various cultural contexts (international, ethnic, gender, and class) and assess different methods and techniques of adapting communication to enhance and overcome the difficulties of intercultural communication. Analyzes how cultures adapt, borrow, communicate verbally and non-verbally, and are represented in a diverse world.

**Transfer:** CSU; UC.

### 15 ARGUMENTATION AND DEBATE (3.0)

3.0 hours lecture per week  
Associate Degree Applicable  
*Advisory:* Eligibility for ENGL 1A

Building, defending, and refuting arguments in formal and informal settings. Evaluation and use of evidence, reasoning, and sources. Emphasis on oral advocacy and debate skills such as organization, refutation, cross examination, and audience adaptation. Students will debate and communicate arguments orally.

**Transfer:** CSU; UC.

### 47 INDEPENDENT STUDIES: SPEECH (0.5 to 2.0)

6.0 hours laboratory per week  
Associate Degree Applicable  
*Prerequisite:* The student must have completed preparatory course work in the field in which the study is to be undertaken

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of speech under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer:** CSU; UC.

### 93 SPEECH SPECIAL TOPIC (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

## VOCATIONAL ESL - VESL

### 701 WORK-RELATED CONVERSATIONAL SKILLS, LEVEL 1 (0.0)

# COURSES (CONTINUED)

3.0 hours lecture per week

*Advisory: ESL placement evaluation or equivalent*

Focuses on work-related conversation, reading, and writing for the non-native speaker at the beginning level. No English is required.

## 702 WORK-RELATED CONVERSATIONAL SKILLS, LEVEL 2 (0.0)

3.0 hours lecture per week

*Advisory: VESL 1 or equivalent*

Presents a continuation of VESL 1, focusing on work-related reading, conversation, and writing for the non-native speaker.

## WELDING - WELD

### 47 INDEPENDENT STUDIES: METALS TECHNOLOGY (2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the technical field in which the study is to be undertaken*

Provides an opportunity for in-depth study or practicum experience by an individual student in a selected topic in the Welding Technology area with support and direction from an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

**Transfer: CSU.**

### 70A BASIC WELDING (3.0 to 4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

Provides for basic instruction in oxyacetylene and shielded metal arc welding. Begins with the fundamentals and quickly progresses through intermediate skills for welding steel. Includes information on cutting, braze welding, metallurgy, vertical arc welding and non-ferrous welding. An emphasis is placed on developing good manipulative welding skills for joining steel in the flat and horizontal positions.

Course may be taken 2 times.

**Transfer: CSU.**

### 70B ADVANCED WELDING (3.0 to 4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: WELD 70A*

Continues WELD 70A with emphasis placed on vertical and overhead welding with the shielded metal arc processes. Includes instruction on air carbon arc gouging, flux core arc welding, and development of welding procedures and techniques.

**Transfer: CSU.**

### 70C WELDING: GMAW & GTAW (3.0 to 4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: WELD 70A*

Presents advanced welding with Gas Tungsten Arc (Heliarc) Welding, Gas Metal Arc (Wire Feed) Welding and Flux Core Arc Welding processes on ferrous and nonferrous materials.

Course may be taken 3 times.

**Transfer: CSU.**

### 77 METAL FABRICATION (3.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: WELD 70A*

Provides an opportunity to design and construct major projects from metal. Manufacturing processes and production techniques are included in planning and developing projects.

Course may be taken 2 times.

**Transfer: CSU.**

### 80 WELDING CERTIFICATION (3.0 to 4.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

Associate Degree Applicable

*Prerequisite: Completion of or concurrent enrollment in WELD 70B*

Continues WELD 70B. Prepares the student to meet industry standards in shielded metal arc welding on plate steel. Includes performance and procedure qualification, workmanship, techniques, inspection. Provides opportunity for certification to the American Welding Society D1.1 Structural Welding Code.

Course may be taken 2 times.

**Transfer: CSU.**

### 570A BASIC WELDING (0.0)

6.0 hours per week: (2.0 hours lecture, 4.0 hours laboratory)

Provides for basic instruction in oxyacetylene and shielded metal arc welding. Begins with the fundamentals and quickly progresses through intermediate skills for welding steel. Includes information on cutting, braze welding, metallurgy, vertical arc welding and non-ferrous welding. An emphasis is placed on developing good manipulative welding skills for joining steel in the flat and horizontal positions.

### 570B ADVANCED WELDING (0.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)

*Prerequisite: WELD 70A, WELD 570A or consent of instructor*

Continues WELD 70A with emphasis placed on vertical and overhead welding with the shielded metal arc processes. Includes instruction on air carbon arc gouging, flux core arc welding, and development of welding procedures and techniques.

### 570C WELDING: GMAW & GTAW (0.0)

## COURSES (CONTINUED)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)  
*Prerequisite: WELD 70A, WELD 570A or consent of instructor*

Presents advanced welding with Gas Tungsten Arc (Heliarc) Welding, Gas Metal Arc (Wire Feed) Welding and Flux Core Arc Welding processes on ferrous and nonferrous materials.

### 580 WELDING CERTIFICATION (0.0)

8.0 hours per week: (2.0 hours lecture, 6.0 hours laboratory)  
*Prerequisite: Completion of or concurrent enrollment in WELD 70B or WELD 570B or consent of instructor*

Continues WELD 70B. Prepares the student to meet industry standards in shielded metal arc welding on plate steel. Includes performance and procedure qualification, workmanship, techniques, inspection. Provides opportunity for certification to the American Welding Society D1.1 Structural Welding Code.

## WELLNESS - WELL

### 100 ADULT FITNESS (0.0)

3.0 hours laboratory per week

Presents an opportunity to begin or continue a lifetime fitness program. Students will participate in activities developing flexibility, muscular endurance, muscular strength, cardiovascular and general conditioning. Group or individual activities may include weight training, aerobics, step training, running, walking, water exercise, resistance workout, use of exercise equipment, etc.

### 101 ADAPTED AQUATICS (0.0)

3.0 hours laboratory per week

Provides an individualized aquatic exercise program for students with a disability. Improves flexibility, strength, and endurance using the water as a source of buoyancy and resistance.

## WORK EXPERIENCE - WRKEXP

### 10 INTRODUCTION TO WORKPLACE READINESS (3.0)

3.0 hours lecture per week  
 Associate Degree Applicable

Introduction of fundamentals for workplace readiness and job retention. Students will develop skills related to customer service, workplace attitude, written and oral communication, and ethical behavior; students will also create a resume and complete a job application, and develop qualities sought by employers. Course may be taken 4 times.

**Transfer:** CSU.

### 11 INTRODUCTION TO WORKPLACE READINESS: VESL (3.0)

8.0 hours per week: (5.0 hours lecture, 3.0 hours laboratory)\*

Associate Degree Applicable

Introduction of fundamentals for workplace readiness and job retention, as well as basic ESL grammar and vocabulary pertaining to the workplace. Students will learn to develop oral and written communication skills, complete an employment application, interview techniques, build interactive workplace relations, and develop qualities sought by employers. Course may be taken 4 times.

**Transfer:** CSU.

### 47 INDEPENDENT STUDIES: WORK EXPERIENCE (0.5 to 2.0)

6.0 hours laboratory per week

Associate Degree Applicable

*Prerequisite: The student must have completed preparatory course work in the field in which the study is to be undertaken*

Provides an opportunity for an in-depth study or a practicum experience by an individual student in a selected topic of Work Experience under the direction of an instructor.

Course may be repeated 4 times (only if each time has a different topic emphasis).

### 50 COOPERATIVE WORK EXPERIENCE (0.5)

0.5 hours lecture per week

Associate Degree Applicable

*Prerequisite: Spring or Fall semester: maintain a minimum of 7 units including Work Experience and work a minimum of 5 hours per week Summer session: maintain enrollment in one other credit course and work 7.5 hours per week Approval of Dean or Designee*

*Corequisite: WRKEXP 50L*

Cooperative Work Experience is a program where working students learn skills, increase performance and explore short and long range career goals on the job. Through collaborative efforts among employers, instructors, and college coordinators students accomplish specific measurable learning objectives and are given laboratory credit for hours worked. Requests for information are coordinated through the Cooperative Education Work Experience program. WRKEXP 50 and WRKEXP 50L have a credit limitation of 16 units.

Course may be taken 4 times.

**Transfer:** CSU.

### 50L COOPERATIVE WORK EXPERIENCE LAB (0.5 to 3.5)

20.0 hours laboratory by arrangement per week

Associate Degree Applicable

*Corequisite: LEADER 55*

Examines and provides information on work-related topics. Students enrolling in this class must have a job, working a minimum of 5 hours per week, be enrolled in a minimum of 7 units, including Cooperative Work Experience, and be enrolled in LEADER 55. For summer, students must be enrolled in one other credit course, and be working a minimum of 7.5 hours per

## COURSES (CONTINUED)

week.

Course may be taken 4 times.

**Transfer:** CSU.

### 51 COOPERATIVE WORK EXPERIENCE (0.5) EDUCATION - GENERAL

0.5 hours lecture per week

Associate Degree Applicable

*Prerequisite: Maintain enrollment in a minimum of 7 units, including Cooperative Work Experience, and be working a minimum of 5 hours per week*

*Corequisite: WRKEXP 51L*

General Work Experience is supervised employment intended to assist students in acquiring desirable work habits, attitudes, and career awareness. The work experience need not be related to the student's educational goals.

Course may be taken 4 times.

### 51L COOPERATIVE WORK EXPERIENCE (0.5 to 2.5) LAB - GENERAL

15.0 hours laboratory by arrangement per week

Associate Degree Applicable

*Corequisite: WRKEXP 51*

Examines and provides information on work-related topics.

Students enrolling in this class must have a job, working a minimum of 5 hours per week, be enrolled in a minimum of 7 units, including Cooperative Work Experience, and be enrolled in WRKEXP 51. For Summer, students must be enrolled in one other credit course, and be working a minimum of 7.5 hours per week.

Course may be taken 4 times.

### 52 COOPERATIVE WORK EXPERIENCE (0.5) EDUCATION-OCCUPATIONAL

0.5 hours lecture per week

Associate Degree Applicable

*Prerequisite: Maintain enrollment in a minimum of 7 units, including Cooperative Work Experience, and be working a minimum of 5 hours per week*

*Corequisite: WRKEXP 52L*

Occupational Work Experience is supervised employment, extending classroom learning at an on-the-job learning station, and relating to the student's educational or occupational goals.

Course may be taken 4 times.

**Transfer:** CSU.

### 52L COOPERATIVE WORK EXPERIENCE (0.5 to 3.5) LAB - OCCUPATIONAL

20.0 hours laboratory by arrangement per week

Associate Degree Applicable

*Corequisite: WRKEXP 52*

Examines and provides information on work-related topics.

Students enrolling in this class must have a job, working a minimum of 5 hours per week, be enrolled in a minimum of 7

units, including Cooperative Work Experience, and be enrolled in WRKEXP 52. For Summer, students must be enrolled in one other credit course, and be working a minimum of 7.5 hours per week.

Course may be taken 4 times.

**Transfer:** CSU.

### 93 WORK EXPERIENCE SPECIAL TOPICS (0.5 to 4.0)

Associate Degree Applicable

Examines a special topic in the field of study related to the discipline offering this course.

### 510 INTRODUCTION TO WORKPLACE (0.0) READINESS

8.0 hours per week: (5.0 hours lecture, 3.0 hours laboratory)

Introduction of fundamentals for workplace readiness and job retention. Students will learn to develop oral and written communication skills, complete an employment application, interview techniques, build interactive workplace relations, and develop qualities sought by employers.

### 511 INTRODUCTION TO WORKPLACE (0.0) READINESS:VESL

8.0 hours per week: (5.0 hours lecture, 3.0 hours laboratory)

Introduction of fundamentals for workplace readiness and job retention, as well as basic ESL grammar and vocabulary pertaining to the workplace. Students will learn to develop oral and written communication skills, complete an employment application, interview techniques, build interactive workplace relations, and develop qualities sought by employers.