

## **COURSE DESCRIPTIONS**



# COURSE DESCRIPTIONS

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## COURSE DESCRIPTIONS

Course descriptions are arranged alphabetically by subject field and are distinguished by identifying numbers and course titles.

The credit value of each course is indicated in semester units. Each unit represents one hour per week of lecture or recitation, or a longer time in laboratory or activity classes. Some courses may be repeated for credit, but only if explicitly indicated in the description. Students wishing to repeat a course for the purpose of recalculating the grade point average should refer to the description regarding "Course Repetition."

Below each course title, the units, hours, prerequisites, and the course description are given. Students should read this material carefully to be sure that they are qualified to take the course and that the course content meets their needs and interests.

In many areas, courses are intended to be taken in sequence. This is especially true in mathematics, the sciences, foreign languages and English. In these cases, credit will not be given for a lower-level course after receiving credit for a higher-level course (i.e., no credit is earned for Spanish I if it is taken after credit has been earned for Spanish II, etc.).

A Schedule of Classes is issued at the opening of the fall, winter, spring and summer terms, and lists the courses to be offered.

## OPEN CLASSES

It is the policy of this District that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the College and who meets such prerequisites as may be established pursuant to Chapter II, Division 2, Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

## COURSE PREREQUISITES

Some courses offered by the college require the completion of a prerequisite. A prerequisite is a course or assessment process that must be satisfactorily completed before a more difficult course is attempted. Students are advised to consult the course descriptions found in the current college catalog or class schedule for the identification of the prerequisites for a course.

All prerequisite classes must have been completed with a satisfactory grade. Satisfactory grade means that, for the course in question, the grade earned must be a CR or C or better; D, F, or NC grades are not acceptable.

**Important Definitions:** If you should see the words

Prerequisite, Co-requisite or Strongly Recommended in the catalog, it is important for you to understand the definition of these terms:

- Prerequisite – a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.
- Co-requisite – a condition of enrollment consisting of a course that a student is required to take simultaneously in order to enroll in another course.
- Strongly Recommended or Recommended Preparation – a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in course or educational program.

## Procedures for Challenging a Prerequisite

Prerequisite Challenge Petitions are available in the Counseling Office. A prerequisite may be challenged for the following reasons:

1. The prerequisite has not been made reasonably available;
2. It was established in violation of regulation or in violation of the District-approved process;
3. The prerequisite is discriminatory or applied in a discriminatory manner; and/or,
4. You have knowledge or ability to succeed in the course despite not meeting the prerequisite.

In each case, the student is to provide documentation to support the challenge.

## DEGREE APPROPRIATE CLASSES

Certain courses in English, mathematics and other basic skills can no longer be used toward the 60-unit requirement for the associate degree. These non-degree-applicable (NDA) courses include English 010, 011, 012, 033, 034, 035, and 063; ESL 060, 061, 065, 070, 071, 075, and 081; General Studies 050-099; Information Technology 040, and 051; Family Studies and Early Childhood Education 050; and Mathematics 010, 025, 026, 030, 057, 058, 059, 060.

## TRANSFERABLE COURSES

In the following course descriptions, "CSU" indicates that a course is baccalaureate certified to California State Universities; "UC" indicates that a course is transferable to the University of California.

**ADMINISTRATION OF JUSTICE****ADMJUS 101 INTRODUCTION TO LAW ENFORCEMENT**

3 units

3 hours lecture weekly

A study of the role and responsibilities of each segment within the administration-of-justice system: law enforcement, judicial, corrections. The history and philosophy of criminal justice in America and the system's parts, role expectations and relationships. Theories of crime effects, punishment, ethics, education and training. CSU:UC

**ADMJUS 110 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM**

3 units

3 hours lecture weekly

An exposure to the court system and the procedures from initial entry to final disposition and the relationship each segment maintains with its system members. CSU:UC

**ADMJUS 125 CRIMINAL LAW I**

3 units

3 hours lecture weekly

Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice, legal research; study of case law; methodology; and concepts of law as a social force. CSU:UC

**ADMJUS 130 REPORT WRITING**

3 units

3 hours lecture weekly

A specialized writing course for students who are considering entry into law enforcement, security work or those currently employed in those fields. Presents a simple review of basic grammar, punctuation, spelling and sentence structure and reviews basic investigation principles, note-taking techniques and rules for writing police reports, warrants and memos. CSU

**ADMJUS 135 CRIMINAL EVIDENCE**

3 units

3 hours lecture weekly

An introduction for students entering law enforcement or those students having an interest in the study of law. Covers relevant constitutional issues, Supreme Court decisions and the federal and California rules of evidence. Major topics include types, kinds and preserva-

tion of evidence; the Hearsay Rule; admissibility; privileges; identification; searches and consent. CSU

**ADMJUS 150 PATROL PROCEDURES**

3 units

3 hours lecture weekly

Exploration of theories, philosophies and concepts related to the role expectations of the line enforcement officer. Emphasis is placed upon the patrol, traffic, and public-service responsibilities and their relationship to the administration of justice. CSU

**ADMJUS 155 CRIMINAL INVESTIGATION**

3 units

3 hours lecture weekly

The study of basic principles of all types of investigations utilized in the justice system. Coverage will include human aspects in dealing with the public, specific knowledge for handling crime scenes: interviews, evidence, surveillance, follow-up, technical resources, and case preparation. CSU

**ADMJUS 160 TRAFFIC: ENFORCEMENT/ INVESTIGATION**

3 units

3 hours lecture weekly

Traffic-law enforcement, accident investigation, and traffic control; primary emphasis on the California Vehicle Code. Basic accident reporting and classification; determination of cause and prevention. Not open to students having credit for Administration of Justice 145. CSU

**ADMJUS 175 VICE**

3 units

3 hours lecture weekly

Presents the social, political, practical, moral and legal issues of vice control; discusses the influence of organized crime on vice activity. Considers the laws dealing with prostitution, gambling and pornography. CSU

**ADMJUS 180 DANGEROUS DRUGS AND NARCOTICS**

3 units

3 hours lecture weekly

The law-enforcement role relating to narcotics and dangerous drugs. The course includes a study of laws pertaining to controlled substances, identification of drugs, symptoms of use and investigative techniques. CSU

## **ADMINISTRATION OF JUSTICE**

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### **ADMJUS 185 POLICE-COMMUNITY RELATIONS**

3 units

3 hours lecture weekly

An in-depth exploration of the roles of the administration-of-justice practitioners and their agencies. Through interaction and study, the student will become aware of the interrelationships and role expectations among the various agencies and the public. Principal emphasis will be placed on the professional image of the system of justice administration and the development of positive relationships between members of the system and the public. CSU:UC

### **ADMJUS 190 POLICE ADMINISTRATION**

3 units

3 hours lecture weekly

Specialized training for those wishing an understanding of law-enforcement management as well as preparing those in law enforcement for supervisory positions. Subjects covered include organization, administration, training and personnel selection. CSU

### **ADMJUS 198 ADVANCED OFFICER TRAINING**

0.5 – 5 units

Special-topics courses in a variable format depending on subject matter. Course content includes refresher material from all areas of law-enforcement responsibility such as law, firearms, first aid, and patrol procedures. Each course will have its own title and letter designation in the schedule of classes. (Formerly AJ-199).

### **ADMJUS 250 SHERIFF'S TRAINING ACADEMY**

10 units

20 hours lecture, 20 hours lab weekly

*Prerequisite: Student must successfully pass POST entry-level law-enforcement test battery, physical-agility test, fingerprint background check, comprehensive medical exam and oral interview. Interested applicants should pick up the Academy Application Packet and make an appointment for interview with the academy coordinator.*

A POST-certified, 18-week course designed to prepare the student for employment with California law-enforcement agencies. CSU

### **ADMJUS 251 RESERVE TRAINING ACADEMY - LEVEL I**

5 units

10 hours lecture, 8 hours lab weekly

*Prerequisite: Student must pass written exam with minimum score of 70 percent, successfully complete physical-agility and strength test, medical exam, psychiatric evaluation, and intensive personal background investigation.*

A 22-week, POST-certified course designed to prepare students for comprehensive voluntary services to California law-enforcement agencies. This course will provide students with the basic training required by the Commission of Peace Officer Standards and training for California peace officers. Students will be trained in functional areas of law enforcement including community relations, criminal law, criminal evidence, patrol procedure investigation, vehicle code, vehicle operations and communications. Additional training will include physical conditioning, health, self-defense tactics and special training in weapons and marksmanship. CSU

### **ADMJUS 252 RESERVE TRAINING ACADEMY - LEVEL II**

3 units

10 hours lecture , 8 hours lab weekly

*Prerequisite: Student must pass written exam with minimum score of 70 percent, successfully complete physical-agility and strength test, medical exam, psychiatric evaluation, and intensive personal background investigation.*

A 16-week, POST-certified course designed to prepare students for voluntary services to California law enforcement agencies. This course will provide students with the basic training required by the Commission on Peace Officer Standards and Training for California peace officers. Students will be trained in functional areas of law enforcement including community relations, criminal law, criminal evidence, patrol procedure investigation, vehicle code, vehicle operations and communications. Additional training will include physical conditioning, health, self-defense tactics and special training in weapons and marksmanship. CSU

**ADMJUS 253 CORRECTIONS OFFICER BASIC ACADEMY SUPPLEMENTAL CORE-COURSE**

3 units

27 hours lecture, 13 hours lab weekly

*Prerequisite: Administration of Justice 250 or other basic POST academy course.*

A basic academy supplemental course designed for the corrections officer who is a peace officer and who has completed the POST basic course (AJ 250). Specific subjects include codes and statutes relevant to custody, legal rights of inmates, classification and identification of contraband, booking and reception, jail investigations, search techniques, supervision of inmates, indicators of substance abuse, physical and medical problems, emergency procedures and responsibilities for inmate work assignments, and inmate visiting. CSU

**ANTHROPOLOGY****ANTHRO 101 PHYSICAL ANTHROPOLOGY**

3 units

3 hours lecture weekly

The study of humans and the lower primates primarily from the biological perspective covering a period of approximately 70 million years. Deals with human-population genetics in the conceptual framework of evolutionary processes. Includes primate behavior, primate evolution and comparison, and the study of fossil humans. Concludes with the analysis of the concepts of race formation and classification in terms of human population genetics. (CAN: ANTH 2) CSU:UC

**ANTHRO 103 CULTURAL ANTHROPOLOGY**

3 units

3 hours lecture weekly

A study of the nature of humankind, culture and society. Includes concepts and theories for the analysis and understanding of culture and society. Survey of topics such as prehistory and culture growth, social organization, family systems, politics and economics, war, religion, values, culture shock and applied anthropology. Combines lectures and class discussions with in-depth studies of selected cultures. (CAN: ANTH 4) CSU:UC

*Note: Anthropology 103 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Faces of Culture." Refer to information on College by Television in this catalog and to the schedule of classes published each semester.*

**ANTHRO 105 INTRODUCTION TO ARCHAEOLOGY**

3 units

3 hours lecture weekly

A general course in archaeology for beginning students. The material includes archaeology as a profession, methods of locating and excavating sites, preservation and restoration of artifacts, methods of dating materials, and the study of selected archaeological sites in both the New and Old World from Paleolithic through Neolithic periods. An emphasis will be given to classical sites and will include the development of agriculture, the domestication of animals, and the rise of the city. (CAN: ANTH 6) CSU:UC

**ANTHRO 210 INDIANS OF CALIFORNIA**

3 units

3 hours lecture weekly

A survey course aimed at reviewing the main cultural aspects of the California Indians. The course includes the prehistory, modes of subsistence, social organization, customs, and geographical and historical relationships of the native people of California and draws upon ethnological, ethnographical, historical and archaeological materials. CSU:UC

**ANTHRO 299 DIRECTED STUDY IN CULTURAL ANTHROPOLOGY**

1-3 units, may be taken four times

Hours: TBA

*Prerequisite: None. Note: Limited to 15 students per semester.*

Independent study in the field of anthropology under the guidance of the instructor. Requires the writing of a research paper as part of an individual or group project. CSU:(UC limited credit)

**ART****ART 110 HISTORY OF ART: PALEOLITHIC TO RENAISSANCE (Formerly Art 111)**

3 units

3 hours lecture weekly

*Prerequisite: English 090 recommended*

The first in a series of two survey classes in art history. In this course the student will be able to study major works of art through reproductions made available in pictures and slides. The emphasis is placed on major monuments of art in painting, sculpture, and architecture of the western world from prehistoric times until the Renaissance. CSU:UC

# ART

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## **ART 111 HISTORY OF ART: RENAISSANCE TO PRESENT**

3 units

3 hours lecture weekly

*Prerequisite: English 090 recommended, Art 110 recommended*

The second in a series of two survey classes in art history. In this course the student will be able to study major works of art through reproductions made available in pictures and slides. The emphasis is placed on major monuments of art of the western world from the Italian Renaissance through the present. CSU:UC

## **ART 113 CONTEMPORARY AMERICAN ARTISTS**

3 units

3 hours lecture weekly

*Prerequisite: Student must have completed or be concurrently enrolled in a studio art class.*

Designed to acquaint fine-arts majors with a survey of contemporary art history from the 1920s to the present. A student will be able to study major works of art through reproductions and slides as well as view actual works in scheduled field trips to museums, galleries and studios. The major objective of the course is to assist students to identify and define their work in the stream of art history. CSU

## **ART 114 HISTORY OF ART: FIELD TRIPS**

1.5 units, may be taken four times

3 hours lecture weekly

This is an eight-week course of museum, gallery and studio visits which may include the Museum of Contemporary Art, Los Angeles County Museum of Art, Norton Simon Museum, J. Paul Getty Museum, Bergamont Station, UCLA's Armand Hammer Museum, Huntington Library and Gardens, and the Pacific Design Center. The course will include interactive discussions and projects with students, faculty, gallery professionals and artists. Different lectures and exhibits each semester. CSU

## **ART 124A DRAWING I**

3 units

3 hours lecture, 3 hours lab weekly

The beginning course in drawing experiences emphasizes (1) basic drawing techniques in a variety of media and (2) compositional and design fundamentals. Students may be expected to participate in a field trip. (CAN: ART 8) CSU:UC

## **ART 124B DRAWING II**

3 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Art 124A*

Deals primarily with the human figure. Studies will be made of the human skeletal and muscular structure as well as the posed model. There will be continued emphasis on the development of drawing skills as well as on proportion, form and gesture. Students may be expected to participate in a field trip. CSU:UC

## **ART 133 HISTORY OF GRAPHIC DESIGN**

3 units

3 hours lecture weekly

A survey of the origin and evolution of the graphic arts, from the printing press to the computer. Emphasis is placed on the pioneers of graphic design and their role in the progress and development of the graphic arts as we know them today. This course covers a wide range of graphic-design communication, including the development of typography, newspapers, advertising, poster design, illustration, corporate identities and trademarks. Students will develop an understanding of past and present industry practices and learn about the graphic designers who are leading the way into the next century. CSU

## **ART 140 BEGINNING DESIGN: 2-DIMENSIONAL MEDIA**

3 units

3 hours lecture, 3 hours lab weekly

A study of the elements and principles of design with special emphasis on structure, color and 2-D composition through experimental media; provides basic fundamentals for 2-D oriented art courses. CSU:UC

## **ART 141 BEGINNING DESIGN: 3-DIMENSIONAL MEDIA**

3 units

3 hours lecture, 3 hours lab weekly

Continued study of elements and principles of design through experimental projects in 3-D materials. Provides basic fundamentals for 3-D-oriented art courses. CSU:UC

**ART 142 GALLERY PRACTICES**

3 units, May be taken four times

3 hours lecture, 3 hours lab weekly

*Prerequisites: Limited to art majors or with consent of instructor.*

Study of techniques of exhibition and graphic design. The course deals with problems of design and production through work on assignments for gallery exhibitions, i.e., exhibition management, scheduling, receiving and delivery, display, brochure design, documentation, advertising, reception. The College art gallery will be utilized as the lab. CSU

**ART 148 COLOR THEORY**

3 units

3 hours lecture, 3 hours lab weekly

An introduction to the study of color and color harmony in an intense and comprehensive manner. Emphasis is placed on an interdisciplinary inquiry into theories of color harmony for the point of view of art theory, psychology and physiology. Course content utilizes relatively new scientific discoveries, as well as historical material and is selected to demonstrate the unique and potent properties of color. CSU:UC

**ART 205 LANDMARKS OF ART**

3 units

3 hours lecture weekly

*Prerequisite: None. Recommended Preparation: English 090*

In exposing the student to visual-art reproductions, this course offers a means of stimulating the student's visual, emotional and intellectual awareness of the artistic heritages of world art without a chronological approach. The course is designed to acquaint the individual with the work of the great masters, both past and present, as well as the manner by which their art products were formed and organized. Students may be expected to participate in a field trip. CSU:UC

**ART 220 BEGINNING WATERCOLOR**

3 units

2 hours lecture, 1 hour lab weekly

A beginning course in the use of transparent watercolor media that will include instruction in the techniques of wet into wet, dry brush, glazing and direct painting applications. Emphasis will be placed upon creative application and composition. CSU

**ART 222 ILLUSTRATION I**

3 units

2.5 hours lecture/2.5 hours lab weekly

*Recommended Preparation: Art 124A and 140*

Illustration I is an introductory course designed to teach students the materials and techniques used by commercial illustrators. Projects emphasize concept development, style, imagery, and illustrative communication for use in and in combination with advertising, editorial print media, and various publications. A variety of media will be used, including the use of the Macintosh computer for computer-aided illustration. Computer programs used: Illustrator and Freehand. Students will become familiar with current practices in the illustration field, past and current illustrators, and have an understanding of the aspects of choosing a career in illustration. Projects are designed to meet professional standards. CSU

**ART 224A DRAWING III**

3 units, may be taken three times

3 hours lecture, 3 hours lab weekly

*Prerequisite: ART125 with a grade of C or better, or presentation of acceptable portfolio*

Life drawing: study and graphic representation of the human figure with the use of professional posed models. Special emphasis on structure of skeletal and muscular systems. Students may be expected to participate in a field trip. CSU:UC

**ART 227 PAINTING I**

3 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Art 124. Art 140, or presentation of acceptable portfolio*

The beginning course in painting technique, pictorial design and composition. Experimentation with various media; i.e., collage, inks, oil, pastel, watercolors, temperas, acrylics, and others. CSU:UC

**ART 228 PAINTING II**

3 units, may be taken four times

3 hours lecture, 3 hours lab weekly

*Prerequisite: Art 140 and Art 227 or presentation of acceptable portfolio*

Emphasis on painting techniques, pictorial design and creative interpretation. Continued use of oil paints as well as other experimental media. Students may be expected to participate in a field trip. May be repeated three times for a maximum of 9 units. CSU:UC

# ASTRONOMY

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## ART 235 SCULPTURE

3 units

3 hour lecture, 3 hours lab weekly

*Prerequisite:* Art 141 or presentation of acceptable portfolio

An introduction to the study of plastic form through the processes of modeling, casting, carving and construction. CSU:UC

## ART 236 SCULPTURE II

3 units, may be taken four times

2 hours lecture, 4 hours lab weekly

This course is a continuation of Art-235 with advanced casting techniques in various materials. Additive and subtractive techniques are further explored. Students are required to participate in museum field trips.

CSU:UC

## ART 237 FUNDAMENTALS OF PRINTMAKING

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite:* Art 124, 140 or presentation of acceptable portfolio

Introduction to materials and techniques of monoprint, silkscreen and relief printing techniques including woodcut and linoleum. Students may be expected to participate in a field trip. CSU:UC

## ART 238 PRINTMAKING (intaglio)

4 units, may be taken two times

3 hours lecture, 3 hours lab weekly

*Prerequisite:* Art 237

Introduction to intaglio printmaking techniques and image development, including etching, engraving, drypoint, and aquatint. Students will also learn about the history and process of printmaking. CSU:UC

## ART 244 ADVERTISING GRAPHICS

3 units

3 hours lecture, 3 hours lab weekly

*Recommended Preparation:* Art 140

Introductory survey to the field of advertising design. Emphasis on principles and skills using a broad approach in presenting materials, techniques and concepts. CSU

## ART 250 FINE ART PHOTOGRAPHY

3 units

3 hours lecture, 3 hours lab weekly

*Recommended Preparation:* Art 140

Introduces students to photography as an aspect of contemporary art practices and as an art form. The aesthetic concerns learned in Beginning Design will be applied to photography. Basic technical skills of black-and-white photography will be covered, including camera operations, photographic chemistry and mathematics; optics and the physics of light; compositional lighting; film processing, printing and mounting of finished prints. Through slide presentations, reading historical and theoretical texts, and visiting local collections, students will learn to critically analyze photographs, both in terms of content, aesthetics, and historical issues. This course is designed to prepare students for further work in photography or for collaboration with other media, including computer arts, graphic design, illustration and 2-and 3-dimensional mixed media. STUDENTS MUST HAVE A 35mm NON-AUTOMATIC CAMERA. CSU

# ASTRONOMY

## ASTRON 100 ASTRONOMY: GENERAL

### ASTRONOMY

3 units

3 hours lecture weekly

Survey of the content and dynamics of the solar system; the earth and its motions; time and the calendar; moon, eclipses, and tides; physics of the sun, planets, comets and meteorites, including their dynamical aspects and motions. Principles, logic, and development of stellar astronomy. Physics of the stars, stellar type populations and stellar evolution; stellar organizations, galaxies, and cosmology. CSU:UC

## ASTRON 101 ASTRONOMY: THE STELLAR SYSTEM

3 units

3 hours lecture weekly

The scientific method, ancient and Renaissance astronomy (Copernicus through Newton); the earth and its motions, seasons, time and the calendar; the moon, eclipses, and tides; electromagnetic radiation; tools of the astronomer; physics of the sun. Principles, logic and development of stellar astronomy. Physics of the stars, stellar types, populations, and stellar evolution; stellar organizations, galaxies and cosmology. CSU:UC

**ASTRON 102 ASTRONOMY: THE SOLAR SYSTEM**

3 units

3 hours lecture weekly

The earth and its motions, seasons, the moon, eclipses, and tides; the content and dynamics of the solar system; planets and their satellites, including their physical and dynamical properties, their differences and similarities both with respect to one another and to the earth-moon system; asteroids, comets, and meteorites; the evolution of the solar system. CSU:UC

**BIOLOGICAL SCIENCES****BIOSCI 050 BIOLOGY COMPUTER LABORATORY**

0.5 unit, may be taken four times

1.5 hours lab weekly

*Not degree applicable*

This biological sciences course is an open-access computer laboratory course to accompany existing courses in the biological sciences. This course will enable the student to develop additional competency during concurrent enrollment in other biology courses.

**BIOSCI 100 GENERAL BIOLOGY**

4 units

3 hours lecture, 3 hours lab weekly

A non-major, general-education biology course designed to familiarize the student with the nature of science, and basic biological concepts, including: cell structure and processes, energetics in living systems, heredity, development, evolution, diversity, and environmental relationships. CSU:UC

**BIOSCI 106 ORGANISMAL AND ENVIRONMENTAL BIOLOGY (Formerly Biological Science 102)**

4 units

3 hours lecture, 3 hours lab weekly

Introduction to organismal and environmental biology, cell theory, patterns of reproduction, embryological and organ development in major plant and animal groups, behavior, Mendelian genetics, population genetics, diversity of plants and animals, classification, and principles of ecology and evolution. Note: May not receive credit for this course if credit has been received for BIOSCI-215 or BIOSCI 216 CSU:UC

**BIOSCI 107 MOLECULAR AND CELLULAR BIOLOGY**

4 units

3 hours lecture, 3 hours lab weekly

*Note: This course is prerequisite to Biological Sciences 204-205, 221, 230, 231, and 250.*

Introduction to the principles of bioenergetics, molecular structure, function and evolution, cell morphology, anatomy, and physiology. CSU:UC

Biological Sciences 106 and 107 are necessary for biology majors.

*Note: Credit will not be given for Biological Science 107 if credit has been received for Biological Science 204-205, 221, 230, 231 or 250.*

**BIOSCI 120 WOMEN AND MINORITIES IN SCIENCE AND MATHEMATICS**

3 units

3 hours lecture weekly

*This interdisciplinary course explores the significant contributions of a broad array of individuals in biological, scientific, and mathematics fields. It examines case studies of women and people of diverse ethnic backgrounds who have made important discoveries and contributions to our understanding of science and mathematics. CSU:UC*

**BIOSCI 125 INTRODUCTORY SCIENCE PROCESS LABORATORY**

3 units

2 hours lecture, 3 hours lab weekly

This biological sciences course introduces the student to basic concepts of laboratory methodology and to the specific techniques commonly used in science labs. The course will prepare students to continue on in science laboratories at the college level and become familiar with the types of science careers involving laboratory work. CSU

**BIOSCI 130 CONTEMPORARY ISSUES IN ENVIRONMENTAL BIOLOGY**

3 units

3 hours lecture weekly

Designed for non-majors, the course explores the global problems facing society today. Students will be introduced to basic ecological principles, current environmental issues such as pollution (air, water and soil), global warming, deforestation and the impact of human population growth on the earth's environment and possible solutions to these problems. CSU:UC

## **BIOLOGICAL SCIENCES**

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### **BIOSCI 204 HUMAN ANATOMY AND PHYSIOLOGY I**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Biological Science 107 with a minimum grade of C.*

First course of a two-semester sequence. Structure and function of the human body. (CAN: BIO SEQ B combined with BIOSCI-205) CSU:UC

### **BIOSCI 205 HUMAN ANATOMY AND PHYSIOLOGY II**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Biological Science 107 and Biological Science 204 with a minimum grade of C.*

Second course of a two-semester sequence. Structure and function of the human body. (CAN: BIO SEQ B combined with BIOSCI-204) CSU:UC

### **BIOSCI 215 GENERAL ZOOLOGY**

4 units

3 hours lecture, 3 hours lab weekly

*Recommended Preparation: Biological Science 107*

*Note: Students are to attend two field trips, to be arranged on weekends during the semester.*

Survey of the animal kingdom with emphasis on integrating mechanisms at the cellular, organismic, and population levels. Included are cell organization, morphology, and development with principles of population biology, evolution and ecology. CSU:UC

### **BIOSCI 216 GENERAL BOTANY**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: None. Recommended Preparation: Biological Science 107*

*Note: Students are to attend two field trips, to be arranged on weekends during the semester.*

The morphology, anatomy, physiology, and taxonomy of members of the plant kingdom with emphasis on seed-bearing plants. Included are principles of plant genetics, population biology, and plant ecology. CSU:UC

### **BIOSCI 219 MARINE BIOLOGY**

4 units

3 hours lecture, 3 hours lab weekly

A study of the description, distribution and natural history of marine organisms and habitats. Laboratories will include both in-class and required field studies, which may extend outside assigned laboratory times. CSU

### **BIOSCI 221 INTRODUCTION TO MICROBIOLOGY**

5 units

3 hours lecture, 6 hours lab weekly

*Prerequisite: Biological Science 107 with a minimum grade of C. Recommended Preparation: Successful completion of high school chemistry or concurrent college course.*

An introduction to the biology of microorganisms (bacteria, viruses, protozoa, parasitic worms, algae, fungi), and their significance, and role in human affairs. (CAN: BIO 14) CSU:UC

### **BIOSCI 230 INTRODUCTION TO BIOTECHNOLOGY**

5 units

3 hours lecture, 6 hours lab weekly

*Prerequisite: Biological Science 107 with a minimum grade of C. Recommended Preparation: Chemistry 151*

This biological science course introduces the student to the concepts and techniques of modern molecular biology. DNA manipulation -- its research, uses, and applications -- will be presented and explored. This course will prepare the student for transfer to a four-year institution or for employment in the biotechnology industry. CSU:UC

### **BIOSCI 231 ADVANCED TOPICS IN BIOTECHNOLOGY**

5 units

3 hours lecture, 6 hours lab weekly

*Prerequisite: Biological Science 230.*

Designed to familiarize students with advanced techniques and topics. Students will complete projects in a revolving lab setting and develop standard operating procedures for a variety of methodologies and produce materials used by other lab sections in a simulated production environment. Builds competence in writing lab reports, presenting research and analyzing experimental data. Lab skills surveyed include: plant and animal tissue culture, DNA manipulation, enzyme and protein studies, and advanced instrumentation and documentation. Course prepares students for research lab work in both academic and industrial settings. CSU

### **BIOSCI 250 HUMAN ANATOMY AND PHYSIOLOGY**

8 units

6 hours lecture, 6 hours lab weekly

*Prerequisite: Biological Science 107 with a minimum grade of C*

A one-semester course covering structure and function of the human body. CSU:UC

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**BUSINESS****BUS 100 INTRODUCTION TO BUSINESS**

3 units

3 hours lecture weekly

The meaning and purpose of business in our society, the historical development of business and the general economic setting for business today. CSU:UC

**BUS 101 BOOKKEEPING AND ACCOUNTING I**

5 units

5 hours lecture weekly

*Prerequisite: Appropriate placement as determined by the College assessment process.*

Designed for the two-year and non-transfer student OR as an introductory course before beginning Business 201. Includes transaction analysis; entries into purchases, cash payments, sales, cash receipts, and general journals; payroll; worksheets and financial statements. Concurrent enrollment in Business Math 144 recommended to continue into Business 102. CSU

**BUS 103 INTRODUCTION TO INTERNATIONAL BUSINESS**

3 units

3 hours lecture weekly

The course combines global business theory as affected by cultural, political, legal, and international economic factors with instruction on government regulation, foreign market analysis, exporting, and importing. Internet applications are utilized to familiarize the student with: available international business and government resources. Case studies are emphasized to demonstrate the practical applications of course subject matter. CSU

**BUS 110 ELEMENTS AND PRINCIPLES OF BUSINESS MANAGEMENT (Formerly BUSMGT-110)**

3 units

3 hours lecture weekly

Provides students with an understanding of the fundamental functions of modern management in a changing world. It will primarily emphasize planning, leading, organizing, and control functions with practical applications. Topics include leadership in management, motivation, communication, managing cultural diversity, team decision-making, management by objectives, the organization's environment, planning and strategic management, control process, organizational structure, and managing organizational change. CSU

**BUS 117 SMALL BUSINESS MANAGEMENT (Formerly BUSMGT-117)**

3 units

3 hours lecture weekly

An analytical and practical perspective on entrepreneurship and the management of a small business to remain on the cutting edge. Includes a comprehensive analysis of establishing, marketing, financing, promoting, insuring, developing and staffing a small business. CSU

**BUS 126 MANAGING DIVERSITY IN THE WORK-PLACE**

3 units

3 hours lecture weekly

Students will analyze and develop an understanding of the effects of increasing diversity in the workplace. Focuses on the benefits and challenges to management and staff presented by diversity of gender, race, ethnicity, national origin, sexual orientation, and other differences. Organizational and interpersonal strategies for working effectively are examined along with developing skills for the creation of productive and diverse business environments. CSU

**BUS 132 NEGOTIATION AND CONFLICT RESOLUTION**

3 units

3 hours lecture weekly

An analysis of organizational-conflict strategies for effective resolution with concentration on internal and external sources of conflict. The methods of non-litigation resolution studied include arbitration, mediation, and mini-trial. The basic theoretical models from the field of social psychology are examined, and students practice utilization of the methodologies by performing in-class exercises. CSU

**BUS 140 PRINCIPLES OF MARKETING**

3 units

3 hours lecture weekly

Provides students with an understanding of the fundamental concepts of modern marketing in a changing world. It will primarily emphasize consumer markets, but will also cover organizational markets. Topics include creating customer value and satisfaction, consumer and organizational buying behavior, market research, market strategy, target market analysis, the global marketing environment, electronic marketing, and sales techniques, with particular emphasis on the marketing mix, including product, pricing, promotion and distribution decisions. CSU

## **BUS 141 PRINCIPLES OF ADVERTISING**

3 units

3 hours lecture weekly

Provides students with an understanding of the fundamental concepts of modern advertising in the current business environment. Topics include: the role of advertising, its relation to the marketing mix, psychological and socio-cultural influences on consumer buying behavior, advertising research and strategy, target market analysis, the global marketing environment, electronic advertising, media selection, creative advertising message design, and integrated marketing. Primary emphasis is on planning an advertising campaign and communicating ideas using advertising techniques. CSU

## **BUS 142 PRINCIPLES OF SELLING**

3 units

3 hours lecture weekly

Provides students with an understanding of the basic concepts of selling in the current business environment. Topics include selling strategies in the new economy, the relation of selling to the marketing mix, the forces influencing customer buying behavior, customer prospecting, creating an effective sales presentation, the global selling environment, electronic selling, communication styles, sales servicing, and sales force management. Emphasis is on developing effective selling strategies and on helping students to build confidence in their own ability to sell and make sales decisions. CSU

## **BUS 144 BUSINESS MATHEMATICS**

5 units

5 hours lecture weekly

*Prerequisite: Satisfactory completion of Mathematics 025 or appropriate placement as determined by the college assessment process. Note: This class satisfies the requirement for the associate degree under Language and Rationality.*

Basic mathematics used in typical accounting, financial, and merchandising transactions. Emphasis is on analyzing word problems, selecting appropriate mathematical procedures, and solving the requisite algebraic equation. Extensive use of real-world business problems in the areas of cash and trade discounts, markup and markdown, compound interest, annuities, loan amortizations, inventory control, depreciation, insur-

ance, investments, and financial-statement analysis.

This course meets the AA graduation requirements for mathematics and serves as a solid preparation for students entering the accounting program. CSU

## **BUS 154 FINANCE**

3 units

3 hours lecture weekly

A comprehensive introduction to personal and financial planning. The concepts, tools, and applications of individual finance are applied within a financial planning process that covers: developing and prioritizing goals; money management; credit management; investment alternatives; retirement planning; housing decisions; tax planning; risk management/insurance and estate planning. CSU

## **BUS 156 INTRODUCTION TO INVESTMENTS**

3 units

3 hours lecture weekly

An introduction to the principles of investing and money management. Introduces students to the various types of financial assets an investor must choose from, their institutional setting, and valuation. CSU

## **BUS 160 BUSINESS ETHICS**

3 units

3 hours lecture weekly

Presents different schools of ethical thought applicable in the business environment. Students are exposed to the types of ethical issues that are presented in a commercial atmosphere and the methodologies used to determine appropriate courses of conduct. Current cases and fact scenarios are presented along with historical examples to demonstrate their effect on contemporary ethical dilemmas in addition to comparing how business morality has evolved. CSU

## **BUS 185 PRINCIPLES OF IMPORTING AND EXPORTING**

3 units

3 hours lecture weekly

An analysis of the basic aspects of importing and exporting, which provides the students with a working knowledge of terms and techniques essential to operating an import/export business. Introduction to International Business, Business 103 is recommended. CSU

**BUS 190 PRINCIPLES OF ELECTRONIC COMMERCE (Same as CIT-190)**

3 units

3 hours lecture weekly

The course involves the study of the main theoretical and practical issues of electronic commerce, its policies and management, and the particular problems of implementing and managing electronic commerce systems and the current uses by business, consumers, and non-profits. Topics include Web-based technologies, electronic data interchange, Internet infrastructure, value chains, strategies for marketing and promotion, new business models, electronic-payment systems, and security, privacy, legal, ethical, and tax issues.

Familiarity with the Internet and proficiency with a Web browser are assumed. CSU

**BUS 201 PRINCIPLES OF ACCOUNTING I**

5 units

5 hours lecture weekly

*Prerequisite: Appropriate placement as determined by the college assessment process.*

Fundamental principles, theory and structure of accounting through the preparation of work sheets and financial statements for single proprietorship and partnerships. Designed for accounting or business administration majors who plan to transfer to a four-year institution. Homework may be completed using a computer.

Completion of Business 144 recommended. (CAN: BUS 2) CSU:UC

**BUS 202 PRINCIPLES OF ACCOUNTING II**

5 units

5 hours lecture weekly

*Prerequisite: Satisfactory completion of Business 201.*

A continuation of Business 201 with emphasis on managerial, manufacturing and corporate accounting. Topical areas include the analysis and interpretation of financial statements, job-order and process-costing systems, standard costs and variances, break-even analysis and capital budgeting. Homework may be completed using a computer. (CAN: BUS 4) CSU:UC

**BUS 206 COMPUTERIZED INCOME TAX ACCOUNTING**

3 units

3 hours lecture weekly

*Prerequisite: Completion of Business 101 with a grade of C or better.*

This course provides a study of federal tax laws and regulations needed for the completion of an individual tax return. The emphasis is on the application of the tax laws including the use of computer software. CSU

**BUS 211 BUSINESS LAW I**

3 units

3 hours lecture weekly

*Prerequisite: None*

Introduction to the legal setting of business; classification of law and court systems: contracts, agency, employment and business. Emphasis placed on learning through the practical application of textbook material to the business world. CSU:UC

**BUS 291 STATISTICAL METHODS IN BUSINESS AND ECONOMICS (Same as Economics 291)**

3 units

3 hours lecture weekly

*Prerequisite: Mathematics 070 or appropriate placement as determined by the COC assessment process.*

A course in descriptive statistics, elements of probability, probability distributions, sampling estimation, confidence intervals, tests of hypothesis, linear regression and correlation. Applications to problems in business and economics. Writing and the use of spreadsheet software are required. CSU:UC

**CHEMISTRY****CHEM 110 INTRODUCTORY CHEMISTRY**

4 units

3 hours lecture, 3 hours laboratory weekly

*Prerequisite: Math 060 with grade of C or better recommended. Students cannot receive credit for both Chemistry 110 and Chemistry 151.*

Introductory Chemistry is an entry-level chemistry class aimed at students with no prior chemistry experience. The course 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. Nomenclature and formula writing as well as biological applications of chemistry will be emphasized. CSU

**CHEM 151 PREPARATORY GENERAL CHEMISTRY**

4 units

3 hours lecture, 3 hours laboratory weekly

*Prerequisite: Math 060 with grade of C or better recommended.*

## CINEMA

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A preparatory course for Chemistry 201 that can also be taken by non-science majors to satisfy a lab science requirement. Beginning general chemistry background. Intensive foundation in problem solving, basic atomic theory, stoichiometry, nomenclature, states of matter, and solution chemistry. Laboratory experiences in basic techniques, gas laws and data treatment. CSU:UC

### CHEM 201 GENERAL CHEMISTRY I

6 units

5 hours lecture (including 2 hours recitation) weekly, 3 hours lab weekly

*Prerequisite: Math 070 and Chemistry 151, or high school chemistry with a grade of C or better.*

Required of all majors in chemistry and most other fields of science or technology. Knowledge of calculus will be useful, but is not required. Lecture: Stoichiometry and atomic theory; molecular theory of gases and the gas laws, theoretical aspects of liquids and solids, solutions and colligative properties, electrochemistry, thermochemistry and thermodynamics. Laboratory: Use of analytical balance, stoichiometry, molecular and equivalent weights; use of volumetric equipment. Precise gravimetric and volumetric analysis and an introduction to qualitative analysis. All students are required to write a research paper and learn how to use a personal computer in statistical data treatment and present the results in graphical form. (CAN: CHEM 2 or CAN: CHEM SEQ A combined with CHEM-202) CSU:UC

### CHEM 202 GENERAL CHEMISTRY II

5 units

3 hours lecture, 6 hours laboratory weekly

*Prerequisite: Chemistry 201 with a grade of C or better.*

A continuation of Chemistry 201. Lecture: acid base equilibria, solubility products, coordination compounds, quantum mechanics, periodic properties of the elements, nuclear chemistry, advanced qualitative analysis and an introduction to organic chemistry. Laboratory: kinetics, equilibria, qualitative analysis, and an introduction to instrumental analysis. (CAN: CHEM 4 or CAN: CHEM SEQ A combined with CHEM-201) CSU:UC

### CHEM 221 QUANTITATIVE ANALYSIS

4 units

3 hours lecture, 3 hours laboratory weekly

*Prerequisite: Chemistry 201 with a grade of C or better*

An introduction to the theories and techniques of gravimetric, volumetric and spectrophotometric analysis. Laboratory work consists primarily of applying principles taught in lecture to the analysis of unknown samples. (CAN: CHEM 12) CSU:UC

### CHEM 255 ORGANIC CHEMISTRY I

5 units

3 hours lecture, 6 hours laboratory weekly

*Prerequisite: Chemistry 201 with a grade of C or better*

Primarily for majors in the physical and biological sciences. The study of various classes of aliphatic, aromatic and heterocyclic compounds with emphasis on modern concepts of structure and reactivity. The accompanying laboratory is devoted to the study of basic physical properties plus the synthesis and identification of organic compounds using modern instrumentation. CSU:UC

### CHEM 256 ORGANIC CHEMISTRY II

5 units

3 hours lecture, 6 hours lab weekly

*Prerequisite: Chemistry 255 with a grade of C or better*

A continuation of Chemistry 255 with emphasis on biochemical processes. The classes of compounds most important to biological functions: amino acids, carbohydrates, proteins, lipids, nucleic acids, etc. The laboratory work includes multistep synthesis; purification and characterization of biological macromolecules; spectrophotometry; catalysis; chromatography, etc. CSU:UC

## CINEMA

### CINEMA 120 FILM AESTHETICS

3 units

3 hours lecture weekly

A critical survey, with examples, of the motion picture both as a medium of mass communication and as a developing art form. Analyzes representative feature films as to genre, technique, aesthetics and sociological impact. Designed as an introductory course. CSU:UC

### CINEMA 122 HISTORY OF CINEMA

3 units

3 hours lecture weekly

A historical survey and critical analysis of motion-picture masterpieces from their inception to the present. A study of these representative films will reveal ideas and values that are reflected and emphasized through artistic techniques. CSU:UC

**CINEMA 125A SPECIAL TOPICS: WOMEN IN FILM**

3 units

3 hours lecture weekly

A critical survey of women in films with examples of the motion picture, both as a medium of mass communication and as a developing art form. Particular emphasis will be placed on the traditional view of women and their relationships with the "big three" of the women's film world – men, marriage, and motherhood. Analyzes representative feature films as to genre, technique, aesthetics, and sociological impact. Designed as an introductory course. CSU:(UC limited credit)

**CINEMA 125B SPECIAL TOPICS:  
GREAT DIRECTORS**

3 units

3 hours lecture weekly

A critical examination of selected masters of the cinema. Each offering, as listed in the class schedule, will explore the works of such masters as Ford, Hitchcock, Wells, Kurasawa, and Bergman. Analyzes a sampling of the filmmaker's work and the impact of their work on the art form and society. Designed as an introductory course. CSU:(UC limited credit)

**CINEMA 125C SPECIAL TOPICS:CLASSIC FILM  
GENRES**

3 units, may be taken four times

3 hours lecture weekly

A critical examination of a selected genre of the cinema. Each offering, as listed in the class schedule, will explore film genres such as the western, horror film, film noire, the war film, the crime film, and the musical. Analyzes a sampling of the genre and its aesthetics. Designed as an introductory course. CSU:(UC limited credit)

**CINEMA 125D SPECIAL TOPICS: CROSS-CULTURAL  
PERSPECTIVES IN CINEMA**

3 units

3 hours lecture weekly

A critical examination of a selected master of the cinema from under-represented ethnic groups. Each offering, as listed in the class schedule, will explore the works of such masters as Lee, Nave, and Wong. Analyzes a sampling of the filmmaker's work and the impact of their work on the art form and society. Designed as an introductory course. CSU: (UC limited credit)

**COMMUNICATION STUDIES****COMS 105 SPEECH FUNDAMENTALS**

3 units

3 hours lecture weekly

*(Formerly SPCOM 105)*

This course examines the principles and practices of public speaking. Emphasis is on speech organization and development, research, audience analysis, presentation skills, listening, and the use of language and ethics for the development of informative and persuasive speeches. (CAN: SPCH 4) CSU:UC

**COMS 150 ORAL INTERPRETATION**

3 units

3 hours lecture weekly

*Prerequisite: Eligibility for English 090; recommended prerequisite or concurrently with Child Development 156 for child development certificate student.*

*(Formerly SPCOM 150)*

Introduction to and practice in the art of reading aloud for effective use of voice and movement according to the style, mood, meaning and emotion of appropriate literature. Students may select adult literature (option A) or children's literature (option B). Partially satisfies CSU general-education requirement. CSU:UC

**COMS 151 RADIO/TELEVISION ANNOUNCING  
(Same as RTVF-151)**

3 units

3 hours lecture weekly

*Prerequisite: Eligibility for or completion of Journalism 105, News Writing recommended*

*(Formerly SPCOM 151)*

Theory and practice in radio/TV announcing for newscasts, commercials, sportscasts, and talk-show hosting with a focus on developing the individual "air" personality. Open to non-majors as well as majors. CSU

**COMS 205 ADVANCED PUBLIC SPEAKING**

3 units

3 hours lecture weekly

*Prerequisite: COMS 105**(Formerly SPCOM 205)*

An advanced study in public speaking that builds on previously learned concepts. The focus will be on advanced principles of audience adaption, analytical skills, critical thinking, and analysis of public discourse. Presentation skills will be enhanced through the presentation of various types of persuasive speeches. CSU:UC

## COMPUTER ELECTRONICS

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### COMS 223 SMALL GROUP COMMUNICATION

3 units

3 hours lecture weekly

*(Formerly SPCOM 223)*

This course provides an opportunity to explore the process of groups and decision-making through the practical application of theoretical concepts to a variety of group activities and public group discussion. Theories of group decision-making and leadership will be explored to analyze group interaction. Preparation for the workplace will be emphasized through critical thinking and problem solving. Strategies for successful group interaction will be discussed. CSU:UC

### COMS 225 STRATEGIES OF ARGUMENTATION

3 units

3 hours lecture weekly

*(Formerly SPCOM 225)*

Studies the strategies used for rhetorical argument: finding issues, using evidence, and detecting fallacies in rhetorical communication; practice is given in the formulation, presentation and analysis of argument in oral communication. (Formerly SPCOM-225). CSU:UC

### COMS 227 RHETORICAL STUDIES

3 units

3 hours lecture weekly

Provides an examination of the introductory principles of rhetorical theory and their application to the analysis and evaluation of public discourse. Emphasizes an understanding of the theories of rhetorical composition as well as methods used to critique persuasive discourse. Also prepares students to employ critical-thinking skills through effective analysis, writing, and discussion of persuasive communication in the public sphere. CSU

### COMS 246 INTERPERSONAL COMMUNICATION

3 units

3 hours lecture weekly

*(Formerly Speech Communication)*

An introduction to theories and principles of interpersonal communication. The primary focus will be two-person communication, focusing on research in the areas of verbal and nonverbal communication, perception, self-concept, communication climate, relationship satisfaction, conflict, and self-disclosure. Theories of relationship development within committed relationships, family, and friendship will be explored. CSU

### COMS 250 PROCESS OF COMMUNICATION

3 units

3 hours lecture weekly

*(Formerly SPCOM 250)*

Analysis of the contemporary behavioral view of the scope and purpose of human communication, the factors involved in the process, and the role of language in human behavior. CSU:UC

### COMS 256 INTERCULTURAL COMMUNICATION

3 units

3 hours lecture weekly

*(Formerly SPCOM 256)*

This course introduces students to the influence of communication variables, such as perception, language, and nonverbal processes in intercultural communication. Students will examine theories of intercultural communication and apply these theories to real and hypothetical intercultural encounters. CSU:UC

### COMS 260 COMMUNICATION AND GENDER

3 units

3 hours lecture weekly

*(Formerly SPCOM 260)*

This course provides an examination of communication styles of males and females in a variety of settings. Topics will include male/female stereotypes and verbal/nonverbal patterns of communication. The implications for the ability to maintain effective personal and professional relationships will be addressed. Communication styles of men and women will be compared and contrasted. Strategies for developing communication competence in the areas of family, friendship, courtship and marriage, education, media, and business will be explored. CSU

## COMPUTER ELECTRONICS

### CMPELC 110 INTRODUCTION TO MUSIC TECHNOLOGY (Same as Music-110)

3 units, may be taken four times

3 hours lecture weekly

This course is an introduction to the production of electronic music. Topics covered include operating systems and system software; data structures for computer information; the hardware mechanics of a computer; instructional software for musicians; acoustics; data structures for sampling and MIDI; data structures for laser audio and video; hardware devices for music publishing; music-notation software; software for music sequencing;

MIDI hardware; software for creating, organizing and editing sound; hardware for digital sampling and recording; software for communication; networking hardware; and multimedia hardware. CSU

**CMPELC 130 COMPUTER ELECTRONICS I**

4 units

3 hours lecture, 3 hours lab weekly

The theory of direct current and its application to electronic circuits. Three circuit parameters of resistance, capacitance and inductance. The mathematical application of Ohm's law, series circuits, parallel circuits and compound circuits. An introduction to magnetism and electromagnetism. CSU

**CMPELC 131 COMPUTER ELECTRONICS II**

4 units

3 hours lecture, 3 hours laboratory weekly

*Prerequisite: Computer Electronics 130*

Complex AC and DC circuit calculations and circuit-breadboarding skills. Solid-state device fundamentals are covered. Use of the multimeter, function generator and the dual-trace oscilloscope are emphasized. CSU

**CMPELC 134 INTRODUCTION TO INDUSTRIAL PROGRAMMING USING VISUAL BASIC**

3 units

3 hours lecture weekly

This course is an introduction to programming for industry. The goal is to equip students with the necessary skills to write programs in Visual Basic that will find application in the typical industrial environment. Topics include problem-solving, fundamentals of programming, procedures, decisions, repetition, arrays, sequential files, graphical display, and the use of the Internet. The student will be capable of writing useful Visual Basic programs at the conclusion of the course. CSU

**COMPUTER INFORMATION TECHNOLOGY**

(Formerly Business Information Technology)

**CIT 010 EXPLORING COMPUTERS - BRIEF (Formerly BUSINF 040)**

1.5 units

2 hours lecture, 3 hours lab weekly (8 weeks)

A brief overview of computers, their usage, and how they function. Topics covered will include computer hardware, software and the Internet, as well as how to purchase, install and maintain a personal computer. Offered on a credit/no credit basis only.

**CIT 011 MICROSOFT WINDOWS - BRIEF (Formerly BUSINF-153A)**

1.5 units

2 hours lecture, 3 hours lab weekly (8 weeks)

A short-term course providing an introduction to Microsoft Windows fundamentals. Topics include the basics of using a mouse, icons, Explorer, file management, windows manipulation, and multitasking (working with multiple programs simultaneously).

**CIT 015 BUSINESS ENGLISH - BRIEF (Formerly BUSINF-092)**

1.5 units

2 hours lecture, 3 hours lab weekly (8 weeks)

A short-term introductory course in English-language usage, grammar, and its applications in business communications.

**CIT 016 BUSINESS COMMUNICATIONS - BRIEF (Formerly BUSINF-091)**

1.5 unit

2 hours lecture, 3 hours lab weekly (8 weeks)

A short-term introduction to writing principles and techniques, business vocabulary improvement, and experience in the composition of basic types of business communications.

**CIT 020 OFFICE PROCEDURES FOR THE ADMINISTRATIVE ASSISTANT - BRIEF (Formerly BUSINF- 090)**

1.5 unit

2 hours lecture, 0.3 hours lab weekly (8 weeks)

A short-term introduction to the modern office and the responsibilities associated with an administrative assistant position as well as other employment opportunities.

**CIT 035 THE INTERNET - BRIEF (Formerly BUSINF-051)**

1.5 unit, may be taken two times

1 hour lecture, 1.5 hours lab weekly (8 weeks)

This short-term course covers Internet fundamentals, including how to use a browser and other software to navigate the internet using the WWW, Gopher, FTP, email, and usenet. Several major service providers will be demonstrated in this hands-on class. Also covers how to research term papers and other projects using the college's fast Internet connection. Need familiarity with Windows operating system.

# COMPUTER INFORMATION TECHNOLOGY

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## **CIT 050 MICROSOFT WORD - BRIEF (Formerly BUSINF-077)**

1 unit

1 hour lecture weekly

A short-term introductory course covering basic word-processing and formatting concepts, including headers, footers, page-numbering, search and global replace features, and use of templates and wizards. Familiarity with keyboarding and the Windows operating system is assumed.

## **CIT 052 WORDPERFECT - BRIEF (Formerly BUSINF-081)**

1.5 units, may be taken two times

1.5 hours lecture weekly

A short-term introductory course using the latest version of WordPerfect for Windows software to develop word-processing proficiency for business and personal use. Familiarity with computer keyboarding and the Windows operating system is assumed.

## **CIT 055 MICROSOFT EXCEL - BRIEF (Formerly BUSINF-076)**

1 unit

1 hour lecture weekly

A short-term introductory course covering the basic skills necessary to create and edit computerized spreadsheets using Excel. Topics include charts, graphs, formatting, and use of simple functions. Familiarity with the Windows operating system is assumed.

## **CIT 060 MICROSOFT ACCESS - BRIEF (Formerly BUSINF-153)**

1 unit

2 hours lecture, 1 hour lab weekly

A short-term introductory course in creating and modifying computerized databases using Access. Topics covered include simple sorting, forms, reports and queries. Familiarity with the Windows operating system is assumed.

## **CIT 065 MICROSOFT POWERPOINT - BRIEF (Formerly BUSINF-080)**

1 unit

2 hours lecture, 3 hours lab weekly (8 weeks)

A short-term introductory course covering the basic skills necessary to create and edit computerized slide presentations using PowerPoint. Topics include: insertion of text and graphical elements, transitions, and simple animations. Familiarity with the Windows operating system is assumed.

## **CIT 098 SPECIAL TOPICS: WORKSHOPS**

0.5 unit

2 hours lecture, 6 hours lab

8 hours total, one day course

May be taken two times.

Offered on a credit/no credit basis only. Not degree applicable.

*Prerequisite: None. Recommended Preparation:*

*Familiarity with computers.*

## **CIT 098A MICROSOFT WINDOWS WORKSHOP (Formerly BUSINF 054)**

Designed for students desiring to quickly acquire the fundamental skills necessary to manage some of the basic features of the Windows operating system. (Formerly BUSINF-054). Units do not apply to the associate degree.

## **CIT 098B MICROSOFT WORD WORKSHOP (Formerly BUSINF 058)**

Designed for students desiring to quickly acquire the basic skills necessary to create and modify simple electronic documents using Microsoft Word. (Formerly BUSINF-058). Units do not apply to the associate degree.

## **CIT 098C MICROSOFT EXCEL WORKSHOP (Formerly BUSINF 056)**

Designed for students desiring to quickly acquire the basic skills necessary to create and modify simple electronic spreadsheets using Excel. (Formerly BUSINF-056). Units do not apply to the associate degree.

## **CIT 098D MICROSOFT ACCESS WORKSHOP (Formerly BUSINF 055)**

Designed for students desiring to quickly acquire the basic skills necessary to create and modify simple relational databases using Microsoft Access. (Formerly BUSINF-055). Units do not apply to the associate degree.

## **CIT 098E MICROSOFT POWERPOINT WORKSHOP (Formerly BUSINF 057)**

Designed for students desiring to quickly acquire the basic skills necessary to create and modify simple electronic presentations for group audiences using PowerPoint. (Formerly BUSINF-057). Units do not apply to the associate degree.

## **CIT 098F QUICKEN WORKSHOP (Formerly BUSINF 059)**

Designed to acquaint students with a financial software package used to organize personal finances by setting up electronic checkbook registers for tracking transac-

tions. (Formerly BUSINF-059). Units do not apply to the associate degree.

### **CIT 101 COMPUTER FUNDAMENTALS (Formerly BUSINF-104)**

3 units

2 hours lecture, 3 hours lab weekly

Students are taught computer concepts and terminology related to system hardware operations, practical uses of software, operating systems, networks, and interpretation of specifications. CSU

### **CIT 105 MICROSOFT WINDOWS (Formerly BUSINF-153)**

3 units

2 hours lecture, 3 hours lab weekly

Provides students with hands-on instruction in Microsoft Windows, the most popular graphical user interface and operating environment for the personal computer. Topics may include using a mouse, icons, Explorer, file management, windows manipulation, multitasking (working with multiple programs simultaneously), desktop customization, use of Windows accessories, Object Linking and Embedding (OLE), virtual memory, data search using Find, Help Troubleshooters, shortcuts, and screen captures. CSU

### **CIT 110 KEYBOARDING AND DOCUMENT PROCESSING (Formerly BUSINF-106)**

3 units

2 hours lecture, 3 hours lab weekly

Mastery of the computer keyboard by touch. Also, operation of the personal computer including skill-building in processing business letters and reports, tables, etc., using Microsoft Word. CSU

### **CIT 111 ADVANCED DOCUMENT PROCESSING & SKILL BUILDING (Formerly BUSINF-107)**

3 units

2 hours lecture, 3 hour lab weekly

*Prerequisite: CIT-110*

Continues skill-building begun in CIT 110 (formerly BUSINF-106), keyboarding and document processing. Emphasis on producing a wide range of documents using Microsoft Word as well as continuing to build speed and accuracy on the keyboard. Basic typing skills and familiarity with MS Word begun in CIT 110 are assumed. CSU

### **CIT 115 BUSINESS ENGLISH**

(Formerly BUSINF-135)

3 units

2 hours lecture, 3 hour lab weekly

Provides an extensive review of the fundamentals of English grammar, punctuation style, and usage, placing heavy emphasis on language principles and applications that promote successful communication in the business world. Importance is placed on employment skills such as proofreading, editing, and writing. CSU

### **CIT 116 BUSINESS COMMUNICATIONS (Formerly BUSINF-220)**

3 units

2 hours lecture, 3 hours lab weekly

Training in the development of writing principles and techniques; business-vocabulary improvement; practical experience in the composition of correspondence typical of business environments. Additional emphasis on principles of business English. Familiarity with computer keyboarding and the Windows operating system is assumed. CSU

### **CIT 120 OFFICE PROCEDURES (Formerly BUSINF-145)**

3 units

2 hours lecture, 3 hours lab weekly

Study of procedures in today's modern office including: administrative responsibilities, information storage and retrieval, distribution of information using latest electronic technologies, preparation for professional employment, etc. Familiarity with basic computer keyboarding is assumed. CSU

### **CIT 125 LEGAL PROCEDURES (Formerly BUSINF-146)**

3 units

2 hours lecture, 3 hours lab weekly

Offers a comprehensive simulation for the legal secretary touching on four fields of law: real estate and property transfer, litigation, wills and estates, and corporations and partnerships. The law-office simulation provides an overall perspective of the types of activities in which the legal secretary will be engaged. CSU

### **CIT 130 MEDICAL OFFICE PROCEDURES (Formerly BUSINF-136)**

3 units

3 hours lecture weekly

Designed to train students for employment as an administrative medical assistant. Covers role, office equip-

## **COMPUTER INFORMATION TECHNOLOGY**

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ment, patient registration and appointment scheduling. Includes correspondence, transcription and facility management. CSU

### **CIT 131 INTRODUCTION TO MEDICAL TRANSCRIPTION (Formerly BUSINF-137)**

1.5 units

1 hour lecture, 2 hours lab weekly

Provides the transcriptionist with entry-level skills in medical transcription, including transcription of basic medical dictation, incorporating English usage and machine-transcription skills, medical knowledge, and proofreading and editing skills. CSU

### **CIT 132 MEDICAL OFFICE FINANCES (Formerly BUSINF-138)**

3 units

3 hours lecture weekly

This course trains students in the various financial methods used in medical offices for insurance billing, collection of fees, etc. Also covers teaching the student how to handle various insurance claims. CSU

### **CIT 135 THE INTERNET (Formerly BUSINF-103)**

3 units

2 hours lecture, 3 hours lab weekly

In this hands-on class, students will operate and configure browsers and other software to navigate and use the Internet. Participants will learn how to evaluate and select a service provider, send and receive e-mail, append attachments, and use the latest productivity software to create schedules, calendars, address books, and journals. Topics also include teleconferencing, distance learning, and e-commerce. CSU

### **CIT 140 MICROSOFT OFFICE (Formerly BUSINF-105B)**

3 units, may be taken two times

2 hours lecture, 3 hours lab weekly

An introductory survey of programs contained within the latest Microsoft Office suite. These application programs include word processing (Word), spreadsheets (Excel), database management (Access), and presentation graphics (PowerPoint). CSU

### **CIT 145 QUICKBOOKS (Formerly BUSINF-185)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: None*

This course teaches all the basics of the popular accounting program designed to assist in the operation of small businesses. CSU

### **CIT 150 MICROSOFT WORD I (Formerly BUSINF-158)**

3 units

2 hours lecture, 3 hours lab weekly

Provides an in-depth introduction to the latest version of MS Word. Topics include creating, revising, formatting, storing, and printing a variety of business documents. Skills are developed from basic functions through utilizing features such as AutoText, columns, custom tab settings, mail merge, envelopes, labels, templates, headers/footers, footnotes, and Find/Replace features. Emphasis on office-quality production of documents. Also designed as preparation for MS Office User Specialist (MOUS) certification core exam in Word. Familiarity with computer keyboarding and the Windows operating system is assumed. CSU

### **CIT 151 MICROSOFT WORD II (Formerly BUSINF-159)**

3 units

3 hours lecture weekly

A continuation of CIT 150. Presents advanced features in Word. Topics include document modification and conversion to Web pages, formatting research papers, business letters and resumes, reports, form letters, newsletters, insertion and manipulation of graphics, creating an index and a table of contents, online forms, merging e-mail form letters using Access database, and using VBA with Word. Also designed as preparation for MS Office User Specialist (MOUS) certification exam. CSU

### **CIT 152 WORDPERFECT(Formerly BUSINF-156)**

3 units

2 hours lecture, 3 hours lab weekly

A comprehensive course using the latest WordPerfect word-processing software on IBM-compatible PC's to develop employable proficiency in the production of business documents. Familiarity with computer keyboarding and the Windows operating system is assumed. CSU

### **CIT 155 MICROSOFT EXCEL I (Formerly BUSINF-165)**

3 units

2 hours lecture, 3 hours lab weekly

Students learn the latest version of MS Excel. Topics include formulas, functions, charting, formatting worksheets, absolute cell references, working with large worksheets, what-if analysis, and practice using Excel to create static and dynamic Web pages. Also covers financial functions, data tables, amortization schedules, cell protection, worksheet-database manipulation,

lookup functions, database functions, templates, working with multiple worksheets and workbooks, find and replace, and customized printing. Course is designed as preparation for the Microsoft Office User Specialist (MOUS) certification core exam in Excel. CSU

### **CIT 156 MICROSOFT EXCEL II (Formerly BUSINF-166)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: CIT-155 (formerly BUSINF-165)*

A continuation of CIT-155, this course provides students with the knowledge to use advanced Excel features. Topics include sorting and filtering information in spreadsheets, worksheet protection, pivot tables and pivot chart reports, consolidation of data, outlines, reports using report manager, macros, guided-cell entry with data validation, use of scenarios to perform what-if analysis, goal seeking, change tracking, and Web and application integration. Also designed as preparation for the Microsoft Office User Specialist (MOUS) certification expert exam in Excel. CSU

### **CIT 160 MICROSOFT ACCESS I (Formerly BUSINF-170)**

3 units

2 hours lecture, 3 hours lab weekly

Provides an in-depth introduction to the latest version of Microsoft Access. Topics include creating, querying, and maintaining a relational database; creating a data-access page, reports, forms, combo boxes; using OLE fields, hyperlinks, and subforms. Familiarity with computer keyboarding and the Windows operating system is assumed. CSU

### **CIT 161 MICROSOFT ACCESS II (Formerly BUSINF-171)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: CIT-160 (formerly BUSINF-170)*

A continuation of CIT-160 using the latest version of Microsoft Access. Topics include creating, querying, and maintaining a relational database; creating reports, forms, combo boxes, cross-tab queries, mailing labels, mail-merge reports, and customization menu bars; integrating Excel worksheet data into an Access database; using OLE fields, hyperlinks and subforms; creating an application system using the Switchboard Manager; customizing forms using VBA, working with charts and PivotTable objects, administering a database and publishing to the Internet using Access pages. Also

designed as preparation for the Microsoft Office User Specialist (MOUS) certification expert exam in Access. CSU

### **CIT 165 MICROSOFT POWERPOINT**

3 units

2 hours lecture, 3 hours lab weekly

Students acquire skills to create dynamic computerized slide shows and presentations using PowerPoint software, the de facto standard presentation application. Topics covered include automating slide shows, transitions, use of graphics and drawn objects, interactive presentations, OLE, and Web-collaboration features. Also designed as preparation for the Microsoft Office User Specialist (MOUS) certification core and expert exams in PowerPoint. Familiarity with Windows operating system is assumed. CSU

### **CIT 166 DESKTOP PUBLISHING (Formerly BUSINF-175)**

3 units

2 hours lecture, 3 hours lab weekly

Designed to provide students with the necessary skills for employment utilizing desktop-publishing concepts and applications on the PC. CSU

### **CIT 167 INTRODUCTION TO PHOTOSHOP - BRIEF (Formerly BUSINF-180)**

1.5 units

2 hours lecture, 3 hours lab weekly (8 weeks)

A short-term introductory course in basic image editing using Photoshop. Topics included are working with layers, image retouching, color correction, scanning, paint tools, text tools, special effects, and application to desktop publishing and personal projects. CSU

### **CIT 170 WEB SITE DEVELOPMENT I (Formerly BUSINF-177)**

3 units

2 hours lecture, 3 hours lab weekly

An introduction to creating Web sites using HyperText Markup Language (HTML) coding. Covers basic through advanced HTML tags and concepts related to the planning and publishing of effective Web sites. Topics include HTML syntax, lists, text formatting, links, Web-safe colors, image insertion and optimization, animated GIFs, image maps, tables, frames, forms, server-side processing, FTP clients, site structure, registration and maintenance. Designed as the foundation for those preparing to obtain recognized certificates in Web site

# COMPUTER INFORMATION TECHNOLOGY

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development or with an interest in developing personal and professional Web sites. Familiarity with the Internet, a browser, and the Windows operating system is assumed. CSU

## **CIT 171 WEB SITE DEVELOPMENT II (Formerly BUSINF-191)**

3 units

3 hours lecture weekly

Hands-on practice and theoretical issues related to the creation and publishing of effective interactive Web sites using Dynamic HTML (DHTML) coding. Students are instructed in application of cascading style sheets (CSS), introductory JavaScript, Java applets, filters, transitions, special effects, form validation, multimedia elements, and other DHTML features. Additional emphasis on e-commerce-related issues. No authoring tools are used in this class. Knowledge of HTML and familiarity with the Windows operating system are assumed. CSU

## **CIT 173 WEB SITE AUTHORIZING TOOLS (Formerly BUSINF-178)**

3 units

2 hours lecture, 3 hours lab weekly

Introduction to creating Web pages using authoring tools. Course covers advanced HTML tags and the use of popular authoring tools such as FrontPage, to create and administer sophisticated Web sites. Practice creating comprehensive Web sites, which include dynamic HTML, short scripts, and the processing of online forms. CSU

## **CIT 174 GRAPHIC APPLICATIONS FOR WEB SITE DEVELOPMENT (Formerly BUSINF-182)**

3 units

2 hours lecture, 3 hours lab weekly

Hands-on practice and theoretical issues related to creating imagery for Web delivery. Computer graphic applications utilized may include Photoshop, Flash, Freehand, Fireworks, Real Producer Plus and others. Topics include Web-safe colors, graphic formats, raster vs. vector, image slicing, image optimization and download efficiency, thumbnails, identity, and e-commerce from a visual perspective. Knowledge of introductory HTML and familiarity with the Windows operating system are assumed. CSU

## **CIT 190 PRINCIPLES OF ELECTRONIC COMMERCE (Formerly BUSINF-190)(Same as BUS-190)**

3 units

3 hours lecture weekly

The course involves the study of the main theoretical and practical issues of electronic commerce, its policies and management, and the particular problems of implementing and managing electronic-commerce systems and the current uses by business, consumers, and non-profits. Topics include Web-based technologies, electronic-data interchange, Internet infrastructure, value chains, strategies for marketing and promotion, new business models, electronic-payment systems, security, privacy, legal, ethical, and tax issues. Familiarity with the Internet and proficiency with a browser are assumed. CSU

# COMPUTER INFORMATION TECHNOLOGY

## "Computer Information Technology (formerly Business Information Technology) New and Former Course Numbers/Titles"

New Course #	New Course Title	Old Course #	Old Course Title	Units
CIT010	Exploring Computers - Brief	BUSINF 040	Exploring Computers	1.5
CIT011	Microsoft Windows - Brief	BUSINF 153A	Computer Applications: Introduction to Windows 98	1.5
CIT015	Business English - Brief	BUSINF 092	Business English	1.5
CIT016	Business Communications - Brief	BUSINF 091	Business Communications	1.5
CIT020	Office Procedures - Brief	BUSINF 090	Administrative Office Procedures	1.5
CIT035	The Internet - Brief	BUSINF 051	Exploring the Internet	1.5
CIT050	Microsoft Word - Brief	BUSINF 077	Word 97	1
CIT052	WordPerfect - Brief	BUSINF 081	WordPerfect	1.5
CIT055	Microsoft Excel - Brief	BUSINF 076	Introduction to Excel 97	1
CIT060	Microsoft Access - Brief	BUSINF 075	Introduction to Access 97	1
CIT065	Microsoft PowerPoint - Brief	BUSINF 080	PowerPoint 97	1
<b>SPECIAL TOPICS: WORKSHOPS</b>				
CIT098A	Microsoft Windows Workshop	BUSINF 054	Introduction to Windows 98	0.5
CIT098B	Microsoft Word Workshop	BUSINF 058	Microsoft Word 97	0.5
CIT098C	Microsoft Excel Workshop	BUSINF 056	Microsoft Excel 97	0.5
CIT098D	Microsoft Access Workshop	BUSINF 055	Microsoft Access 97	0.5
CIT098E	Microsoft PowerPoint Workshop	BUSINF 057	Microsoft PowerPoint 97	0.5
CIT098F	Quicken Workshop	BUSINF 059	Quicken	0.5
<b>TRANSFERABLE COURSES</b>				
CIT101	Computer Fundamentals	BUSINF 104	Intro to Computer Operations	3
CIT105	Microsoft Windows	BUSINF 153	Computer Applications: Working with Windows	3
CIT 110	Keyboarding & Document Processing	BUSINF 106	Keyboarding I	3
CIT 111	Advanced Document Processing & Skillbuilding	BUSINF 107	Advanced Keyboarding on the Computers	3
CIT 115	Business English	BUSINF 135	Applied Business English	3
CIT 116	Business Communications	BUSINF 220	Business Communications	3
CIT120	Office Procedures	BUSINF 145	Procedures for the Electronic Office	3
CIT125	Legal Procedures	BUSINF 147	Legal Procedures	3
CIT130	Medical Office Procedures	BUSINF 136	Medical Office Procedures	3
CIT131	Medical Transcription - Brief	BUSINF 137	Medical Transcription	1.5
CIT132	Medical Office Finances	BUSINF 138	Medical Office Finances	3
CIT135	The Internet	BUSINF 103	Mastering the Internet	3
CIT140	Microsoft Office	BUSINF 105B	Introduction to Computer Software	3
CIT145	QuickBooks	BUSINF 185	QuickBooks	3
CIT150	Microsoft Word I	BUSINF 158	Microsoft Word 2000	3
CIT151	Microsoft Word II	BUSINF 159	Advanced Word 2000	3
CIT152	WordPerfect	BUSINF 156	Computer Applications: WordPerfect for Windows	3
CIT155	Microsoft Excel I	BUSINF 165	Computer Applications: Microsoft Excel	3
CIT156	Microsoft Excel II	BUSINF 166	Advanced Excel 2000	3
CIT160	Microsoft Access I	BUSINF 170	Computer Applications: Microsoft Access	3
CIT161	Microsoft Access II	BUSINF 171	Advanced Access 2000	3
CIT165	Microsoft PowerPoint		NEW COURSE	3
CIT166	Desktop Publishing	BUSINF 175	Computer Applications: Desktop Publishing	3
CIT167	Introduction to Photoshop - Brief	BUSINF 180	Introduction to Photoshop for Prof. and Personal Use	1.5
CIT170	Web Site Development I	BUSINF 177	Web Page Creation	3
CIT171	Web Site Development II	BUSINF 191	Web Site Development for Business	3
CIT173	Web Site Authoring Tools	BUSINF 178	Web Site Authoring Tools	3
CIT174	Graphic Applications for Web Site Development	BUSINF 182	Graphic Apps for Business Web Site Development	3
CIT190	Principles of E-Commerce	BUSINF 190	Principles of E-Commerce	3

Brief = 8-week course, Workshop = 8 hours of instruction/lab

## COMPUTER NETWORKING

### CMPNET 137 A+ CERTIFICATION 1

2 units

3 hours lecture, 3 hours lab weekly

An introduction to trouble-shooting and maintenance of microcomputers at the component level including work with multiple microcomputer-system platforms. Activities will include hands-on maintenance experience for multi-media computers. CSU

### CMPNET 138 A+ CERTIFICATION 2

2 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Computer Electronics 137 or Computer Networking 137*

Trouble shoot complex computer configurations and recover lost data and files. Memory and disk-configuration conflicts between software packages will be diagnosed. Introduction to peripheral devices such as modems, disk drives, monitors, keyboards, mice and other input/output devices. CSU

### CMPNET 140 BEGINNING NETWORK CERTIFICATION I

2 units

2 hours lecture weekly

*Prerequisite: None*

This is one of the eight networking fundamental courses in the 3Com NetPrep program. In this course, students will learn how local area network (LANs) are built: which physical cables are used, how those cables are connected, and how hardware platforms (such as servers and workstations) attach to LANs. Students will also learn about the network operating system (NOS) software and applications that run on LANs. CSU

### CMPNET 141 BEGINNING NETWORK CERTIFICATION II

2 units

2 hours lecture weekly

This is one of the eight networking fundamental courses in the 3Com NetPrep program. In this course, students will learn network topics related to wide area networks (WANs). These topics include the telecommunications components and concepts used to build WANs, as well as the protocols used to transport voice and data over a wide area. CSU

### CMPNET 142 NETWORKING ESSENTIALS

1.5 units

3 hours lecture weekly (8 week)

The course provides an in-depth study of Microsoft networking essentials. The focus will be on networking terminology, network topologies, network protocols, LAN and WAN networking. Implementing networks using Microsoft products will be explored. CSU

### CMPNET 143 MS WINDOWS NT WORKSTATION I

2 units

2 hours lecture weekly

The course provides an in-depth study in the implementation and support of Microsoft Windows NT Workstation. The focus will be on Windows NT Workstation installation, account administration, disk and resource management, networking environment, interoperation, network domain, optimization, application support, printing, and trouble-shooting. CSU

### CMPNET 144 MS WINDOWS NT SERVER

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 143 or Computer Networking 143*

The course provides an in-depth study of Microsoft Windows NT Server. The focus will be on implementing and supporting Windows NT Server installation, account administration, environment configuration, file system, local-resource protection, security, networking environment, interoperation, network domain, optimization, and troubleshooting. CSU

### CMPNET 145 MCSE EXCHANGE SERVER

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 144 or Computer Networking 144*

One of the courses in the seven-course MCSE certification series. The focus is on planning and installing the exchange server; the architecture of exchange server; supporting exchange server in a single site or multi-site enterprise environment; establishing messaging connectivity over the Internet; and supporting Web access to exchange server computers through Microsoft Outlook Web Access. CSU

**CMPNET 146 MS NT SERVER 4.0 - ENTERPRISE TECHNOLOGY**

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 144 or Computer Networking 144*

The course provides an in-depth study of Microsoft Windows NT Server 4.0 in the enterprise. The focus is on the design, implementation, and support of Windows NT Server network operating system in a multi-domain enterprise environment. CSU

**CMPNET 147 MCSE SYSTEM ADMINISTRATION OF MS SQL SERVER**

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 144 or Computer Networking 144*

The course provides an in-depth study of MS SQL server. The focus will be on installing and upgrading SQL server, creating devices and databases, creating users and assigning permission to databases, implementing SQL server-security models, backing up and restoring databases, and learning the functions of the master, msdb, and tempdb databases, and monitoring and troubleshooting SQL server. CSU

**CMPNET 148 MCSE INTERNETWORKING W/MS TCP/IP ON WinNET 4.0**

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 144 or Computer Networking 144*

The course provides an in-depth study of Microsoft TCP/IP and components networking. The focus will be on installation and configuration of DHCP server, WINS server, SNMP server services, TCP/IP printing, and LMHOSTS files as well as troubleshooting TCP/IP networks. CSU

**CMPNET 149 MCSE INTERNET INFORMATION SERVER ON WinNT 4.0**

2 units

2 hours lecture weekly

*Prerequisite: Computer Electronics 144 or Computer Networking 144*

The course provides an in-depth study of Microsoft Internet Information Server 4.0. The course concentrates on virtual servers, co-existence with Win NT Server 4.0 and MS SQL Server 7.0. The intent is to train

the student to pass the MCSE elective exam on IIS 4.0, and train the student how to administer a commercial Web site. CSU

**CMPNET 154 CISCO SYSTEM COMPUTER NETWORKING 1**

3.5 units

3 hours lecture, 0.5 hour lab weekly

*Prerequisite: Computer Electronics 148 or Computer Networking 148*

The course provides students with an excellent foundation on which to build their network training. It covers the basics of computer networking, including terms and concepts. Networking technology – how it works and why it works – is made clear in this course, where concepts like contemporary network services, transmission media, and protocols, are explained. Students learn how protocols are used in networking implementations from many vendors, especially those most common in today's LANs and WANs. CSU

**CMPNET 155 CISCO SYSTEM COMPUTER NETWORKING 2**

3.5 units

3 hour lecture, 0.5 hour lab

*Prerequisite: Computer Electronics 154 or Computer Networking 154*

This course provides students with an excellent foundation on which to build network training. Covers the basics of computer networking, including terms and concepts, networking technology – how and why it works – is made clear. Includes concepts of contemporary network services, transmission media, and protocols and how they are used in networking implementations from many vendors, especially those most common in today's LANs and WANs. CSU

**CMPNET 156 CISCO SYSTEM COMPUTER NETWORKING 3**

3.5 units

3 hours lecture, 0.5 lab weekly

*Prerequisite: Computer Electronics 155 or Computer Networking 155*

This course is the third in the Cisco System series. It covers the basics of computer networking, including terms and concepts, networking technology, and how and why it works. Contemporary network services, transmission media and protocols are explained, and students learn how protocols are used in networking

## COMPUTER SCIENCE

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implementations from many vendors, especially those most common in today's LANs and WANs. CSU

### **CMPNET 157 CISCO SYSTEM COMPUTER NETWORKING 4**

3.5 units

3 hours lecture, 0.5 lab weekly

*Prerequisite: Computer Electronics 156 or Computer Networking 156*

The course, the fourth in the Cisco System series, provides students with an excellent foundation on which to build their network training. It covers the basics of computer networking, including terms and concepts, networking technology, how and why it works, and clarifies concepts like contemporary network services, transmission media, and protocol. Students learn how protocols are used in networking implementations from many vendors, especially those most common in today's LANs and WANs. Also covers WANs WAN design, PPP, ISDN, and frame relay. CSU

### **CMPNET 158 CISCO 5 (CCNP)**

3.5 units

3 hours lecture, 0.5 lab weekly

*Prerequisite: CCNA Certification*

The beginning course in the process for pursuing a Cisco CCNP certification through the College's Cisco Academy. Topics covered include advanced routing, routing protocols, routing tables, scalable routing protocols, access lists, route distribution, and configuration of advanced networks. Requires a Cisco CCNA certification. CSU

### **CMPNET 180 WINDOWS 2000 SERVER**

2 units

1 hour lecture weekly, 3 hours lab weekly

This course provides the basic introduction to Windows 2000 Advanced Server for MCSE certification. CSU

### **CMPNET 181 WINDOWS 2000 PROFESSIONAL**

2 units

1 hour lecture weekly, 3 hours lab weekly

This course provides the basic introduction to Windows 2000 Professional for MCSE certification. CSU

### **CMPNET 182 WINDOWS 2000 DIRECTORY SERVICES**

2 units

1 hour lecture weekly, 3 hours lab weekly

*Prerequisite: CMPELC-180*

This course provides the basic introduction to Windows 2000 Directory Services for MCSE certification. CSU

### **CMPNET 183 WINDOWS 2000 NETWORK INFRA-STRUCTURE**

2 units

1 hour lecture weekly, 3 hours lab weekly

Provides technical information for deploying a Windows 2000 Advanced Server Network. This course directly relates to certification information necessary to pass the network infrastructure exam for MCSE certification. CSU

## COMPUTER SCIENCE

### **CMPSCI 101 INTRODUCTION TO COMPUTER-BASED SYSTEMS**

4 units

3 hours lecture, 3 hours lab weekly

Designed as a general introduction to the computer as a productivity tool. The student will learn how to use the computer as a tool to improve the quality of his/her written assignments and personal correspondence (word processing), to help budget time and money more effectively (spreadsheets), to keep track of large collections of things such as hobby collections or household inventories for insurance purposes (database), and to create simple programs to solve academic or personal data-manipulation problems. The course addresses "computer survival," word-processing, spreadsheets, database, and programming in about equal measure. CSU:UC

### **CMPSCI 111 INTRODUCTION TO ALGORITHMS AND PROGRAMMING/JAVA**

3 units

3 hours lecture weekly

*Co-requisite: Computer Science 111L*

This course is an introduction to programming and the organization of computers. Basic programming concepts: algorithms, data and control structures, debugging, program design, documentation, structured programming. This course will use Java to demonstrate the application of software-engineering methodologies. CSU

**CMPSCI 111L INTRODUCTION TO ALGORITHMS AND PROGRAMMING/JAVA LAB**

1 unit

3 hours lecture weekly

*Prerequisite: Concurrent enrollment in Computer Science 111*

This is a required laboratory to support Computer Science 111. CSU:UC

**CMPSCI 120 APPLICATION PROGRAM DEVELOPMENT I (COBOL)**

3 units

3 hours lecture, 1 hour lab weekly

*Prerequisite: Computer Science 132*

Writing programs for common business applications. Emphasis on developing well-structured programs to accomplish such tasks as data entry, verification, report-writing and file-updating. Importance of documentation will be stressed. COBOL language used for implementation. CSU:UC

**CMPSCI 122 INTRODUCTION TO DIGITAL COMPUTERS**

3 units

3 hours lecture weekly

*Prerequisite: Computer Science 132*

Primitive computer architecture: internal organization and utilization of digital computers. Data representation and storage organization. Primitive instructions and operations. Illustrative instruction and practice in assembly language programming of a representative computer. CSU:UC

**CMPSCI 125 FORTRAN PROGRAMMING**

3 units

3 hours lecture weekly

*Prerequisite: Computer Science 132*

Writing of computer programs for mathematical and scientific problems. Syntactical structure of language and data, translation of algorithms into FORTRAN programs, representative applications. CSU:UC

**CMPSCI 132 INTRODUCTION TO ALGORITHMS AND PROGRAMMING**

3 units

3 hours lecture weekly

*Introduction to algorithms, their representation, design, structuring, analysis and optimization. Implementation of algorithms as structured programs in a high-level language. CSU:UC*

**CMPSCI 182 DATA STRUCTURES AND PROGRAM DESIGN**

3 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Computer Science 122 and 132*

Review of primitive data types and their internal representation. Data structures built from primitive types such as arrays and records. Abstract data types such as sets, stacks, queues, trees, and graphs, and their implementation. Algorithms and applications for data structures. CSU:UC

**CMPSCI 182L DATA STRUCTURES AND PROGRAM DESIGN LAB**

1 unit

3 hours lab weekly

*Co-requisite: CMPSCI-182*

This course offers students hands-on programming experience with object-oriented data structures. Abstract data types such as sets, stacks, queues, trees, and lists will be implemented using the Java programming language. This lab is a second-semester (or intermediate-level) Java-programming language course. CSU:UC

**CMPSCI 190 WEB PROGRAMMING: JAVASCRIPT**

3 units

3 hours lecture weekly

For Web site designers who need to extend their skills beyond HTML in the development of Web sites through the use of scripting. Topics include creating animated Web pages, client-side forms validation, creating and using cookies to track users, processing forms data, and generating dynamically updated Web pages. Experience creating Web pages with HTML is strongly suggested prior to taking this course. CSU

**CMPSCI 191 CGI PROGRAMMING: PERL**

3 units

3 hours lecture weekly

An introduction to CGI (Common Gateway Interface) programming using the Perl language. Students will go beyond writing Web pages and build programs that generate entire Web sites and create server-side programs to process form input, dynamic Web pages, and interface with databases. Experience creating Web pages with HTML is strongly recommended prior to taking this course.

# DANCE

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## **CMPSCI 222 COMPUTER ORGANIZATION**

3 units

3 hours lecture weekly

An advanced computer-architecture course that covers basic addressing concepts to more advanced addressability such as base register and self-relative addressing. Computer architecture comparisons between such organizations as multiple-register processors and stack machines. Introduction to the concept of microprogrammable systems. Low-level language translation process associated with assemblers. CSU

## **CMPSCI 225 ADVANCED FORTRAN PROGRAMMING**

3 units

3 hours lecture weekly

*Prerequisite: Computer Science 101 and Computer Science 125*

A second-semester course in Fortran covering subprograms, loops, arrays, control breaks and file I/O. Applications will be geared to the areas of manufacturing, science, engineering and mathematics. CSU:UC

## **CMPSCI 235 C PROGRAMMING**

3 units

3 hours lecture weekly

*Prerequisite: Computer Science 132 or previous equivalent experience.*

An introduction to C programming to include data structure, arrays functions and file I/O. CSU:UC

## **CMPSCI 236 C++ OBJECT-ORIENTED PROGRAMMING**

3 units

3 hours lecture weekly

*Prerequisite: CMPSCI-235 or equivalent.*

Object-Oriented Programming (OOP) using the C++ language. Topics covered will be C++ classes/objects, input/output streams, overloading, inheritance, templates and exception-handling. This is a second-semester course in C++. Students entering course should already be familiar with the C programming language. CSU:UC

## **CMPSCI 252 ADA PROGRAMMING**

3 units

3 hours lecture weekly

*Prerequisite: Computer Science 132 or appropriate prior experience*

A general introduction to the ADA programming language for career programmers, engineers, and managers. The course will lay the groundwork for use of ADA for the solution of nontrivial mathematical, scientific, engineering, and commercial information-processing problems. Hands-on experience with ADA program development tools will be provided. CSU:UC

## **CMPSCI 282 ADVANCED DATA STRUCTURES**

3 units

3 hours lecture weekly

An exploration of advanced data structures (particularly persistent structures) using object-oriented design and an introduction to databases using a language like Java. Course covers main memory-based structures such as hash tables and trees. Disk-based structures such as hash-based persistent structures and indexed files. Architectural foundations for files, large-scale sorting and serialization. CSU

# **DANCE**

## **DANCE 100 DANCE APPRECIATION**

3 units

3 hours weekly

A non-performance dance course which examines the historical and cultural aspects of dance through viewing of dance films, lecture-discussions, and attendance at live performances. (Does not satisfy the physical-education activity requirement for the associate degree.) CSU:UC

## **DANCE 101 INTRODUCTION TO WORLD DANCE**

1 unit, may be taken three times

3 hours lab weekly

An introductory course designed to survey dances of selected world dance cultures. Through movement experiences and discussion, students will gain the techniques and understanding necessary to perform selected dances. CSU:UC

## **DANCE 111 FUNDAMENTALS OF DANCE MOVEMENT I**

1 unit, may be taken four times

3 lab hours weekly

Through the introduction of ballet, modern and jazz dance techniques, this course instills development of strength, flexibility, coordination and rhythm for all movement techniques. Basic warm-up and strengthening techniques, stretching, movement combinations, and information on physiological conditioning will be stressed. A preparation for all dance courses. CSU:UC

**DANCE 121 MODERN DANCE I**

1 unit

3 hours lab weekly

An introduction to the basic movements, patterns and style of modern dance, emphasizing elementary skills and techniques while conferring an appreciation of modern dance and increasing understanding of body structure and movement. CSU:UC

**DANCE 122 MODERN DANCE II**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Dance 121*

A continuation of Modern Dance I. A more intense study of modern dance technique and expanded movement experience. Exploration of rhythmic structure and patterns, expanded choreographic experiences and a more refined use of music in modern dance composition. May be repeated for a total of four units. CSU:UC

**DANCE 131 INTRODUCTION TO JAZZ TECHNIQUES**

1 unit

3 hours lab weekly

*Prerequisite: Dance 111 or equivalent*

An introduction to jazz dance, emphasizing elementary skills and techniques while conferring an appreciation of jazz dance and increasing understanding of body structure and movement. CSU:UC

**DANCE 132 INTERMEDIATE JAZZ**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Dance 131*

A progressive refinement of jazz dance technique, building on skills and techniques covered in Dance 131. May be repeated for a total of four units. CSU:UC

**DANCE 133 INTRODUCTION TO AFRICAN DANCE**

1 unit, may be taken four times

3 hours lab weekly

This is a movement course focusing on the learning of traditional dances of various West African cultures. Students will learn the fundamental elements of African dances, including polyrhythms, call and response, integration of movement to the music as well as the social/religious aspects of African culture. CSU:UC

**DANCE 134 BALLROOM AND SOCIAL DANCE**

1 unit, may be taken four times

3 hours lab weekly

This course introduces students to selected social dance styles and practices in performing these styles. Dances taught include ballroom dances, salsa, swing, and flamenco. Dances taught may vary by semester. CSU:UC

**DANCE 135 BEGINNING TAP DANCE**

1 unit, may be taken four times

3 hours lab weekly

This is a beginning course introducing basic and elementary tap techniques, as well as various routines and rhythmic structures. The history and development of tap is also discussed. CSU:UC

**DANCE 141 INTRODUCTION TO BALLET TECHNIQUES**

1 unit

3 hours lab weekly

*Prerequisite: Dance 111*

Introduction to the basic skills and techniques of ballet exercises at the barré, in order to develop flexibility, strength, control and resilience. The course concentrates on simple port de bras, adagio, and allegro combinations. CSU:UC

**DANCE 142 INTERMEDIATE BALLET**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Dance 141*

A continuation of the skills introduced in Dance 141, with additional emphasis on the rhythm, design, and dynamics. May be repeated for a total of four units. CSU:UC

**DANCE 160 DANCE PERFORMANCE ENSEMBLE**

1.5 units, may be taken four times

4-5 hours weekly

*Prerequisite: Dance 121, 131 or 141 or successful audition at schedule time*

Involves learning a repertoire created by the instructor, perfecting performance skills and final production. May be repeated for a total of six units. CSU:UC

## DESIGN ARTS AND TECHNOLOGY

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### DANCE 161 CONCERT DANCE ENSEMBLE

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

*Prerequisite: Successful audition at schedule time*

This course provides intermediate and advanced dancers with consistent opportunities to perform student and faculty choreography. Students are also introduced to dance-production methods. CSU:UC

### DANCE 170 INTRODUCTION TO CHOREOGRAPHY

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Dance 121, 131 or 141 or successful audition at first class meeting*

Designed to introduce the fundamental skills and concepts necessary to begin choreographing. Through assignments, exercises and improvisations, the fundamental concepts of dance composition will be explored. May be repeated for a total of four units. CSU:UC

### DANCE 179 COC MARCHING/DANCE TROUPE (Same as MUSIC-179)

2 units, may be taken four times

6 hours lab weekly

Rehearsal and performance of rifle, flag, and dance units auxiliary to the College of the Canyons Marching Band. Subsequent enrollment will provide the student an opportunity for additional skill and competency development within the subject matter. CSU

### DANCE 180 INTRODUCTION TO YOGA/DANCE STRETCHING

1 unit, may be taken four times

3 hours lab weekly

An introduction to basic yoga concepts including poses, postures, breathing, and meditation techniques. Also covers dance stretches to increase flexibility. CSU

## DESIGN ARTS AND TECHNOLOGY

Short-Term Application Courses

### DAT 041 APPLICATIONS: QUARKXPRESS I (Formerly Art-099A)

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic computer knowledge.*

A short-term, introductory course in page-layout design through the popular tool QuarkXpress for print media. Students learn how to utilize layout features for both text and images, along with exploring QuarkXpress's powerful tools to control basic typographic elements and format images for print.

### DAT 042 APPLICATIONS: QUARKXPRESS II

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: DAT-041.*

A short-term intermediate course in page-layout design through the popular tool QuarkXpress. Students continue to develop their skills in layout for both text and images. In addition, students explore QuarkXpress's powerful tools to control more advanced typographic elements and format images for print.

### DAT 044 APPLICATIONS: ADOBE ILLUSTRATOR (Formerly Multi-060)

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic computer knowledge.*

A short-term introduction to computer illustration using the popular tool Adobe Illustrator. Students learn how to create images, use type and layout features, use filters and format images for print, web and multimedia mediums.

### DAT 045 APPLICATIONS: ADOBE ILLUSTRATOR II

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: DAT 044.*

A short-term intermediate course in computer illustration through the popular tool Adobe Illustrator. Students will continue to develop their skills in basic computer illustration along with more advanced illustration techniques, creating images for print, web and multimedia mediums.

**DAT 047 APPLICATIONS: ADOBE PHOTOSHOP FOR DESIGNERS (Formerly MULTI-062)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic computer knowledge.*

A short-term introduction to digital imaging using the popular tool Adobe Photoshop. Students learn to scan, composite, create layers, select operating areas, image adjustment and change image modes and file formats for electronic presentations, print, and web design.

**DAT 048 APPLICATIONS: ADOBE PHOTOSHOP II FOR DESIGNERS (Formerly MULTI-064)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic Photoshop and computer knowledge.*

This short-term course is designed to explore intermediate topics in digital imaging through the popular tool Adobe Photoshop. Students continue to develop their skills in image resolution, compositing, layers, image adjustment, and sophisticated image creation for electronic presentations, print and web design.

**DAT 060 CAREERS IN INTERIOR DESIGN**

1 unit

1 hour lecture weekly

Examines the interior-design profession, industry, related occupations and work sites. Emphasizes personal, educational and professional qualifications required for entry into the field.

**DAT 061 ART AND ACCESSORIES IN INTERIOR DESIGN**

1 unit

1 hour lecture weekly

A lecture course covering the use and application of fine collectibles, art, serigraphs, lithographs, posters, framing methods, portable light fixtures, linens, and tableware in interior design. Course may include field trip.

**DAT 062 MERCHANDISING IN INTERIOR DESIGN**

1 unit

1hour lecture weekly

Covers topics such as retailing concepts and strategies used by contemporary merchandisers. Special attention will be given to the practice of activities such as sales transactions, customer service, store operations, store policies, advertising and display. May include a field trip to a notable retail store.

**DAT 071 APPLICATIONS: DREAMWEAVER (Formerly MULTI-066)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic Photoshop and computer knowledge.*

A short-term introduction to dynamic Web page design through the popular tool Dreamweaver. Students learn how to insert images, create frames, make links, use forms, and how to manage web sites by creating actual DHTML sites.

**DAT 073 APPLICATIONS: DESIGNING WEB GRAPHICS (Formerly MULTI-068)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic computer knowledge and DAT-047 or basic Adobe Photoshop experience.*

A short-term introduction to designing web graphics through the use of the popular tools Adobe Photoshop and Image Ready. Students learn how to first composite and create images, then use specialized effects to create and optimize dynamic graphics for the web.

**DAT 074 APPLICATIONS: MACROMEDIA FLASH**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Knowledge of Adobe Photoshop.*

A short-term, introductory course in vector-based animated graphics for multimedia through Macromedia Flash.

**DAT 075 APPLICATIONS: ADOBE PREMIERE (Formerly MULTI-070)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic Photoshop and computer knowledge.*

A short-term introduction to digital editing through the popular tool Adobe Premiere. Students learn how to digitize video, combine clips, and use transitions and filters to edit video for the web and multimedia mediums.

**DAT 077 APPLICATIONS: AFTER EFFECTS (Formerly MULTI-072)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic Photoshop and computer knowledge.*

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A short-term introduction to animated motion graphics through the popular tool Adobe After Effects. Students learn how to sweeten video by introducing specialized effects applied to video, graphics and text.

### **DAT 078 APPLICATIONS: DIRECTOR (Formerly MULTI-074)**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: Basic Photoshop and computer knowledge.*

A short-term introduction to multimedia production through the popular tool Macromedia Director. Students learn how to use the program's multimedia-importing techniques, basic type, and paint tools to synthesize sound, video, and graphics for use in web and CD-ROM presentations.

### **DAT 081 APPLICATIONS: 3D STUDIO MAX (MAGMA) I**

1 unit

1 hour lecture weekly

A short, introductory course in basic character design and animation using the popular tool Magma for animation. Students learn how to utilize basic design and animation features along with the application of Magma for the building of simple armatures and exploring forward kinematics animation. Not degree applicable.

### **DAT 082 APPLICATIONS: 3D STUDIO MAX (MAGMA) II**

1 unit

1 hour lecture weekly

A short-term intermediate course in character animation and design using the popular tool Discreet Magma. Students continue to develop their skills using more complex animation and designs, along with exploring Magma's powerful tools to control more advanced character designs, textures, lighting and mapping. Not degree applicable.

### **DAT 083 APPLICATIONS: 3D STUDIO MAX (MAGMA) III**

1 unit

1 hour lecture weekly

A short-term advanced course in character animation and design using the powerful tool Discreet Magma. Students continue to develop their skills in character animation, along with exploring Magma's tools to create complex set designs with maps, textures and lighting. Not degree applicable.

### **DAT 085 APPLICATIONS: MAYA I**

1 unit

1 hour lecture weekly

A short-term introductory course in character animation and design through the popular tool MAYA. Students learn how to design and animate basic characters, along with exploring MAYA's powerful tools to control basic textures and graphics. Students need basic computer knowledge. Not degree applicable.

### **DAT 086 APPLICATIONS: MAYA II**

1 unit

1 hour lecture weekly

A short-term intermediate course in character animation and design through the popular tool MAYA. Students learn how to design and animate complex characters and explore detailed textures and mapping for characters and set design. Second course in the series. Not degree applicable.

### **DAT 087 APPLICATIONS: MAYA III**

1 unit

1 hour lecture weekly

A short-term advanced course in character animation and design through the popular tool MAYA. Students learn how to design, texture and map complex set designs, along with exploring MAYA's powerful tools to control rendering, lighting and effects. Third in the series. Not degree applicable.

### **DAT 092L OPEN ANIMATION LAB**

1-2 units, may be taken four times

3-6 hours lab weekly

*Recommended preparation: Concurrent enrollment with another DAT course.*

An open lab for the currently enrolled design arts and technology student who wishes to increase skills through the use of the computer animation lab. Offered on a credit/no credit basis only. Not degree applicable.

### **DAT 094L OPEN GRAPHICS LAB (Formerly Art-090L)**

1-2 units, may be taken four times

3-6 hours lab weekly

*Prerequisite: None*

This course is for students who are currently enrolled in any DAT or multimedia course that uses the Macintosh computer. Students may use the lab hours to increase their skills using Adobe Photoshop, Adobe Illustrator and/or QuarkXpress. Not degree applicable.

**DAT 095L OPEN CAD LAB**

1-2 units, may be taken four times

3-6 hours lab weekly

*Recommended Preparation: Concurrent enrollment with another DAT course.*

An open lab for the currently enrolled design arts and technology student who wishes to increase skills through the use of the CAD lab. Offered on a credit/no credit basis only. Not degree applicable.

**DAT 096L OPEN ARCHITECTURAL/INTERIOR LAB**

1-2 units, may be taken four times

3-6 hours lab weekly

*Recommended Preparation: Concurrent enrollment with another DAT course.*

An open lab for the currently enrolled design arts and technology student who wishes to increase skills through the use of the architectural and interior design lab. Offered on a credit/no credit basis only. Not degree applicable.

**DAT 097L OPEN MULTIMEDIA LAB (Formerly MULTI-090L)**

1-2 units, may be taken four times

3-6 hours lab weekly

*Recommended preparation: Concurrent enrollment with another DAT course.*

An open lab for the currently enrolled multimedia student who wishes to increase skills through the use of the multimedia lab facility. Not degree applicable.

**DAT 100A INTRODUCTION TO DESIGN TECHNOLOGY (Formerly MULTI-050)**

1 unit

3 hours lecture weekly/6-week course

A short-term course focusing on basic computer operations, along with exploring various software used specifically for the design arts. The course also covers resolving software conflicts and the key to management. The first of three introductory courses to technology. CSU

**DAT 100B INTRODUCTION TO DESIGN TECHNOLOGY II (Formerly DAT-180)**

1 unit

3 hours lecture weekly/6-week course

*Recommended preparation: DAT-100A.*

A short-term course focusing on defining and exploring desktop computer hardware systems used specifically in the design arts. Discussion is on high-end printers, options in file storage, and resolution of hardware con-

flicts. The second of three introductory courses in technology. CSU

**DAT 100C INTRODUCTION TO DESIGN TECHNOLOGY III**

1 unit

3 hours lecture weekly/6-week course

*Recommended Preparation: DAT 100B.*

A short-term course focusing on exploring peripherals like digital cameras, camcorders and scanners used specifically in the design arts. The course will define file formats and compression theories. The third of introductory courses in technology. CSU

**DAT 101 SURVEY OF DESIGN ARTS TECHNOLOGY (Formerly MULTI-120)**

3 units

3 hours lecture weekly

*Recommended Preparation: DAT 100A, 100B, 100C or equivalent.*

This course surveys the design arts and technology industry, including discussion of commercial, artistic, and technical aspects of its development and production. Topics covered include the definition of design arts and its tools of production along with occupational opportunities and critically evaluating the design arts. CSU

**DAT 102 APPLIED COLOR FOR DESIGNERS (Formerly DAT-162)**

3 units, may be taken two times

2 hours lecture, 3 hours lab weekly

This course is focused on theory and application of color in design and digital media. Students will get hands-on experience with the elements of color as they change backgrounds and environments by applying pigmented and/or digital color. The course concentrates on color systems, psychology and appropriate color choices for various projects such as architecture, interior design, set decoration, advertising and marketing. CSU

**DAT 104 RAPID VISUALIZATION AND ILLUSTRATION (Formerly DAT-164)**

3 units

2 hours lecture, 3 hours lab weekly

This course covers techniques for freehand drawing and illustration necessary for visual communication and presentation. Rapid sketching techniques in addition to perceptual skills and an understanding of line, tone, proportion, composition, perspective, and rendering are included. CSU

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### **DAT 105 DIGITAL PHOTOGRAPHY I (Formerly MULTI-165. Same as Photo-165)**

3 units, May be taken four times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 100A, 100B, and 100C or basic computer knowledge.*

A semester long course covering basic to intermediate-level digital photographic manipulation. Topics include demonstration of Adobe Photoshop software, scanning, image compositing, color correction and use of digital cameras. CSU

### **DAT 140 VISUAL DESIGN (Formerly MULTI-140)**

3 units

2 hours lecture/3 hours lab weekly

*Recommended Preparation: DAT-100A, 100B, and 100C or basic computer knowledge.*

Using traditional and computer art tools, students learn principles of design including line, shape/form, space, size/scale, texture/pattern, orientation, light, value, volume, perspective, typography and color. These principles are explored in a series of progressive projects that help students produce media that are aesthetically rich and artistically sound. CSU

### **DAT 142 2D COMPUTER ILLUSTRATION (Formerly Art-223)**

3 units

2 hours lecture/3 hours lab weekly

*Recommended Preparation: DAT-100A, 100B, 100C or basic computer knowledge.*

Introductory course in the methods, materials and techniques used for commercial illustration. Emphasis is placed on two-dimensional aspects of computer illustration using Adobe Illustrator and Adobe Photoshop on the Macintosh computer to develop textures, lines, shapes, and colors, that are used to illustrate books, editorials, and other forms of graphic communication. Students will develop illustrations from concept to completion and understand the use of commercial illustration as a career path. CSU

### **DAT 144 GRAPHIC DESIGN I (Formerly Art 254)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: Art-140 or DAT-140 and DAT-100A, 100B, 100C or basic computer knowledge.*

A survey in basic design of print graphics that covers both beginning page layout and logo design. The course will include instruction in several computer applications. CSU

### **DAT 145 TYPE & TYPOGRAPHY (Formerly Art 260)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-100A, 100B, 100C or basic computer knowledge.*

Introductory course in the history, development and creation of western letter forms and typography for use in advertising, print media, publications and other areas of communication and graphic design. Emphasis is placed on the ability to understand the nature of letter forms, the importance of typography in society, and the use of visual techniques to develop typographic sensitivity. Traditional hand-lettering and the use of the computer enable students to explore a variety of typographic methods and aesthetic consideration. CSU

### **DAT 148 PACKAGING DESIGN (Formerly Art-264)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-140 or Art-140.*

This is an introductory course in the use, design and marketing of products, and the packages in which they are displayed. The course focuses on two and three-dimensional design, environmentally sound design, and marketing strategies of packaging design. Students will study the history of packaging, the materials that are used (past and present) and develop an understanding of the future of package design. CSU

### **DAT 150 INTRODUCTION TO MECHANICAL DRAFTING AND AUTOCAD® (Same as Engineering 150)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: Concurrent enrollment in DAT 100.*

This entry-level course emphasizes the theory of mechanical drafting and includes drawings done on the board featuring line quality, lettering, orthographic projection and isometric sketching. AutoCAD's® structure, draw and edit commands will be introduced. Some drawings will be computer-generated. CSU:UC

**DAT 151 AUTOCAD® FOR MECHANICAL DRAFTING**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 150 or equivalent.*

This hands-on course covers the majority of drawing and editing commands and procedures necessary to complete basic 2D working drawings. CSU

**DAT 160 FUNDAMENTALS OF INTERIOR DESIGN**

3 units

2 hours lecture, 3 hours lab weekly

An in-depth study of the principles and elements of interior design based on function and aesthetics.

Creative expression and the design process will be developed through the use of presentation skills. CSU

**DAT 161 INTERIOR MATERIALS AND PRODUCTS**

3 units

3 hours lecture weekly

A comprehensive survey of materials, products, and processes used by designers to create interior environments. Included are techniques in measuring and calculating materials for construction, installation, and specification for residential and commercial application. The course also explores client, architect, and vendor relationships. This course is of interest to interior design majors and the decorating/design professional or amateur. CSU

**DAT 162A HISTORY OF ARCHITECTURE AND FURNISHINGS I**

3 units

3 hours lecture weekly

The historical relationship between the decorative arts, architecture and interior furnishings is covered in this overview of periods from Egyptian through the classical revival period. Emphasis is placed on style development as it relates to social, economic and political influences. CSU

**DAT 162B HISTORY OF ARCHITECTURE AND FURNISHINGS II**

3 units

3 hours lecture weekly

The historical relationship between the decorative arts, architecture and interior furnishings is covered in this overview of periods from classical revival through the present. Emphasis is placed on style development as it relates to social, economic and political influences. CSU

**DAT 163 ARCHITECTURAL DRAFTING I (Formerly DAT-170)**

3 units

2 hours lecture, 3 hours lab weekly

This entry-level course is intended to provide a student with information concerning current practices in architectural drafting and construction technology sufficient for the student to produce a set of working drawings for a small single-family residence. Drafting techniques will emphasize clarity, line-weight expression and accuracy. CSU

**DAT 172 DIGITAL EDITING (Formerly MULTI-168. Same as RTVF-168)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: RTVF-118, DAT- 105, or knowledge of Adobe Photoshop.*

An introductory-level course designed to teach software applicable to desktop computer non-linear programs such as Adobe's Premiere and After Effects. The course will include making short video projects. CSU

**DAT 173 AUDIO AND MOTION GRAPHICS (Formerly MULTI-150)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-105 or knowledge of Adobe Photoshop.*

Introduction to the concepts and procedures of multimedia audio and video production emphasizing the creation, editing, and retooling of audio and video files for multimedia projects; fundamentals of camera operation, lighting, nonlinear audio and video-editing software, and storyboarding for interactive media. The course will utilize recording software, samplers, computers, video recorders and digital-editing equipment. CSU

**DAT 175 MULTIMEDIA PRODUCTION (Formerly MULTI-170).**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 140, 150.*

Students work collaboratively to design and produce small-scale multimedia products such as web sites and presentations. Working with the instructor, students design projects, create storyboards, write scripts, and create media including interfaces. Students learn about the production cycle for multimedia projects and how to communicate effectively in multimedia teams. CSU

## **DAT 177 WEB PAGE DESIGN (Formerly MULTI-180)**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-105 and 140.*

Learn visual web page design introduced through power software supporting dynamic HTML. Incorporate interactive media using animation, sound, and graphics. This course will also focus on the importance of aesthetics and interactive design principles in multimedia. CSU

## **DAT 184 INTRODUCTION TO ANIMATION**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

This course covers composition, laws of motion, drawing, timing, scripting and storyboarding. In addition, the basics of animation as it developed historically will be explored. Both traditional drawing methods and/or computers will be used. CSU

## **DAT 185 STORY DEVELOPMENT**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

An introductory course in the development of story and character for animation. Explores traditional as well as stylized forms of storyboarding from different artists. Students will be given the opportunity to attend lectures given by story artists from major feature and television studios. CSU

## **DAT 187 INTRODUCTION TO 3D StudioMAX®/ ANIMATION**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: Concurrent enrollment in DAT 184.*

This course introduces cell animation using 3D Studio® and Animator Pro software. 3D models and animations with light, sounds and textures will be produced on high-resolution computers. Animations suitable for architectural walk-throughs and/or product design will be created. CSU

## **DAT 242 GRAPHIC DESIGN II**

3 units, may be taken two times

2 hours lecture/3 hours lab weekly

*Recommended Preparation: DAT-144 and DAT-105.*

An advanced course to further develop visual communication skills in print graphics. The course will utilize several computer application programs in page layout, illus-

tration and digital imaging to explore brochure, advertising and identity graphics. CSU

## **DAT 244 GRAPHIC DESIGN PRODUCTION (Formerly Art -255)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-144.*

An introductory course in output and creation of mechanicals for printed communications. Students will develop an understanding of the use of camera-ready art such as 4-color and spot-color separations, negatives and positives. Emphasis is placed on learning the language of print production and of printers, printer specifications, and the appropriateness of traditional and digital camera-ready art methods. Creation of mechanicals for specific assignments will develop the student's understanding of the production process. Discussions of grayscale, color, and halftone images, both digital and traditional, will complete the understanding of document and image handling, scanning and production. CSU

## **DAT 249 GRAPHIC DESIGN PORTFOLIO**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-244.*

Students will learn to prepare and present a graphic-design portfolio in a professional manner. Emphasis will be on appropriate selection of work, concept improvement and methods of presentation. CSU

## **DAT 252 MECHANICAL DRAFTING II (Formerly DAT 152).**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 150, 151, or equivalent.*

This course covers working, assembly, detail and exploded-view drawings with emphasis on dimensioning practice using ASME geometric dimensioning and tolerancing standards. These dimensions will be applied to AutoCAD-generated drawings. Parametric designing-driven dimensioning will be introduced on drawings using software such as Mechanical Desktop, Ironcad and Solidworks. CSU

**DAT 253 SOLIDS MODELING FOR MECHANICAL DRAFTING (Formerly DAT-153)**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-151.*

This course covers topics relating to design and development of mechanical parts with solids modeling programs such as Mechanical Desktop, Solids Modeling or Pro Engineer. Parts development will involve practices used in current engineering environment. CSU

**DAT 259 MECHANICAL DRAFTING PORTFOLIO**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended preparation: DAT 151, 252, 282, and 283.*

In this course, students learn to prepare and present a mechanical-drafting portfolio in a professional manner. Emphasis will be on appropriate selection of work, concept improvement and methods of presentation. CSU

**DAT 260 CODES AND ZONING REGULATIONS**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: DAT-263*

An in-depth review of the Uniform Building Codes, ADA or California Title 24 (Disabled Access Regulations based on the governing laws of Americans with Disability Act) as related to commercial, residential and institutional projects. Students will apply building and zoning codes for the design and drafting in architecture. CSU

**DAT 262 ARCHITECTURAL DRAFTING II (Formerly DAT-171)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-163.*

Advanced architectural/residential drafting includes drawing of a set of working drawings for a two-story home with detail drawings of stairways, fireplace, and interior elevations. Perspective and axonometric drawings will be generated from the plans. CSU

**DAT 263 SPACE PLANNING (Formerly DAT-163)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: DAT-163. Recommended Preparation: DAT-160 and 163.*

This course covers topics relating to residential and commercial use of space. Human dimensions as related to anthropometrics and proxemics, the use of space for special populations and other user needs will be applied in student projects. CSU

**DAT 264 AutoCAD® FOR ARCHITECTURE AND INTERIOR DESIGN (Formerly DAT-172)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: None. Recommended Preparation: DAT-163.*

This hands-on course covers the majority of drawing and editing commands and procedures to complete basic 2D drawings for architectural floor plans and axonometric drawings. CSU

**DAT 265 ADVANCED CADD FOR ARCHITECTURE AND INTERIOR DESIGN (Formerly DAT-173)**

3 units, may be taken two times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-264.*

This advanced course includes the software technology to create 3D conceptual designs. These 3D drawings are used for design development, construction documents and working drawings. Detail drawings can be created and reused by assembling parametric material components. CSU

**DAT 266 ADVANCED INTERIOR DESIGN (Formerly DAT-166)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: DAT-104, 160, 161, 162A, 162B, 263. Co-requisites: DAT-102, 264.*

Problem-solving will be emphasized through creative design solutions for residential environments including new construction and/or remodeling for diverse clients and budgets. The application of space planning, manual drafting and AutoCAD drawings will be employed. Students will prepare several presentation boards. CSU

**DAT 269A INTERIOR DESIGN PORTFOLIO**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-266.*

In this course, students will learn to prepare and present an interior-design portfolio in a professional manner. Emphasis will be on appropriate selection of work, concept improvement and methods of presentation. CSU

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### **DAT 269B ARCHITECTURAL DESIGN PORTFOLIO**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation:* DAT 104, 262, and 265.

In this course, students learn to prepare and present an architectural portfolio in a professional manner.

Emphasis will be on appropriate selection of work, concept improvement and methods of presentation. CSU

### **DAT 271 ADVANCED DIGITAL PHOTOGRAPHY (Same as PHOTO-205)**

3 units

2 hours lecture weekly, 3 hours lab weekly

*Recommended Preparation:* DAT-105.

An advanced course covering expert skills in digital imaging software and hardware. Topics include sophisticated image-compositing and color correction, as well as utilizing the software for complex Web imagery, optimization and animation. CSU

### **DAT 275 MULTIMEDIA PRODUCTION II (Formerly MULTI-175)**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Recommended Preparation:* DAT 175.

Students work collaboratively to design and produce a full-scale multimedia project – online tutorial, interactive game, informative kiosk, etc. Using discrete skills acquired in prior courses, students put it all together from concept formation to formulative evaluation. The real-world multimedia productions will include creating media, authoring, formative evaluation, writing documentation and instructional manuals. Also, students learn important communication skills, including interviewing clients, meeting management and presentation skills. CSU

### **DAT 277 ADVANCED WEB-PAGE DESIGN**

3 units

2 hours lecture/3 hours lab weekly

*Recommended Preparation:* DAT 177.

This course covers advanced topics in Web page design. A variety of software packages are explored to incorporate expert techniques in interactive media using animation, sound, and graphics. There is an emphasis on the aesthetics of interactive-design principles in multimedia. CSU

### **DAT 279 MULTIMEDIA PORTFOLIO (Formerly MULTI-295)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation:* DAT 275.

In this course, students learn to prepare and present a multimedia portfolio in a professional manner. Emphasis is on appropriate selection of work, concept improvement and methods of presentation. CSU

### **DAT 281 ADVANCED ANIMATION**

3 units

2 hours lecture, 3 hours lab weekly

Provides an in-depth and detailed study of character animation and its techniques. Includes individual and group projects to introduce the skills used in effects animation and synch sound. CSU

### **DAT 282 ADVANCED AutoCAD® (2D) (Formerly DAT-182)**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite:* None

*Recommended Preparation:* DAT 151 or 264.

Commands for complex 2D working drawings are covered along with blocks, attributes and AutoCAD® system variables for improved user efficiency. CSU

### **DAT 283 ADVANCED AutoCAD® (3D) (Formerly DAT-183)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation:* DAT-151 or 264.

3D drawings are generated on the computer using parametric and solid-modeling techniques. CSU

### **DAT 284 INTRODUCTION TO 3D STUDIO ANIMATION FOR ARCHITECTURE AND INTERIOR DESIGN**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite:* DAT-163 and DAT-264.

An introduction to 3D software specifically designed for creating walk-throughs and fly-bys of architectural visualizations on building projects. With this realistic animation and renderings software, clients can walk through and understand spatial quality of lighting strategy, window locations and optimum views. CSU

**DAT 285 LAYOUT FOR ANIMATION**

3 units

2 hours lecture, 3 hours lab weekly

Students learn animation-layout design, composition, perspective, atmospheric and psychological lighting, and camera placement. This knowledge is applied to the construction of scenes, the congruency of sequences, and the design of backgrounds for animation. CSU

**DAT 286 FUNDAMENTALS OF AutoLISP® AND AutoCAD® CUSTOMIZATION (Formerly DAT-186)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT-151 or DAT-264.*

An introduction to AutoCAD's® on-line interpreted programming language used in the creation of automated routines for drafting and design tasks, and for creating custom menus. Overview of menu-file construction and language. Keyboard macros and script files are also covered. CSU

**DAT 287 ADVANCED 3D StudioMAX®-ANIMATION (Formerly DAT-189)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 184, and 187.*

This course covers advanced concepts for producing 3D computer models and animations. Product and/or architectural animations are produced using lighting, sound and texture using software for the PC such as 3D STUDIO®, CHARACTER STUDIO®, and ANIMATOR PRO®. CSU

**DAT 289 ANIMATION PORTFOLIO**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 104, 184, 187, and 287.*

In this course, students learn to prepare and present an animation portfolio in a professional manner. Emphasis is on appropriate selection of work, concept improvement and methods of presentation. CSU

**DAT 295 PROFESSIONAL PRACTICES**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: DAT 101.*

Provides essential skills necessary for a career in the design arts. Topics include entrepreneurial and communication skills needed in the design-arts industry, as well as project planning and team work. CSU

**DAT 299 DIRECTED STUDIES (Formerly Multi-299)**

1-3 units

*Recommended Preparation: Instructor approval.*

Provides students with further work and experience in the design-arts and technology field. CSU

# DESIGN ARTS AND TECHNOLOGY

## New and Former Design Arts and Technology Course Numbers/Titles

Course #	Course Name	Units	Old # and Name	Offered	Certificate
DAT 041	Applications: Quark I	1.0	Art 099A Intro to Quark & Illustrator	both	none
DAT 042	Applications: Quark II	1.0		both	none
DAT 044	Applications: Adobe Illustrator I	1.0	MM 060 Intro to Computer Illustration	both	none
DAT 045	Applications: Adobe Illustrator II	1.0		both	none
DAT 047	Applications: Adobe Photoshop	1.0	MM 062 Intro to Digital Imaging I	both	none
DAT 048	Applications: Adobe Photoshop II	1.0	MM 064 Intro to Digital Imaging II	both	none
DAT 071	Applications: Dreamweaver	1.0	MM 066 Intro to Web Page Design	both	none
DAT 073	Applications: Designing Web Graphics	1.0	MM 068 Intro to Designing Web Graphics	both	none
DAT 074	Applications: Macromedia Flash	1.0		spring	none
DAT 075	Applications: Adobe Premiere	1.0	MM 070 Intro to Digital Editing	both	none
DAT 077	Applications: After Effects	1.0	MM 072 Intro to Animated Motion Graphics	both	none
DAT 078	Applications Director	1.0	MM 074 Intro to Director	both	none
DAT 092L	Open Animation Lab	1-2.0		both	
DAT 094L	Open Graphics Lab	1-2.0	ART090 Open Lab	both	
DAT 095L	Open CAD Lab	1-2.0		both	
DAT 096L	Open Arch/Interior Design Lab	1-2.0		both	
DAT 097L	Open Multimedia Lab	1-2.0	MM 090L Open Lab	both	
DAT 100A	Intro to Design Technology I	1.0	MM 050	both	G, MM, AR, MD
DAT 100B	Intro to Design Technology II	1.0	DAT 180	both	G, MM, AR, MD
DAT 100C	Intro to Design Technology III	1.0		both	G, MM, AR, MD
DAT 101	Survey of Design Arts and Technologies	3.0	MM 120 Intro to Multimedia	both	G, MM, AR, MD
DAT 102	Applied Color for Designers	3.0	DAT162 Applied Color for Designers	both	G, MM, ID
DAT 104	Rapid Visualization & Illustration	3.0	DAT164 Rapid Visualization and Illustration	both	G, MM, ID
DAT 105	Digital Photography	3.0	MM 165 Digital Photo	both	G, MM, Creative
DAT 140	Visual Design	3.0	MM 140 Visual Design for MM	both	G, MM
DAT 142	2D Computer Illustration	3.0	ART223 Computer Illustration	both	G
DAT 144	Graphic Design I	3.0	ART254 Computer Graphics I	both	G
DAT 145	Type and Typography	3.0	ART260 Type & Typography	fall	G
DAT 148	Packaging Design	3.0	ART264 Packaging Design	spring	
DAT 150	Intro to Mechanical Drafting & AutoCAD	3.0	DAT150 Intro to Mechanical Drafting	both	MD
DAT 151	AutoCAD for Mechanical Drafting	3.0	DAT151 AutoCAD for Mechanical Drafting	both	MD
DAT 160	Fundamentals of Interior Design	3.0	DAT160 Fundamentals of Interior Design	both	ID
DAT 161	Interior Materials & Products	3.0	DAT161 Interior Materials & Products	fall	ID
DAT 162	History of Architecture & Furnishings	3.0	DAT165 History of Architecture & Furnishings	both	AD, ID
DAT 163	Architectural Drafting I	3.0	DAT170 Architectural Drafting	both	AD, ID
DAT 172	Digital Editing	3.0	MM 168 Digital Editing	both	
DAT 173	Audio & Motion Graphics	3.0	MM 150 Audio & Motion Graphics	spring	MM
DAT 175	Multimedia Production	3.0	MM 170 Intro to MM Production	fall	MM
DAT 177	Web Page Design	3.0	MM 180 Web Page Design	both	MM
DAT 184	Intro to Animation	3.0	DAT184 Intro to Animation		
DAT 187	Intro to 3D Computer Animation	3.0	DAT187 Intro to 3D Computer Animation	both	
DAT 242	Graphic Design II	3.0		spring	G
DAT 244	Graphic Design Production	3.0	ART255 Computer Graphics II	spring	G
DAT 249	Graphic Design Portfolio	3.0		spring	
DAT 252	Mechanical Drafting II	3.0	DAT152 Mechanical Drafting II	spring	MD
DAT 253	Solids Modeling for Mechanical Drafting	3.0	DAT153 Solids Modeling for Mechanical Drafting	fall	MD
DAT 259	Mechanical Drafting Portfolio	3.0		spring	MD
DAT 262	Architectural Drafting II	3.0	DAT171 Architectural Drafting II	spring	AD, ID
DAT 263	Space Planning	3.0	DAT163 Space Planning	both	AD, ID
DAT 264	AutoCAD for Architecture & Interior Design	3.0	DAT172 AutoCAD for Arch & Interior Design	both	AD, ID
DAT 265	Adv. CADD for Architectural & Interior Design	3.0	DAT173 Adv CADD for Arch & Interior Design	both	AD, ID
DAT 266	Interior Design Studio I	3.0	DAT166 Design Studio I	spring	ID
DAT 269A	Interior Design Portfolio	3.0		spring	ID
DAT 269B	Architectural Design Portfolio	3.0		spring	AD
DAT 271	Adv. Digital Photography	3.0		spring	
DAT 275	Multimedia Production II	3.0	MM 175 Multimedia Production	spring	
DAT 277	Adv. Web Page Design	3.0		both	
DAT 279	Multimedia Portfolio	3.0	MM 295 MM Portfolio & Entrepreneurship	spring	
DAT 282	Adv. AutoCAD (2D)	3.0	DAT182 Adv AutoCAD (2D)	spring	AD, MD
DAT 283	Adv. AutoCAD (3D)	3.0	DAT 183 Adv AutoCAD (3D)	fall	AD, MD
DAT 286	Fund. of AutoLISP & AutoCAD Customization	3.0	DAT186 Fund of AutoLISP & AutoCAD Cust	every 4th	AD, MD
DAT 287	Adv. 3D Studio & Animation	3.0	DAT189 Adv 3D Computer Animation	sem	AD, MD
DAT 289	Animation Portfolio	3.0		both	
DAT 295	Professional Practices	3.0		spring	G, MM, AD, MD, ID
DAT 299	Directed Studies	1-3.0	MM 299 Directed Studies	fall	
				both	

G=Graphics, MM=Multimedia, AD=Architectural Drafting, MD=Mechanical Drafting, ID=Interior Design,

**ECONOMICS****ECON 130 CONSUMER ECONOMICS**

3 units

3 hours lecture weekly

Elements and concepts of financial planning and decision-making in the areas of budgeting, taxes, borrowing, money management, consuming, insurance, investments, retirement, and estate planning are analyzed with an emphasis on application to changing family needs. CSU

**ECON 150 ECONOMIC PRINCIPLES IN ACTION**

3 units

3 hours lecture weekly

A one-semester economics course designed to give the student a general, elementary knowledge of basic economic concepts and serve as an introduction to more advanced economics courses. Covers basic concepts such as supply and demand, unemployment and inflation, GDP, monetary and fiscal policy, the firm, production decisions, profits and losses, and international trade. (Will not meet the requirements for economics course for business and political science majors.) CSU

**ECON 170 ECONOMIC HISTORY OF THE UNITED STATES**

(Same as HIST 170)

3 units

3 hours lecture weekly

Survey of the economic development of the U.S. emphasizing a topical approach rather than strict chronology. Includes the development of business cycles, trade, banks in the new nation, manufacturing, tariffs, slavery, big business, labor, government regulations and deregulation leading to a modern industrial nation. Fulfills the American Institutions requirement in U.S. History. CSU:UC

**ECON 201 MACROECONOMICS**

3 units

3 hours lecture weekly

*Prerequisite: None*

*Recommended Preparation: Strongly recommended ENGL-090 and MATH-060.*

Macroeconomics studies economic problems facing the nation, such as unemployment, inflation, aggregate demand and supply, gross domestic product (GDP), fiscal policy, monetary policy and supply-side economics, debts-deficits-surpluses, money and banking, the Federal Reserve System. (CAN: ECON 2) CSU:UC

**ECON 202 MICROECONOMICS**

3 units

3 hours lecture weekly

*Prerequisite: Economics 201. Recommended*

*Preparation: A passing score on the reading-placement test recommended.*

Microeconomics studies how the individual, the firm and industries behave in our economy by looking at supply and demand, perfect competition, monopolies, oligopolies, monopolistic competition, wages, prices and profits. (CAN: ECON 4) CSU:UC

**ECON 291 STATISTICAL METHODS IN BUSINESS AND ECONOMICS**

3 units

3 hours lecture weekly

*Prerequisite: Mathematics 070 or appropriate placement as determined by the COC assessment process.*

A course in descriptive statistics, elements of probability, probability distributions, sampling estimation, confidence intervals, tests of hypothesis, linear regression and correlation. Applications to problems in business and economics. Writing and the use of spreadsheet software are required. CSU:UC

**ENGINEERING****ENGR 101 INTRODUCTION TO SCIENCE, ENGINEERING AND TECHNOLOGY**

2 units

2 hours lecture weekly

This course is an introduction to engineering and engineering technology and is required of all engineering majors. Topics include history, careers, ethics and responsibilities, and engineering calculations and problem-solving (examples from mechanics, dynamics, and fluids). The curricula are also examined. Various engineering systems are modeled. The design process is examined. Guest speakers from various engineering fields are invited to speak to the class. CSU

**ENGR 150 INTRODUCTION TO MECHANICAL DRAFTING AND AUTOCAD® (Same as Design Arts & Technology 150)**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended Preparation: It is recommended that students who have no previous computer-aided drafting experience take Drafting 180 concurrently.*

## ENGLISH

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This entry-level course emphasizes the theory of mechanical drafting and includes drawings done on the board featuring line quality, lettering, orthographic projection and isometric sketching. AutoCAD's® structure, draw and edit commands will be introduced. Some drawings will be computer-generated. CSU:UC

### **ENGR 151 MATERIALS OF ENGINEERING**

3 units

3 hours lecture weekly

*Prerequisite: Chemistry 201*

This course covers properties of materials as they relate to atomic and crystal structure. Topics include atomic structure and bonding; crystalline structures; phases and phase diagrams; metals; polymers; electrical and magnetic properties. Additional topics include optical properties, corrosion and process methods. CSU

### **ENGR 152 STATICS**

3 units

3 hours lecture weekly

*Prerequisite: Physics 220, Mathematics 211*

Applications of the principles of mechanics to rigid bodies in two and three-dimensional equilibrium. Analytical and graphical solutions using force vectors and equivalent force systems to solve problems pertaining to friction, centroids, center of gravity, and moments of inertia for areas. CSU

### **ENGR 153 ELECTRICAL CIRCUITS I**

3 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Physics 221, Mathematics 212*

Electric-circuit analysis in both time and frequency domains, transient and steady-state solutions. Topics include linear circuit-analysis techniques, Kirchoff's laws, network theorems, mesh and nodal analysis, OP amps and amplifiers, Thevenin/Norton equivalents, natural-forced-complete response of RLC circuits, AC circuits, phasors, three-phase power, frequency response, and resonance. CSU :UC

## ENGLISH

### **College Skills**

#### **ENGL 010 COLLEGE SKILLS: READING AND STUDY SKILLS**

3 units

3 hours lecture weekly

*Not degree applicable*

An open-entry, open-exit individual and group instruction course or lab in reading and study skills designed for students who are not eligible to take English 034. Units do not fulfill the communications-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

#### **ENGL 011 COLLEGE SKILLS: GRAMMAR AND WRITING**

3 units

3 hours lecture weekly

*Not degree applicable*

An open-entry, open-exit individual and group instruction course or lab in grammar and writing designed for students who are not eligible to take English 035. Units do not fulfill the communication-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

#### **ENGL 012 COLLEGE SKILLS: SPELLING AND VOCABULARY**

3 units

3 hour lecture weekly

*Not degree applicable*

An open-entry, open-exit individual and group instruction course or lab in spelling and vocabulary designed for students who are not eligible to take English 033. Units do not fulfill the communication-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis.

#### **ENGL 033 SPELLING SKILLS**

2 units

2 hours lecture weekly

*Not degree applicable*

Designed to improve spelling skills necessary for college courses. Units do not fulfill the communications-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

#### **ENGL 034 READING SKILLS**

3 units

3 hours lecture weekly

*Not degree applicable*

Efficiency in reading comprehension and speed by a study of techniques of reading with an emphasis on practical material. Improvement in reading vocabulary. Units do not fulfill the communications-skills requirement and

may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

### ENGL 035 SENTENCE WRITING

3 units

3 hours lecture weekly

*Not degree applicable*

Individualized and group-learning laboratory where students improve sentence grammar, word usage, mechanics and punctuation. Units do not fulfill the communications-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

### ENGL 063 STUDY SKILLS/LISTENING AND NOTE-TAKING

1 unit

1 hour lecture weekly

*Not degree applicable*

Skills necessary for college study: reading textbooks, time management, concentration techniques, test preparation, marking textbooks, memory improvement, listening skills, note-taking, capturing the main idea and organization. Unit does not fulfill a communication-skills requirement and may not be applied toward elective units for the associate degree. Offered on a credit/no credit basis only.

### ENGL 080 INTRODUCTION TO COLLEGE READING

3 units

3 hours lecture weekly

*Prerequisite: Successful completion of ENGL-034 or appropriate placement as determined by the assessment process.*

Exploration of short stories, the novel, poetry, music, film and other mass media. Successful completion fulfills 3 units of the humanities and fine arts OR language-rationality (communication skills) requirement for the associate degree.

### ENGL 090 WRITING SKILLS

3 units

3 hours lecture weekly

*Prerequisite: Successful completion of ENGL-090 or appropriate placement as determined by the COC assessment process.*

An individualized and group-learning laboratory where students develop sentence and paragraph-writing skills. (Meets the proficiency requirement for the associate degree and/or prepares the student for English 101.)

### ENGL 092 INTRODUCTION TO TECHNICAL WRITING

3 units

3 hours lecture weekly

*Prerequisite: ENGL-035*

Helps students develop the skills they will need to write successfully in the workplace. It introduces students to the rhetorical principles and compositional practices necessary for writing effective business letters, memos, resumes, and reports. (Meets the proficiency requirement for the associate degree and/or prepares the student for English 101.)

### ENGL 095 WRITING SKILLS WORKSHOP

1 unit

1 hour lecture weekly

This course is a workshop that emphasizes the critical writing and reading activities of English 090. Focused activities designed to supplement the academic work of English 090 include assistance in grammar, sentence structure, usage, organization of the paragraph, and critical reading. Offered on a credit/no credit basis only.

### ENGL 101 ENGLISH COMPOSITION AND LITERATURE

3 units

3 hours lecture weekly

*Prerequisite: Appropriate placement as determined by the college assessment process or successful completion of ENGL-080 and 090, or 092, or ENGL-080 and JOURN-105, or equivalent.*

Principles and methods of expository writing, with reading and analysis of expository prose, plus limited exposure to creative literature. (CAN: ENGL 2) CSU:UC

*NOTE: Honors sections of English 101 are available for capable students. (See below)*

### ENGL 101H - (HONORS) INTRODUCTION TO COMPOSITION AND LITERATURE (Honors)

4 units

4 hours lecture weekly

*Prerequisite: Appropriate placement as determined by the college assessment process or successful completion of ENGL-080 and 090 or 092, or ENGL-080 and JOURN-105, or equivalent.*

Expository writing, with an emphasis on analysis and interpretation, plus application of skills for writing a research paper. Additional work on skills necessary for becoming an above-average student. CSU:UC

## ENGLISH

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### **ENGL 102 INTERMEDIATE COMPOSITION, LITERATURE AND CRITICAL THINKING**

3 units

3 hours lecture weekly

*Prerequisite: ENGL-101*

Designed to develop skills beyond those attained in English 101, this course provides instruction and practice in critical thinking and writing strong arguments using literature -- short stories, plays, novels, poems -- as subject matter. Through close reading of challenging literary works, discussion, and argumentative writing, students develop critical-thinking skills. (CAN: ENGL 4) CSU:UC

### **ENGL 103 CRITICAL READING, WRITING, AND THINKING**

3 units

3 hours lecture weekly

*Prerequisite: ENGL-101*

Designed to develop skills beyond those attained in English 101, this course provides instruction and practice in critical thinking and in writing strong arguments. Through close reading, discussion, and argumentative writing in different disciplines -- such as history, economics, politics, psychology, science, and/or other academic areas -- students will sharpen their critical thinking skills. CSU:UC

### **ENGL 105 CREATIVE WRITING**

3 units

3 hours lecture weekly

*Prerequisite: ENGL-090 or eligibility for ENGL-101*

Designed for students who have mastered fundamental writing skills and who want to experience developing ideas imaginatively in either prose or poetry. May provide the opportunity for participation in the organization of the campus literary magazine *Canyon Carvings*. CSU:UC

### **ENGL 106 CREATIVE WRITING - NONFICTION**

3 units

3 hours lecture weekly

*Prerequisite: ENGL-090 or eligibility for ENGL-101*

Students study and write nonfiction prose, emphasizing description, narration, and the personal essay. Writing practice will stress the writer's awareness of his or her own style and the manipulation of stylistic elements. CSU:UC

### **ENGL 107 INTRODUCTION TO PLAYWRITING (Same as THEATR- 230)**

3 units

3 hours lecture weekly

An introduction to playwriting. Includes discussion and analysis of structure, development of character, writing dialogue, and composition of a two-act play. CSU

### **ENGL 134 CRITICAL READING**

3 units

3 hours lecture weekly

*Prerequisite: Eligibility for ENGL-101*

This course focuses on reading that college students must do to succeed in an academic program and serves the needs of the community. High-interest selections come from many disciplines, enabling students to learn to read efficiently (speed and comprehension); to improve concentration and retention; to analyze a reading for main ideas, principal interpretation, and appropriate conclusions; to answer application questions of inference; and to critically evaluate material across the curriculum. Vocabulary development is an integral part of this course. CSU

### **ENGL 135 LITERATURE AND FILM**

3 units

3 hours lecture weekly

An introduction to literature through the comparative study of selected short stories, novels, and plays and the films based on these literary works. CSU:UC

### **ENGL 195 ENGLISH COMPOSITION AND LITERATURE WORKSHOP**

1 unit, may be taken two times

1 hour lecture weekly

*Prerequisite: Concurrent enrollment in ENGL-101*

Individual and group-learning laboratory designed to support the academic activities of English 101. Emphasis on critical-reading skills as well as argument development and structural analysis. Offered on a credit/no credit basis only. CSU

### **ENGL 250 BRITISH LITERATURE I**

3 units

3 hours lecture weekly

A survey of British literature from the beginnings to 1790. (CAN: ENGL 8 or CAN: ENGL SEQ B combined with ENGL 251) CSU:UC

**ENGL 251 BRITISH LITERATURE II**

3 units

3 hours lecture weekly

A survey of British literature, 1790 to the present. (CAN: ENGL SEQ B combined with ENGL 250) CSU:UC

**ENGL 260 AMERICAN LITERATURE I**

3 units

3 hours lecture weekly

A survey of American literature from the beginnings through 1860. CSU:UC

**ENGL 261 AMERICAN LITERATURE II**

3 units

3 hours lecture weekly

A survey of American literature from 1860 to the present. CSU:UC

**Latin American Literature see Spanish 240**

**ENGL 263 INTRODUCTION TO POETRY**

3 units

3 hours lecture weekly

A study of the elements of poetry with emphasis on discovery of meaning by reading analytically. Major forms are examined, along with aspects of imagery, figurative language, rhythms, and sounds. CSU:UC

**ENGL 264 STUDY OF FICTION**

3 units

3 hours lecture weekly

Study of selected prose fiction from different times and places in Western civilization. Emphasis on short fiction of the nineteenth and 20th centuries plus intensive work on one novel. Through close reading and discussion, students learn to analyze and interpret prose narratives. CSU:UC

**ENGL 265 INTRODUCTION TO DRAMA**

3 units

3 hours lecture weekly

Reading, analysis and discussion of selected plays from Greek tragedy to contemporary drama. Emphasis is placed on significant works of British and American playwrights. CSU:UC

**ENGL 271 MYTHOLOGY**

3 units

3 hours lecture weekly

A multicultural look at basic themes in mythology-creation, origin, fertility, heroic quest, natural phenomena,

death and afterlife, and others to show their significance and relevance to individuals and cultures. CSU:UC

**ENGL 272 THE BIBLE AS LITERATURE**

3 units

3 hours lecture weekly

Reading and discussion of selected books of the Old and New Testament, and the Apocrypha: saga, myth, epic, story, historical writing, poetry, wisdom literature, prophecy, parables, letters, proverbs. CSU:UC

**ENGL 273 WORLD LITERATURE I**

3 units

3 hours lecture weekly

A survey of world literature in translation from the early Chinese, Japanese, Indian, Ancient Greek, and Roman to the Middle Ages in Europe. The literary selections, serving as vehicles for understanding the experiences of the human family, are studied for appreciation of their artistic and cultural value. CSU:UC

**ENGL 274 WORLD LITERATURE II**

3 units

3 hours lecture weekly

A survey of world literature in translation from the Renaissance in Europe to modern times including literature of China, Japan, Africa, and Latin America. The literary selections, serving as vehicles for understanding the experiences of the human family, are studied for appreciation of their artistic and cultural value. CSU:UC

**ENGL 275 SHAKESPEARE**

3 units

3 hours lecture weekly

A survey of the principles of Shakespearean drama. Detailed reading of selected comedies, tragedies and histories. CSU:UC

**ENGL 280 WOMEN'S LITERATURE**

3 units

3 hours lecture weekly

A study of women's literature and women in short fiction, novels, poetry, drama and essay. A major focus of the course will be how literature by women reflects women's roles in various cultural settings. CSU:UC

## **ENGLISH AS A SECOND LANGUAGE**

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### **ENGLISH AS A SECOND LANGUAGE**

#### **ESL 040 INTENSIVE BEGINNING ENGLISH AS A SECOND LANGUAGE**

10 units, may be taken three times

10 hours lecture weekly

*Not degree applicable*

Development of English speaking, listening, reading and writing skills. Basic practice in listening to and speaking English. Development of basic reading comprehension and survival vocabulary. Practice writing grammatical sentences, short narratives, letters, application forms, and descriptions. Offered on a credit/no credit basis only.

#### **ESL 041 INTENSIVE LOW INTERMEDIATE ENGLISH AS A SECOND LANGUAGE**

10 units, may be taken three times

10 hours lecture weekly

*Prerequisite: ESL 040*

*Not degree applicable*

Development of English speaking, listening, reading and writing skills. Pronunciation practice of English sounds in the context of vocabulary and idioms used in class. Discussion and analysis of topics in American culture. Development of English-reading comprehension and vocabulary-building skills. Practice in writing simple, compound, and complex sentences and in writing short compositions and business letters. Offered on a credit/no credit basis only.

#### **ESL 042 INTENSIVE HIGH INTERMEDIATE ENGLISH AS A SECOND LANGUAGE**

5 units, may be taken two times

5 hours lecture weekly

*Not degree applicable*

English speaking and listening practice in a variety of contexts. Emphasis on comprehension of information. Development of vocabulary appropriate in both formal and informal situations. Discussion and analysis of topics in American culture and cultural differences. Development of note-taking skills. Restricted to students whose native language is not English. Offered on a credit/no credit basis only.

#### **ESL 045 VOCATIONAL ENGLISH AS A SECOND LANGUAGE**

3 units, may be taken three times

3 hours lecture weekly

*Not degree applicable*

Extensive introduction to and reinforcement of specific vocational concepts and language. Practice in pronunciation, grammar, and vocabulary relevant to the work setting. Restricted to students whose native language is not English. Offered on a credit/no credit basis only.

#### **ESL 060 BEGINNING READING, WRITING AND GRAMMAR**

3 units, may be taken two times

3 hours lecture weekly

*Not degree applicable*

Reading and writing skills designed to assist non-native speakers of English toward college-level work. Practice in basic sentence structure, spelling, vocabulary development, handwriting. Offered on a credit/no credit basis only.

#### **ESL 061 FUNDAMENTALS OF SPOKEN ENGLISH**

3 units, May be taken two times

3 hours lecture weekly

*Not degree applicable*

Practice in the production and understanding of spoken English, including basic grammatical patterns, pronunciation and vocabulary. Designed to assist non-native speakers of English toward college-level work. Offered on a credit/no credit basis only.

Recommended enrollment in ESL 060. Maximum credit 6 units, 3 units each semester. Offered on a credit/no credit basis only.

#### **ESL 070 READING AND WRITING SKILLS**

3 units, may be taken two times

3 hours lecture weekly

*Prerequisite: Credit in ESL 060 or appropriate placement as determined by the placement process.*

*Not degree applicable*

Intensive practice in writing basic English patterns; fundamentals of punctuation; spelling; vocabulary development; grammar; reading and writing of short paragraphs and essays. Offered on a credit/no credit basis only.

#### **ESL 071 LISTENING AND SPEAKING**

3 units, may be taken two times

3 hours lecture weekly

*Not degree applicable*

Grammatical patterns common to spoken English, such as questions, requests and reduced forms; use of idiomatic English in finding directions, greetings, leave-

taking and simple messages; basics of English pronunciation and vocalization. Offered on a credit/no credit basis only.

**ESL 075 ESL COMPUTER COMPOSITION**

2 units, may be taken two times  
2 hours lecture, 2 hours lab weekly  
*Eligibility for ESL 070 recommended.*  
*Not degree applicable*

Restricted to students whose native language is not English. Use of the computer to improve composition, grammar, and editing skills covered in the English-as-a second language writing classes.

**ESL 080 INTERMEDIATE READING AND COMPOSITION**

3 units  
3 hours lecture weekly  
*Prerequisite: Credit in ESL 070 or appropriate placement as determined by the placement process.*  
Intensive writing practice in complex sentence patterns. Reading and writing paragraphs and short essays. Punctuation, vocabulary development, and spelling. Degree applicable.

**ESL 081 SPEAKING ENGLISH AS A SECOND LANGUAGE**

3 units, may be taken two times  
3 hours lecture weekly  
*Not degree applicable*  
Pronunciation and intonation of general American English for speakers of English as a second language. Vocabulary and accent-reduction exercises. Offered on a credit/no credit basis only.

**ESL 083 HIGH INTERMEDIATE READING**

4 units, may be taken three times  
4 hours lecture weekly  
*Prerequisite: None. ESL 080 is recommended preparation.*  
*Not degree applicable*  
Development of English reading comprehension and vocabulary-building skills in extended written materials. Restricted to students whose native language is not English.

**ESL 085 ACCENT REDUCTION**

3 units, may be taken three times  
3 hours lecture weekly  
*Not degree applicable*  
Eligibility for ESL 071 recommended. Restricted to students whose native language is not English. Focus on breaking the accent barrier. English-language stress, intonation, and phoneme patterns including oral practice of English. Aural discrimination and sound patterns reproduction.

**ESL 095 TOEFL PREPARATION I**

3 units, may be taken four times  
3 hours lecture weekly  
*Not degree applicable*  
This course will focus on developing essential language skills needed to obtain a satisfactory score on the Test of English as a Second Language (TOEFL). Emphasis will be on fine-tuning learners' listening, reading, grammar, and writing skills. Development of test-taking skills and spelling practice. Restricted to students whose native language is not English. Offered on a credit/no credit basis only. .

**ESL 100 ADVANCED READING AND COMPOSITION**

4 units, may be taken two times  
4 hours lecture weekly  
*Prerequisite: (1) Minimum grade of C in ESL 080, or (2) appropriate placement as determined by the placement process.*

Reading, composition, and grammar for more advanced non-native speakers, designed to prepare students for transfer-level courses. Emphasis on reading of college-level material and on writing complex sentence patterns and paragraph-level composition. CSU:UC

**ESL 105 PARAGRAPH TO ESSAY**

4 units  
4 hours lecture weekly  
*Prerequisite: Either a minimum grade of C in ESL 100, or appropriate placement as determined by the assessment process.*  
Practice of techniques of expository and argumentative writing based on personal experience, critical reading, and critical thinking. Designed to take students from the paragraph-writing stage to the development of an essay. CSU:UC

# ENVIRONMENTAL CONTROL

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## ENVIRONMENTAL CONTROL

### ENVRMT 100 WATERWORKS MATHEMATICS

3 units

3 hours lecture weekly

*Prerequisite: Mathematics 025 equivalent ability recommended*

Manipulation, calculation and performance of all mathematical computations necessary to solve elementary water-treatment problems involving the metric system, percent, dosage, dosage rate, flow rate, volume, weight, velocity, area, geometric shapes and volumes, and elementary hydraulics. This course will assist the student with the water-treatment plant water distribution certification examinations. CSU

### ENVRMT 101 WATER TREATMENT PROCESSES I

3 units

3 hours lecture weekly

*Prerequisite: One of the following strongly recommended: Satisfactory score on mathematics placement examination (eligibility for Mathematics 060) or Waterworks Mathematics or Mathematics 060*

Designed to acquaint the student with basic water-treatment concepts and basic chemical-dosage techniques. This introductory course will also enable the student to qualify for the California state water-treatment examination for Grades I & II. CSU

### ENVRMT 102 WATER TREATMENT PROCESSES II

3 units

3 hours lecture weekly

*Prerequisite: Environmental Control 101 or Grade III Operator. Waterworks Mathematics (EC100) strongly recommended.*

A continuation of Environmental Control 101. Emphasis is placed on specific water-treatment processes and associated duties commonly encountered within a treatment facility. Will assist the student to qualify for California state water-treatment grade III examination. CSU

### ENVRMT 105 WATER DISTRIBUTION OPERATOR I

3 units

3 hours lecture weekly

A basic course covering all aspects of water distribution after the water-treatment plant. The student will become familiar with key operative parameters and maintenance of the system. Will assist the student in passing grade I water distribution operators licensing test. CSU

### ENVRMT 106 WATER DISTRIBUTION OPERATOR II

3 units

3 hours lecture weekly

*Prerequisite: Four years of employment in a water-treatment plant, water-distribution system or hold a valid Grade I license.*

An advanced course in water distribution covering subject matter of Environmental Control 105 in greater detail. Will assist the student in passing grade II water distribution operator's license test. CSU

### ENVRMT 108 WATER TREATMENT CHEMISTRY

3 units

3 hours lecture weekly

*Prerequisite: Environmental Control 101*

Expands on the concepts presented in Environmental Control 101 with particular emphasis on the chemistry of water-treatment and water-quality regulations. CSU

### ENVRMT 110 WASTEWATER AND DISPOSAL I

3 units

3 hours lecture weekly

*Prerequisite: Two years of high school mathematics strongly recommended*

Introduction to wastewater treatment and disposal. Topics covered include the characteristics of wastewater; sources and quantities of wastewater; individual sewage-treatment and disposal systems; pre-treatment, primary treatment, secondary treatment and effluent polishing. Emphasis is given to solving problems of the type encountered on operator certification examinations. CSU

### ENVRMT 111 WASTEWATER TREATMENT AND DISPOSAL II

3 units

3 hours lecture weekly

*Prerequisite: High school math and Environmental Control 110*

A continuation of Wastewater Treatment and Disposal I with additional emphasis on process control, troubleshooting, and wastewater mathematics and formula manipulations which may be encountered on state certification examinations. Topics covered include individual sewage treatment, and disposal systems and methods; pretreatment, primary treatment, secondary treatment, solids handling, chemical applications, and effluent polishing. CSU

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## FAMILY STUDIES AND EARLY CHILDHOOD EDUCATION

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### ENVRMT 112 WASTEWATER III

3 units

3 hours lecture weekly

*Prerequisite: Environmental Control 110 and Environmental Control 111 or possession of grade III certification.*

An extension of Wastewater Treatment I and II content with an emphasis on mathematics and essay problems encountered on the grade IV and V state certification examination. Topics covered will include phosphorus removal, tertiary treatment, and chemical addition. CSU

## FAMILY STUDIES AND EARLY CHILDHOOD EDUCATION

### CHLDEV 110 INTRODUCTION TO EARLY CHILDHOOD PROGRAMS

3 units

3 hours lecture weekly

This course meets partial requirements to apply for the child-development permit to teach in the Title XXII and Title V programs. An overview of history, philosophies, and development of the field of early childhood education. Course includes basic history and theories, developmental ages and stages, types of programs, roles of teachers, parent partnerships, and current issues and trends. Field observation at sites designated by the instructor will be required. It is recommended that CD 116A lab experience be taken concurrently. This course is a prerequisite for CD 115. CSU

### CHLDEV 115 CURRICULUM AND CLASSROOM MANAGEMENT OF EARLY CHILDHOOD EDUCATION PROGRAMS

3 units

3 hours lecture per week

*Prerequisite: Child Development 110*

This course continues from Child Development 110 and includes the teacher's role and goals in facilitating a developmentally appropriate learning environment for young children. The course will cover planning and implementing the physical, temporal and interpersonal environment; including materials and equipment, activity plans, scheduling, routines, transitions, and group time as well as techniques in implementation. Also integrated into this course are techniques for guiding behavior. Emphasis is on meeting the individual needs of the whole child including acknowledgment of diversity. This

course meets the CDA competency goals for center-based home day-care provider programs. CSU

### CHLDEV 116 A-B-C CURRICULUM AND CLASSROOM MANAGEMENT OF EARLY CHILDHOOD EDUCATION PROGRAM LAB

1-3 units

3 hours lab weekly per unit

*Prerequisite: Lab A - Previous completion or concurrent enrollment in Child Development 110; for Lab B - Lab A plus previous completion or concurrent enrollment in Child Development 115; for Lab C - Lab A and B.*

Three hours supervised field work/lab weekly per unit. Supervised experience working with children relating previous or concurrent coursework to practical application in the on-campus FS&ECE toddler and preschool program or in a certified ECE mentor site in the community. Emphasis is on observation, implementation and evaluation of classroom experience for young children. CSU

### CHLDEV 120 CHILD GROWTH AND DEVELOPMENT

3 units

3 hours lecture weekly

A study of the developmental process of children from the prenatal period through adolescence. The characteristics of behavior as well as the physical, emotional, social and cognitive development typical of each age period are studied. Field observations are required. This course may be required or of interest to parents, educators, health-care professionals or others who work with children or adolescents. CSU:UC

### CHLDEV 125 CHILD, FAMILY AND COMMUNITY

3 units

3 hours lecture weekly

This course is part of core curriculum meeting requirements for state licensing Title XXII, Title V programs and the child-development permit matrix. In this course the child will be studied in various contexts, where the interrelationships between family, school and community are seen as the foundation for human development. Cultural, social and family issues are studied as they relate to the developing child. Emphasis is on societal issues that impact children and their families, and how that impact affects the roles of the early childhood educator. Community resources for families and professionals are researched. CSU

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## **FAMILY STUDIES AND EARLY CHILDHOOD EDUCATION**

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### **CHLDEV 130 INFANT/TODDLER DEVELOPMENT AND CURRICULUM**

3 units

3 hours lecture weekly

An overview of infant/toddler development and its implications for group child-care settings. Principles of infant/toddler caregiving and curriculum planning will be emphasized. This course meets the CDA competency goals for infant/toddler caregivers in center-based programs. CSU

### **CHLDEV 135 SCHOOL-AGE CHILD CARE PROGRAMS AND CURRICULUM**

3 units

3 hours lecture weekly

This course examines the needs for and design of school-age child-care programs. Emphasis on developmental stages of the child ages 5-13 and curriculum development. The relationship of the family to the community and the special needs of the school-age child will be discussed. CSU

### **CHLDEV 140 RECREATIONAL LEADERSHIP IN THE SCHOOL-AGE PROGRAM**

3 units

3 hours lecture weekly

*Prerequisite: Employment in a related area recommended.*

Presents different leadership techniques and styles as they apply in leading various recreational activities for school-age children. The student will develop a file for the following activities: quiet and active games, creative dramatics, music and dance, song leading, arts and crafts, team and individual sports. Class will also include an overview of discipline techniques for small- and large-group settings. CSU

### **CHLDEV 144 MUSIC AND MOTOR DEVELOPMENT FOR THE YOUNG CHILD**

2 units

2 hours lecture weekly

Provides the basic skills, methods and theory in music and motor activities as related to the young child. The student shall develop a portfolio of materials, develop lesson plans and participate in classroom demonstrations. This course meets the CDA competency goals for center-based and home day-care provider programs. CSU

### **CHLDEV 151 ART AND CREATIVITY FOR THE YOUNG CHILD**

2 units

2 hours lecture weekly

Through lectures and demonstrations, the basis of creativity in young children is explored; planning and preparing art activities for groups of young children, including selection of appropriate media, motivational techniques and classroom arrangements. This course meets the CDA competency goals for center-based and home day-care provider programs. CSU

### **CHLDEV 155 SCIENCE AND MATH FOR THE YOUNG CHILD**

2 units

2 hours lecture weekly

Designed to promote the discovery approach to learning in the areas of basic sciences and math. The student will design basic science and math units and integrate new ideas for everyday science and math experience for young children. This course meets the CDA competency goals for center-based and home day-care provider programs. CSU

### **CHLDEV 156 LITERATURE AND LANGUAGE DEVELOPMENT FOR THE YOUNG CHILD**

2 units

2 hours lecture weekly

A survey of literature for children ages 2-6 with emphasis on techniques of selection and presentation of such literature as: story telling, development of reading readiness, selection and awareness regarding multicultural and non-sexist roles will be explored. This course meets the CDA competency goals for center-based and home day-care provider programs. CSU

### **CHLDEV 160 UNDERSTANDING AND EDUCATION OF EXCEPTIONAL CHILDREN**

3 units

3 hours lecture weekly

An introduction to the field of special education, emphasizing the development theories as they apply to the understanding and training of exceptional children and adults. Emphasis on PL94-142, main-streaming preparation of individual education plans (IEPs) and current topics and trends will be discussed. CSU

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## **FAMILY STUDIES AND EARLY CHILDHOOD EDUCATION**

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### **CHLDEV 165 TEACHING CHILDREN IN A DIVERSE COMMUNITY**

3 units

3 hours lecture weekly

Covers the impact of social, political, economic and cultural issues that shape values, beliefs, and behaviors.

Students explore personal experiences to increase skills in developing partnerships with families. CSU

### **CHLDEV 173 CHILDHOOD NUTRITION**

2 units

2 hours lecture weekly

This course will examine the nutritional needs of children from infancy through school age, in theory and in practice. It will include techniques for applying sound nutritional principles for parents and professionals at home in the curriculum of early childhood programs.

Techniques for involving children in planning preparing healthy snacks will be covered. This course meets the requirements for preschool/school age certificates. CSU

### **CHLDEV 175 HEALTH CONCERNS AND FIRST AID IN EARLY CHILDHOOD**

1 unit

1 hour lecture weekly

This class will emphasize the care of children in both health and illness. Through lecture discussions and selected articles, the student will learn normal growth and development patterns, variations in these patterns, how culture and family may impact on the child's behavior and how to care for a child who is ill. The student will be introduced to the major health problems associated with newborn, infant, early and late childhood, and how to cope with these illnesses. Basic pediatric first-aid and health and safety for the above age groups, will be discussed. This course meets Title 22 requirements for infant/child CPR and first-aid. Students can earn pediatric first-aid in Infant/child CPR and health and safety child care certificates. CSU

### **CHLDEV 198 CURRENT ISSUES IN PARENTING**

1 unit

1 hour lecture weekly

This course encompasses the dynamics of age/stage-specific child development of parenting skills. Focus is on the emotional, social, physical and cognitive maturation processes of the child as they apply to the unique nature of the parent/child relationship. It will assist both parents and teacher/caregivers in understanding this unique relationship. CSU

### **CHLDEV 201 SUPERVISION AND ADMINISTRATION OF CHILDREN'S PROGRAMS**

3 units

3 hours lecture weekly

*Prerequisite: 9 units of child development course work completed.*

The principles and practices of nursery school organization and administration including organizational structure, budgeting, personnel policies and practices, records, reporting, relationships with community resources, regulatory agencies and parents. Overview of social and public policy and professional groups influencing child development today. This course meets the CDA competency goals for center-based and home day-care provider programs. CSU

### **CHLDEV 202 ADVANCED SUPERVISION AND ADMINISTRATION OF CHILDREN'S PROGRAMS**

3 units

3 hours lecture weekly

*Prerequisite: Child Development 201 or its equivalent.*

This course builds on the competencies acquired in CD 201 and includes opportunities for administrators of children's programs to learn techniques in hiring and training staff. It covers philosophies of management and staff relations including team building and human-resource development. This course meets one of the requirements of the child development permits for site supervisor or program director as needed for Title V programs. CSU

### **CHLDEV 220 THE MENTOR TEACHER: SUPERVISING THE ADULT LEARNER - EARLY CHILDHOOD EDUCATION**

2 units

2 hours lecture weekly

*Prerequisite: Completion of a child-development course of study; which includes a supervised practicum recommended.*

Covers all aspects of supervising the adult learner in a child-care setting as well as use of the early childhood environmental rating scale (Harnes & Clifford). It is required for all candidates for mentor teacher. CSU

### **CHLDEV 225 MENTOR TEACHER SEMINAR**

0.5 unit, unlimited repeats

Meets 2 hours per month

*Prerequisite: Mentor Teacher status*

This course is designed for the mentor teacher who is in the field supervising Lab B child-development students.

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## **FIRE TECHNOLOGY**

This course fulfills the grant requirement that mentors attend monthly seminars. CSU

### **CHLDEV 226 THE IMPACT OF VIOLENCE ON CHILDREN**

3 units

3 hours lecture weekly

This course is designed to explore violent and aggressive behavior and its impact on the physical and psychological well-being of children and families. Students will look at the diverse perspectives on violence, be it in the home or in the community, and its impact on the stages of child development. Focus will be on the early childhood educator's role in teaching young children alternatives to violent behavior. CSU

### **CHLDEV 227 VIOLENCE INTERVENTION STRATEGIES**

3 units

3 hours lecture weekly

*Prerequisite: CHLDEV-226*

Builds on CHLDEV 226. Course provides early childhood educators with the skills to work with children and families who have been exposed to violence and aggression. Students identify specific characteristics that children exhibit from exposure. Techniques for classroom and behavior management will be presented, including the power of play and play materials in helping children resolve conflict and find alternatives to violent behavior. CSU

### **CHLDEV 290 CURRENT ISSUES**

0.5 unit, may be taken four times

1 hour lecture weekly

*Prerequisite: Depends on topic*

Various topics may include advanced supervision and management, curriculum, mainstreaming, multicultural, nutrition, Piaget, discipline, child abuse, conferencing, home safety and various workshops. CSU

### **CHLDEV 299 DIRECTED STUDY IN CHILD DEVELOPMENT**

1-4 units, may be taken four times

*Prerequisite: (See Directed Study courses in this catalog)*

Designed to encourage the independent study of a phase of child development of interest to a student. Topics assigned would involve library and/or laboratory study and could be used to complete the additional experience required toward the children's center permit. CSU

## **FIRE TECHNOLOGY**

### **FIRETC 101 FIRE PROTECTION ORGANIZATION**

3 units

3 hours lecture weekly

Survey of career opportunities in fire service and related fields; history of fire protection; fire-loss analysis; public, quasi-public and private fire-protection services; specific fire-protection functions; fire chemistry and physics.

CSU

### **FIRETC 102 FIRE PREVENTION TECHNOLOGY**

3 units

3 hours lecture weekly

Organization and function of fire prevention; inspections; surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; enforcing solutions to a fire hazard; public relations as affected by fire prevention. CSU

### **FIRETC 103 FIRE PROTECTION EQUIPMENT AND SYSTEMS**

3 units

3 hours lecture weekly

Portable fire-extinguishing equipment: protection systems for special hazards; sprinkler systems and fire-detection and alarm systems. CSU

### **FIRETC 104 BUILDING CONSTRUCTION FOR FIRE PROTECTION**

3 units

3 hours lecture weekly

Fundamentals of building construction as they relate to fire-protection; classification of occupancy and types of construction with emphasis on fire-protection features including building equipment, facilities, fire-resistant materials and high-rise considerations. CSU

### **FIRETC 105 FIRE BEHAVIOR AND COMBUSTION**

3 units

3 hours lecture weekly

Fundamentals and scientific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxic materials, forms of energy and fire-prevention/suppression techniques. CSU

### **FIRETC 106 FIRE COMPANY ORGANIZATION AND PROCEDURES**

3 units

3 hours lecture weekly

This course is designed to review fire department organization and offer instruction in the organization,

management and supervision of fire companies. Areas of discussion include the relationship of the company officer to the organizational structure, as well as responsibilities with regards to personnel supervision, evaluation, discipline and training, communication, fire apparatus and equipment maintenance, fire prevention, incident response and command, strategy and tactics and records and reports. CSU

**FIRETC 107 FIRE APPARATUS AND EQUIPMENT**

3 units

3 hours lecture weekly

A study of fire-apparatus design including mobile and fixed apparatus; a review of construction specifications and performance capabilities; the effective deployment, utilization and performance of equipment under emergency conditions. CSU

**FIRETC 108 FIRE HYDRAULICS**

3 units

3 hours lecture weekly

Review of applied mathematics; hydraulics laws as applied to the fire-service application formulas and mental calculations, to hydraulics and water-supply problems. CSU

**FIRETC 110 WILDLAND FIRE BEHAVIOR**

3 units

3 hours lecture weekly

This course covers topics related to wildland fire behavior such as weather, fuel and topographic factors. CSU

**FIRETC 123 FIRE INVESTIGATION**

3 units

3 hours lecture weekly

*Prerequisite: Fire Technology 101 or concurrent enrollment in Fire Technology 101*

Determining cause of fire (accidental, suspicious, and incendiary); types of fires; related laws, introduction to arson and incendiarism; recognizing and preserving evidence; interviewing witnesses and suspects; arrest and detention procedures, court procedures and giving testimony. CSU

**FIRETC 125 FIREFIGHTING TACTICS AND STRATEGY**

3 units

3 hours lecture weekly

*Prerequisite: Fire Technology 101 or concurrent enrollment in Fire Technology 101*

Course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground. CSU

**FIRETC 198 FIREFIGHTER INSERVICE TRAINING**

0.25 – 4.0 units

*Prerequisite: Current employment as a firefighter or completion of a state-approved Firefighter/academy.*

This course provides instruction in various contemporary fire-fighting techniques and subjects related to fire technology. Topics to be announced per semester. Major topics may include organizational development, fire-service appliances, fire chemistry, automatic fire extinguishers and agents, ladders, and hose operations.

**FIRETC 201 INCIDENT COMMAND SYSTEM 200**

1 unit

1 hour lecture weekly

*Prerequisite: Current employment as a firefighter or completion of a state-approved Firefighter/academy.*

ICS 200 is intended for fire personnel assigned to an incident or event who have a minimum requirement for understanding the incident command system. Basic Incident Command System 200 consists of seven modules and has been determined by National Wildfire Coordination Group as meeting the training needs of wildland fire personnel for ICS. CSU

**FIRETC 202 INCIDENT COMMAND SYSTEM 300**

1.5 units

1.5 hours lecture weekly

*Prerequisite: Current employment as a firefighter or completion of a state-approved firefighter I academy.*

Successful completion of Fire Technology 201. ICS 300 is intended for fire personnel assigned to an incident or event to have an intermediate requirement for understanding the incident command system. Intermediate Incident Command System 300 consists of five modules and has been determined by National Wildfire Coordinating Group as meeting the training needs of wildland fire personnel for ICS. CSU

**FIRETC 231A FIRE PREVENTION OFFICER 1A**

2 units

40 hours lecture total

Skills and knowledge necessary for entry into the fire-prevention field. Meets NFPA 1031 fire inspector professional qualifications and California State Board of Fire Services standards for fire prevention officer 1A. Not offered every semester. CSU

## **FRENCH**

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### **FIRETC 231B FIRE PREVENTION OFFICER 1B**

2 units

40 hours lecture total

*Prerequisite: Fire Technology 231A*

Continuation of Fire Technology 231A. Meets NFPA 1031 fire inspector professional qualifications and California State Board of Fire Services standards for fire prevention officer 1B. Not offered every semester. CSU

### **FIRETC 231C FIRE PREVENTION OFFICER 1C**

2 units

40 hours lecture total

*Prerequisite: Fire Technology 231A and 231B*

Continuation of Fire Technology 231B. Meets NFPA 1031 fire inspector professional qualifications and California State Board of Fire Services standards for fire prevention officer 1C. Not offered every semester. CSU

### **FIRETC 241A FIRE INSTRUCTOR 1A**

2 units

40 hours lecture total

An introduction to fire service-training methods with emphasis on using the occupational analysis, identifying training needs and training others to perform manipulative skills. Not offered every semester. CSU

### **FIRETC 241B FIRE INSTRUCTOR 1B**

2 units

40 hours lecture total

*Prerequisite: Fire Technology 241A*

Continuation of Fire Technology 241A with emphasis on preparation to train others in technical skills. Not offered every semester. CSU

### **FIRETC 251A FIRE INVESTIGATION 1A**

2 units

40 hours lecture total

*Prerequisite: Employment as a professional firefighter*

Fire origin and cause, evidence preservation, prosecution, maintaining records, and handling special arson and investigation problems. Not offered every semester. CSU

### **FIRETC 251B FIRE INVESTIGATION 1B**

2 units

40 hours lecture total

*Prerequisite: Fire Technology 251A or equivalent*

Provides advanced training in fire/explosion investigative techniques, evidence preservation, courtroom testimony, interview and interrogation techniques and fire cause/origin determination. This course provides the

necessary job and interpersonal skills necessary to successfully investigate fires, apprehend those responsible, and convict them. This is a state fire marshal-certified course. CSU

### **FIRETC 261A FIRE MANAGEMENT 1A**

2 units

40 hours lecture total

*Prerequisite: Employment as a professional firefighter*

Assists future fire officers with the changing role of fire managers and helps fire officers develop techniques of management skills. Not offered every semester. CSU

### **FIRETC 271A FIRE COMMAND 1A**

2 units

40 hours lecture total

Introduces fire-service personnel to human-resource management, provides an overview of the organizational structure used within the fire service, including duties and responsibilities. Introduces fire-service personnel to communication skills appropriate for reporting on conditions and managing resources at an emergency scene. CSU

### **FIRETC 271B FIRE COMMAND 1B**

2 units

40 hours lecture total

*Prerequisite: Fire Technology 271A, or equivalent*

A continuation of Fire Technology 271A dealing specifically with hazardous materials and emergency incident procedures. Meets Fire Officer 1 command training requirements established by California State Board of Fire Services. Not offered every semester. CSU

## **FRENCH**

### **FRNCH 101 ELEMENTARY FRENCH I**

4 units

4 hours lecture, 1 hour laboratory weekly

Abeginning course which meets four times weekly.

Pronunciation, oral practice, study of French cultures and civilization and basic grammar of the French language.

(CAN: FREN SEQ Acombined with FRNCH -102)CSU:UC

### **FRNCH 102 ELEMENTARY FRENCH II**

4 units

4 hours lecture, 1 hour lab weekly

*Prerequisite: French 101, Elementary French I, or equivalent (2 years high school French)*

Continuation of French 101. Pronunciation, oral practice, study of French culture and civilization, and basic

grammar of the French language. (CAN: FREN SEQ A combined with FRNCH-101) CSU:UC

**FRNCH 150 BEGINNING CONVERSATIONAL FRENCH**

3 units

3 hours lecture weekly

A beginning course for students with little or no background in French. Emphasis on understanding and speaking French in everyday situations, including vocabulary and phrases useful for studying and working in French-speaking countries. CSU

**FRNCH 201 INTERMEDIATE FRENCH I**

4 units

4 hours lecture, 1 hour lab weekly

*Prerequisite: French 102 or three years of high school French or equivalent*

Comprehensive review of French grammar with special emphasis on practical and idiomatic usage. Reading short stories in French by well-known French authors. Discussions, and written and oral reports, in French based on reading selections. This course corresponds to the fourth year of high school French. (CAN: FREN 8 or CAN: FREN SEQ B combined with FRNCH-202) CSU:UC

**FRNCH 202 INTERMEDIATE FRENCH II**

4 units

4 hours lecture, 1 hour laboratory weekly

*Prerequisite: French 201 or four years of high school French or intermediate-placement standing*

Complete review of French grammar. Oral discussion and written composition based on assigned readings of current French prose. Intensive reading of outstanding French literature. (CAN: FREN 10 or CAN: FREN SEQ B combined with FRNCH-201) CSU:UC

**GENERAL STUDIES****GENSTU 050 INDIVIDUAL DIAGNOSTIC/PRESCRIPTIVE LEARNING ASSESSMENT**

0.5 unit

8 hours lecture TBA

Not degree applicable

This course combines small group and individual sessions. The first session is informational, covering learning-disability characteristics, the assessment process and the community college eligibility model. Subsequent sessions involve group and individual achievement and

cognitive testing to determine student eligibility for services as well as individual academic strengths and weaknesses.

**GENSTU 051 INDIVIDUAL DIAGNOSTIC/PRESCRIPTIVE LEARNING ASSESSMENT**

0.5 unit

8 hours lab weekly

Not degree applicable

Diagnostic assessment for students with communication disabilities and/or acquired brain injuries. Assessment process will identify specific cognitive strengths and weaknesses, receptive and expressive language skills, information-processing skills. The compilation of information will be used to develop an individualized educational plan outlining specific recommendations and interventions once a student has been found eligible for support services. Offered on a credit/no credit basis.

**GENSTU 081 COGNITIVE BASIC SKILLS-COMPUTER ASSISTED INSTRUCTION/ADAPTED COMPUTER TECHNOLOGY**

1-5 units

(2-10 hours weekly—open entrance)

*Prerequisite: Assessment and verification of a disability with an appropriate individual education plan and approval by DSP&S.*

Not degree applicable.

Major emphasis is to improve cognitive retraining in areas of critical thinking, reasoning, communication, memory improvement, visual perception and language skills by use of computer-assisted instruction and adaptive technology. Course is designed specifically for verified acquired-brain-injured students and physically disabled students. May be repeated. Offered on a credit/no credit basis.

**GENSTU 082 INDIVIDUALIZED COMPUTER APPLICATIONS**

1-5 units

1-5 lab hours per week are available based on student need

*Prerequisite: Assessment and/or verification of a disability with an appropriate individual education plan and approval by DSP&S.*

Not degree applicable.

This course is designed for DSP&S students as a support in their courses other than English and math. It is

## GENERAL STUDIES

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tutorial in nature and focuses on the utilization of computers, assistive technology devices, the Internet, a scanner and selected software programs. Computer applications will be taken from topics based on the student's coursework to provide additional computer support or enhance basic skills. Offered on a credit/no credit basis. May be repeated.

### GENSTU 091 INDIVIDUAL STUDIES-LANGUAGE SKILLS

1-5 units

1-5 lab hours per week are available based on student need

*Prerequisite: Assessment and/or verification of a disability with an individual educational plan and approval by DSP&S*

Not degree applicable.

This course is designed for DSP&S students as a support in mainstream English and language-related courses other than mathematics. It is tutorial in nature and focuses on the utilization of computers, assistive technology devices, the Internet, a scanner and selected software programs. Computer applications are taken from topics based on the student's coursework to provide additional computer support or enhance basic skills. Offered on a credit/no credit basis. May be repeated. Not degree applicable.

### GENSTU 092 INDIVIDUAL STUDIES-MATHEMATICS SKILLS

1-4 units

1-4 lab hours per week are available based on student need

*Prerequisite: Assessment and/or verification of a disability with an individual educational plan and approval by DSP&S*

Not degree applicable.

This course is designed for DSP&S students as a support in mainstream college math classes. The course offers individual or small-group tutoring for students who have a verified disability and who are concurrently enrolled in Math 025 Arithmetic, Math 057 Algebra Preparation I, Math 058 Algebra Preparation II, Math 059 Developmental Algebra, Math 060 Elementary Algebra, Math 070 Intermediate Algebra, or Business 144 Business Mathematics. Students will learn strategies to enhance math concepts and computation skills. Offered on a credit/no credit basis. May be repeated.

### GENSTU 094 SUPERVISED TUTORING

0 units

0 hours lecture/lab

*Prerequisite: Enrollment in related class and referral of instructor/counselor*

Not degree applicable.

Provides individual assistance to students with expressed needs in study skills, learning modes and developmental materials. Learning experiences will be under instructional supervision. Offered on a credit/no credit basis.

### GENSTU 096 LITERACY TUTOR PRACTICUM

1-3 units

1-3 hours lab weekly

*Prerequisite: General Studies 105*

Not degree applicable.

Supports the on-campus SCV Reads program, coordinated through the Volunteer and Service Learning Center, by training students to serve as children's literacy tutors. Student tutors are placed at local elementary schools and practice tutoring strategies while assisting beginning and emerging readers. Offered on a credit/no credit basis.

### GENSTU 101 CAREER DECISION-MAKING FOR STUDENTS WITH DISABILITIES

3 units

3 hours lecture weekly

This course introduces students with disabilities to career-search strategies. It provides an overview of the career decision-making process including goal-setting, decision-making and researching the job market.

Students will participate in vocational testing, job-search strategies, resume writing, interviewing techniques, and group discussions on disability related issues involving career choice and employment. CSU

### GENSTU 104 TUTORING METHODS

1 unit

3 hours lab weekly

This course incorporates techniques in tutoring individuals and small groups, and techniques to improve the tutees' problem-solving, writing, computational, listening, note-taking, and test-taking skills. Students practice individual tutoring under supervision. Offered on a credit/no credit basis. CSU

**GENSTU 105 CHILDREN'S LITERACY TUTOR TRAINING**

1-3 units

3-9 hours lecture weekly

Supports the on-campus SCV Reads program, coordinated through the Volunteer and Service Learning Center, by training students to serve as children's literacy tutors. Student tutors are placed at local elementary schools and practice literacy-tutoring strategies while assisting beginning and emerging readers. This course may be highly desirable for students who see themselves as future teachers. CSU

**GENSTU 164 HITE COLLEGE SUCCESS COURSE**

3 units

3 hours lecture weekly

The purposes of this course are to assist students in mastering the pedagogical and personal skills necessary to reach their educational objectives and to provide an extended orientation to the benefits of attending College of the Canyons. This course is recommended for all new students, especially those in the HITE Program. (Students in General Studies 164 must concurrently enroll in English 164, Introduction to Research.) Offered on a credit/no credit basis only. CSU

**GENSTU 299 HONORS COLLOQUY**

3 units

Lecture hours to be arranged (TBA)

The Honors Colloquy is provided primarily for students in the HITE Program to encourage independent thinking and research on topics related to the Phi Theta Kappa Annual Honors Essay Theme. It is desirable that students taking the class be a member of Phi Theta Kappa, a national community college honor fraternity. CSU

**GEOGRAPHY****GEOG 101 PHYSICAL GEOGRAPHY**

3 units

3 hours lecture weekly

A study of the basic physical elements of the natural environment: the earth and its astronomical relationship to the sun and moon, in particular, a study of the fundamentals of the form and dimensions of the earth, maps, atmosphere, weather, climates, soils, water resources, vegetation, ecology, physical oceanography, mineral resources, geology and land forms. Satisfies physical science requirement for the associate degree. CSU:UC

**GEOG 102 CULTURAL GEOGRAPHY**

3 units

3 hours lecture weekly

A study of the basic common denominators (themes) which underpin all groups of people (cultures) on earth: natural resource base; linguistic, population, economic, political, religious, agrarian versus urban-suburban, etc., patterns. Ultimately includes a succinct analysis of some or all of these patterns as expressed within selected regions (i.e., Latin America and Europe) and countries (i.e. USA and China) which are prominent or pivotal in world affairs today. (CAN: GEOG 4) CSU:UC

**GEOLOGY****GEOG 100 PHYSICAL GEOLOGY LABORATORY**

1 unit

3 hours lab weekly

Megascopic and microscopic laboratory study and determination of selected elements, minerals and rocks. Includes study and use of topographic maps, geologic tools, geologic maps, cross-sections and columns. Fieldwork may be undertaken from time-to-time to collect earth materials and to recognize and study existing or on-going geologic processes, landforms and structures. CSU:UC

**GEOG 101 PHYSICAL GEOLOGY**

3 units

3 hours lecture weekly

Study and interpretation of the basic features of the exterior and interior of the earth's crust, the materials of which those features are composed, and the geologic processes which produced them. Includes specific consideration of minerals, rocks, volcanic activity, running water erosion, soils, ground water activity, landsliding, glaciation, coastlines, wind activity, deserts, plate tectonics, mountains, faults and earthquakes, metamorphism, geologic time, etc. Fieldwork may be undertaken from time-to-time. CSU:UC

**GEOG 102 HISTORICAL GEOLOGY**

3 units

3 hours lecture weekly

Study of the evolution of the earth's crust and the earth's plant and animal life from the beginnings to the present as revealed in geologic strata and in the fossil record. Emphasizes the evolution of the North American

## GERMAN

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continent, its landforms, contiguous oceans, animals and plants. Includes some study of the principles of paleontology. Fieldwork may be undertaken from time-to-time. CSU:UC

### GEOL 105 GEOLOGY OF CALIFORNIA

3 units

3 hours lecture weekly

Study of major geomorphic provinces of California, including their topography, basic geologic landforms and structures, geologic history, main rock units and mineral resources. Some discussion of fossil assemblages.

Fieldwork may be undertaken from time-to-time. CSU:UC

### GEOL 106 GEOLOGY OF NATIONAL PARKS AND MONUMENTS

3 units

3 hours lecture weekly

Study of the key geologic features found at selected national parks and monuments with emphasis on California and the west. Includes specific study of major landforms and geologic structures, the basic origin and evolution of those landforms and structures, the kind of rock of which they are composed, the main geologic agent, the age of the rock and the principal minerals associated with each park or monument. Fieldwork may be undertaken from time-to-time. CSU

### GEOL 107 MINERALS, ROCKS AND FOSSILS

3 units

2 hours lecture, 3 hours lab weekly

Megascopic and microscopic laboratory study and determination of selected elements, minerals, gems, igneous rocks, sedimentary rocks, metamorphic rocks and fossils. Primary emphasis placed on the study of minerals and the individual properties by which minerals are identified, although a student may emphasize one of the other earth materials. Collecting fieldwork may be undertaken from time-to-time. CSU

## GERMAN

### GERMAN 100 ADVENTURE IN GERMAN

2 units

2 hours weekly

A beginning course for students with little or no background in German. Emphasis on understanding and speaking German in everyday situations, including vocabulary and phrases useful for studying and working in German-speaking countries. The skills of translating and writing of compositions are introduced. Class is taught in the Lozanov method. CSU

### GERMAN 101 ELEMENTARY GERMAN I

4 units

4 hours lecture, 1 hour laboratory weekly

A beginning course in German. Pronunciation, oral practice, study of German culture and civilization and basic grammar of the German language. This course corresponds to the first two years of high school German. (CAN: GERM SEQ A combined with GERMAN-102) CSU:UC

### GERMAN 102 ELEMENTARY GERMAN II

4 units

4 hours lecture, 1 hour laboratory weekly

*Prerequisite: German 101 or equivalent (2 years high school German)*

Continuation of German 101. Pronunciation, oral practice, study of German culture and civilization, and basic grammar of the German language. (CAN: GERM SEQ A combined with GERMAN-101) CSU:UC

### GERMAN 101 and 102 ELEMENTARY GERMAN I AND II

8 units

8 hours lecture weekly

This course combines GERMAN 101 and GERMAN 102. For students with limited knowledge of the language, utilizing total immersion into the language and culture. Practice in understanding, reading, speaking and writing in German; emphasis on building a usable vocabulary and knowledge of idioms, writing compositions, and written and oral exercises. The goal is to communicate with ease on completion of the course. (CAN: GERM SEQ A) CSU:UC

### GERMAN 111 ADVENTURE IN GERMAN

4 units

4 hours weekly

A beginning course for students with little or no background in German. Intensive practice in understanding, speaking and writing German in everyday situations. Emphasis on building a usable vocabulary and knowledge of basic idioms in German. Class is taught in the Lozanov method. CSU

### GERMAN 201 INTERMEDIATE GERMAN I

4 units

4 hours lecture, 1 hour lab

*Prerequisite: German 102 or three years of high school German or equivalent.*

Comprehensive review of German grammar with special emphasis on practical and idiomatic usage. Readings of

short stories in German by well-known German authors. Discussions and written and oral reports in German based on reading selections. This course corresponds to the fourth year of high school German. (CAN: GERM SEQ B combined with GERMAN-202) CSU:UC

**GERMAN 202 INTERMEDIATE GERMAN II**

4 units

4 hours lecture, 1 hour lab

*Prerequisite: German 201 or advanced-placement standing.*

Complete review of German grammar. Oral discussion and written composition, dealing with assigned readings of current German prose. Intensive reading of outstanding German literature. (CAN: GERM SEQ B combined with GERMAN-201) CSU:UC

**220 ADVANCED GERMAN**

4 units

4 hours lecture weekly, 1 hour lab weekly

*Prerequisite: German 202 or advanced-placement standing.*

Comprehensive review of German grammar with emphasis on more difficult grammatical problems. Advanced conversation and composition through intensive readings of German, Austrian and Swiss literature. This course is conducted entirely in German. CSU:UC

**HISTORY****101 HISTORY OF WESTERN CIVILIZATION: THE PRE-INDUSTRIAL WEST**

3 hours lecture weekly

A general survey of the history of western civilization from earliest times to the 16th century. Emphasis is placed on the development of economic, socio-political, and cultural institutions from prehistory, riverine cultures of the Near East, the Greco-Roman world, and medieval and early modern Europe. CSU:UC

**HIST 102 HISTORY OF WESTERN CIVILIZATION: THE MODERN ERA**

3 units

3 hours lecture weekly

A general survey of the history of western civilization from the 16th century to the present. Emphasis is placed on economic, sociopolitical, and cultural developments in Europe, the Americas, and the emergent nations of the modern era. This course is especially

useful to majors in history, art history, sociology, political science, and literature. CSU:UC

**HIST 111 UNITED STATES HISTORY I**

3 units

3 hours lecture weekly

A general survey of American civilization, from the pre-Colombian era through Reconstruction (1877).

Emphasis is placed on the political, economic, and social history of the United States. (Designed for, although not limited to, transfer students.) (Taken with History 112, meets the entire American institutions requirement.) (CAN: HIST 8 or CAN SEQ B combined with HIST-112) CSU:UC

*Note: History 111 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Shaping America." Refer to CTV section in this Catalog for information on College by Television and to the schedule of classes published each semester.*

**112 UNITED STATES HISTORY II**

3 units

3 hours lecture weekly

A general survey of American civilization, 1877 to the present. Emphasis is placed on the political, economic and social history of the United States. (Designed for, although not limited to, transfer students.) (Taken with History 111, meets the entire American institutions requirement.) (CAN: HIST 10 or CAN SEQ B combined with HIST-111) CSU:UC

*Note: History 112 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "America in Perspective: U.S. History Since 1877." Refer to this Catalogue for information on College by Television and to the schedule of classes published each semester.*

**HIST 120 THE ROLE OF WOMEN IN THE HISTORY OF THE UNITED STATES**

3 units

3 hours lecture weekly

This course explores the political, economic, social and intellectual history of women in the development of the United States from the early colonial era in the 1600s to the present day with special emphasis on their contributions and problems. CSU:UC

# HISTORY

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## **HIST 150 INTRODUCTION TO THE HISTORY OF THE UNITED STATES**

3 units

3 hours lecture weekly

An introduction to the major issues in American history from the 15th through 20th centuries. Topics include colonization, the Revolutionary War, the U.S. Constitution, causes and results of the Civil War, western settlement, progressivism, World War I and World War II, various civil rights movements, America's participation in Vietnam, Watergate, and the administrations of Nixon and Clinton. Course appropriate for non-majors and applicable toward graduation requirement in American Institutions. CSU:UC

## **HIST 170 ECONOMIC HISTORY OF THE UNITED STATES**

3 units

3 hours lecture weekly

Survey of the economic development of the U.S. emphasizing a topical approach rather than strict chronology. Includes the development of business cycles, trade, banks in the new nation, manufacturing, tariffs, slavery, big business, labor, government regulations and deregulation leading to a modern industrial nation. Fulfills the American Institutions requirement in U.S. History. CSU:UC

## **HIST 191 HISTORY OF EASTERN CIVILIZATION I (same as ECON 170)**

3 units

3 hours lecture weekly

A comparative study of Asian civilizations from antiquity to the 19th century. The major historical, philosophical, cultural, political, and socioeconomic trends of China and Japan will be emphasized. Neighboring areas, such as Korea, India, and Southeast Asia, will also be discussed. CSU:UC

## **HIST 192 HISTORY OF EASTERN CIVILIZATION II**

3 units

3 hours lecture weekly

A comparative study of Asian civilizations from the nineteenth century to the present. China and Japan will be emphasized, with additional discussion of surrounding areas such as Korea, India and Southeast Asia. Important themes will include western imperialism, nationalist movements, Asian countries' involvement in World War II, the establishment of communist regimes

in several Asian countries, efforts at economic modernization, and developments in art and literature. CSU:UC

## **HIST 210 HISTORY OF CALIFORNIA**

3 units

3 hours lecture weekly

A survey of California from its pre-Colombian past to the present. Utilizing a cross-cultural emphasis, the course will also include segments of study on the natural and institutional history of California. CSU:UC

## **HIST 230 HISTORY OF AMERICAN INDIANS**

3 units

3 hours lecture weekly

A general survey of American Indian history. From the pre-Columbian past through the modern era, the saga of American Indians and their role in western civilization will be examined. Particular attention will be paid to the intersection of American Indian history and United States history. CSU

## **HIST 240 LATIN AMERICAN CIVILIZATION**

3 units

3 hours lecture weekly

A general survey of the geography, history, customs, economic and political development of Latin America from pre-Colombian times to the present. This course is especially recommended for Spanish and history majors. CSU:UC

## **HIST 241 HISTORY OF EARLY LATIN AMERICA**

3 units

3 hours lecture weekly

A general survey of Latin American history from the late pre-Columbian era to independence. Course examines the major indigenous politics, European expansion and exploration, the implantation of Iberian civilization, Ibero-American socio economic and sociopolitical infrastructures, the Catholic Church's role and impact on colonial Ibero-America, the international competition for political and economic control of the Western Hemisphere and the Ibero-American wars for independence and their aftermath. CSU:UC

## **HIST 242 HISTORY OF MODERN LATIN AMERICA**

3 units

3 hours lecture weekly

A general survey of Latin America's nineteenth and 20th centuries. Focuses on Latin America's sociopolitical and socioeconomic development from 1800 to the present.

Also provides historical analysis and review of U.S.-Latin American relations. Designed to introduce students to the internal and external forces that have shaped and continue to influence contemporary Latin American societies. CSU:UC

### **HIST 243 HISTORY OF MEXICO AND THE MEXICAN AND CHICANO**

3 units

3 hours lecture weekly

Introduces the Mexican and Chicano historical heritage from 1519 to present. Topics include: Aztec, Maya and lesser Mexican pre-Cortesian politics, the conquest of Mexico, Mexico under Spanish rule, the Mexican independence movement, the Age of Santa Anna and the War of the North American Invasion, creation of the Constitution of 1857, the Porfiriato, the Mexican Revolution and the development of the PRI, Mexican immigration into the United States, the rise and impact on the Mexican and Chicano peoples. Also includes an historical overview and analysis of U.S.-Mexican relations from 1820 to present. CSU:UC

### **HIST 245 HISTORY OF THE AMERICAS**

3 units

3 hours lecture weekly

This course emphasizes the interrelationship between the history of North and South America. It examines the social, political, economic, and diplomatic impact that the peoples of both continents have had on each other. This course fulfills the American History portion of the American Institution Requirements for CSUN Liberal Arts Majors. CSU:UC

## **HOTEL AND RESTAURANT MANAGEMENT**

### **HRMGT 101 INTRODUCTION TO THE LEISURE INDUSTRY**

3 units

3 hours lecture weekly

Surveys the opportunities, careers, responsibilities and trends in the hotel, restaurant, tourism and recreation industry. Through class presentations, guest lectures and field trips, students gain insight into the social and economic forces which interrelate and influence the various industry components. CSU

### **HRMGT 121 FOODS AND NUTRITION IN THE RESTAURANT INDUSTRY**

3 units

2 hours lecture, 3 hours lab weekly

Principles of food selection, preparation, and evaluation. Incorporates study in meal management, various cuisines and food presentation. Covers basic nutrition concepts. Discusses current industry focus concerning foods and nutrition. Lab experience applies scientific cooking principles to a variety of products. CSU

### **HRMGT 151 HOTEL OPERATIONS**

3 units

3 hours lecture weekly

*Prerequisite: HRM 101 and HRM 245 strongly recommended*

Exploration of management functions and responsibilities through observational experience in hotels. Includes exposure to the operation of various departments within a hotel. Utilizes a systems review and analysis of prescribed hotel operation. CSU

### **HRMGT 152 FRONT-OFFICE MANAGEMENT**

3 units

3 hours lecture weekly

*Prerequisite: HRM 101 recommended*

Designed to expose students to front office operation in a hospitality lodging enterprise with emphasis on guest relations and accommodations. Covers proper registering, accounting for and checking out guests. Shows administration of the front office through forecasting, occupancy statistics, billing and audit procedures. CSU

# HOTEL AND RESTAURANT MANAGEMENT

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## HRMGT 202 HOTEL AND RESTAURANT PURCHASING AND INVENTORY CONTROL

3 units

3 hours lecture weekly

*Prerequisite: HRM 101 recommended*

Strategies and mechanics involved in the procurement process. Methods of product and material selection are examined. Additional concepts include vendor selection and evaluation; material handling and storage; and value analysis and yield management. The course examines purchasing policy and procedure along with specification writing and various managerial forms of paperwork. CSU

## HRMGT 210 HOTEL AND RESTAURANT LAW

3 units

3 hours lecture weekly

The fundamentals of law important to innkeepers and restaurateurs. Examines the duties, rights and liabilities of the host and guest. Case studies and problem-solving exercises are utilized. CSU

## HRMGT 220 RESTAURANT OPERATIONS

3 units

3 hours lecture weekly

*Prerequisite: HRM 122 strongly recommended, HRM 245 recommended*

A practical application of principles and practices utilized in quantity food production. The course provides a directed opportunity for students to gain observational training in various food systems. Analysis and synthesis of various restaurant and food-service operation principles and practices are related to the management of service, production and people. CSU

## HRMGT 225 FOODSERVICE SANITATION AND SAFETY

3 units

3 hours lecture weekly

Presents guidelines and concepts that assure a safe and sanitary foodservice facility. Emphasis is on customer protection and maintenance of sanitary standards. Areas covered include accident and fire prevention; food handling and storage; and food-borne illness and prevention. The course includes sanitation certification through the National Restaurant Association Educational Foundation. CSU

## HRMGT 235 HOTEL AND RESTAURANT SALES AND MARKETING

3 units

3 hours lecture weekly

Organization and function of both sales and marketing departments focusing on planning and analysis of current product and service competition and markets. Stressed concepts include merchandising, promotion, advertising and public relations. Establishment and execution of a marketing plan to best serve the customer, allowing for the largest level of profit, is the foundation of this course. CSU

## HRMGT 245 HOTEL AND RESTAURANT SUPERVISION AND GUEST RELATIONS

3 units

3 hours lecture weekly

*Prerequisite: HRM 101 recommended*

A foundation-level presentation of supervisory-management skill areas. Management of personnel includes employee selection, training and appraisal. Management areas include management functions and theory; leadership methods and styles; quality control and assurance; policy and procedure development; discipline and motivation, and communication and listening skills. The guest-relations component of the course provides an in-depth view of guest services including guest needs and accommodations. Various guest markets are profiled to enable delivery of high-quality guest services. CSU

## HRMGT 299 HOTEL AND RESTAURANT MANAGEMENT INTERNSHIPS

1-3 units

60-225 lab hours total per semester

*Prerequisite: Hospitality 101 and Hospitality 245 strongly recommended*

On-the-job training within the hotel or restaurant industry. The experience is fulfilled through use of objectives. Coordination occurs between faculty, student and work supervisor. The classroom component serves as a problem-solving center. Course material covers professionalism, career-enhancement and job-obtainment skills. CSU

### HUMANITIES

#### HUMAN 100 THEATRE OF THE MIND

3 units

3 hours lecture weekly

An interdisciplinary course using classical and significant works to introduce the student to themes and methods of inquiry on the humanities. The perspectives and concerns of philosophy, history, and literature will be developed and applied to the study and analysis of written texts and visual images. Students will develop an understanding of the values and ideas of western civilization and their comparison to the ideals and cultural expressions of non-western civilization. Themes will vary and be listed in the class schedule. CSU

#### HUMAN 101 FORMS AND IDEAS IN HUMANITIES

3 units

3 hours lecture weekly

*Eligibility for English 101 is recommended.*

An introductory course that provides instruction in interdisciplinary analysis and interpretation of meaning in art, music, and literature and in the understanding of philosophical ideas in their own right and as they influence the world civilizations. CSU:UC

#### HUMAN 105 CULTURAL ERAS IN HUMANITIES I

3 units

3 hours lecture weekly

*Eligibility for English 101 is recommended*

Interdisciplinary, multicultural study of major eras of humanistic development from the ancient world to the fifteenth century through representative works of visual art, architecture, music, philosophy, religion, and oral and written literature. CSU:UC

#### HUMAN 106 CULTURAL ERAS IN HUMANITIES II

3 units

3 hours lecture weekly

*Eligibility for English 101 is recommended.*

Interdisciplinary, multicultural study of eras of humanistic development from the sixteenth century to the present through representative works of visual art, architecture, music, philosophy, religion, and oral and written literature. CSU:UC

#### HUMAN 150 GREAT BOOKS, GREAT IDEAS

3 units

3 hours lecture weekly

An introductory survey of classical works of literature, philosophy, history, and the visual arts. Students will

study themes of the humanistic study of human nature and the contemporary significance of the values and ideas expressed in the works of this course. Covers the time period of Greek antiquity to the end of the medieval period. CSU

### JOURNALISM

#### JOURN 015 NEWSPAPER LAB

1 unit

16 hours lecture weekly

Not degree applicable

A basic study of all aspects of newspaper production other than newswriting and reporting. Taught in a laboratory setting. Units will include contemporary newspaper design, production methods and desktop publishing.

#### JOURN 100 MEDIA AND THE SOCIETY (Same as RTVF-100)

3 units

3 hours lecture weekly

A general-interest survey and evaluation of the mass media. Focus is to help the media consumer better understand today's mass communicators: newspapers, radio, television, motion pictures, magazines, advertising, and public relations. Course content discusses the history, relationships, ethics, rights and responsibilities of media as well as topics of current interest. CSU:UC

#### JOURN 105 NEWS WRITING

3 units

3 hours lecture weekly

A basic introduction to journalism. This course teaches the principles and methods of news gathering and news writing. Adherence to professional writing style and successful interview techniques as well as the legal and ethical aspects of the profession are covered among a wide range of writing experiences. CSU

#### JOURN 110 ARTICLE WRITING

3 units

3 hour lecture weekly

Free-lance writing suitable for publication, including feature articles, editorials and reviews that will be written and marketed. Interviewing techniques, editing skills and research methods will be taught. CSU

## **LIBRARY/MEDIA TECHNOLOGY**

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### **205 ADVANCED NEWS REPORTING AND PRODUCTION**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: Journalism 105*

An extension of News Writing, this course introduces students to fundamental reporting techniques and provides students with practice in writing specialized news stories. Features, sports stories, editorials, and column/opinion pieces are written as students participate in the production of the College newspaper, the *Canyon Call* and the student magazine, *Cougar*. May be taken concurrently with Journalism 215. CSU

### **JOURN 210 NEWSPAPER AND MAGAZINE PRODUCTION STAFF**

3 units, may be taken four times

9 hours lab weekly

*Prerequisite: Journalism 205 or Photography 160*

Staff members gather, evaluate, write, photograph, and edit the news for publication in the campus newspaper, the *Canyon Call* and in the College magazine, *Cougar*. Working as a production unit, the staff plans, budgets and designs each issue through final paste-up. As a production class, may be repeated for a maximum of 12 units. May be taken concurrently with Journalism 215. CSU

### **JOURN 215 EDITORIAL WORKSHOP**

3 units, may be taken four times

1 hour lecture, 6 hours lab per week

*Prerequisite: Journalism 105 and editorial appointment.*

Must be taken concurrently with Journalism 205, Journalism 210, or Journalism 260. A study of the major aspects of editorial responsibilities. Taught in a laboratory setting, the course provides practical instruction and experience for campus editors in writing, editing, and evaluating each issue of the campus newspaper and the magazine as well as formulating editorial policy. As a production class, may be repeated for a maximum of 12 units. CSU

### **JOURN 299 DIRECTED STUDIES IN JOURNALISM**

1-3 units

3 hours lab weekly per unit

Provides students with further work and experience in the journalism field. CSU:(UC limited credit)

## **LIBRARY/MEDIA TECHNOLOGY**

### **LMTECH 100 INTRODUCTION TO RESEARCH**

2 units, may be taken two times

Introduces students to libraries and basic research techniques with emphasis on the materials and services of the College library. Students will learn to use the online public catalog, periodical indexes, Library of Congress classification system, selected reference tools and the locations of special services. The course also includes an introduction to research on the Internet with hands-on practice. Students will also learn to write research papers in the widely accepted MLA style. (This course is not designed for LMT majors.) CSU

### **LMTECH 101 INTRODUCTION TO LIBRARY SERVICES**

1 unit

3 hours lecture weekly

Surveys the history, mission, and organization of libraries and information centers. Emphasis on community analysis of library clientele, diversity of information formats, and current issues and trends. Provides beginning library/media technology students with an introduction and overview and identifies job opportunities in the field. CSU

### **LMTECH 102 REFERENCE SKILLS AND SERVICES**

1 unit

3 hours lecture weekly

Enables the student, writer, researcher, or consumer to use a library and its resources effectively. Covers the use of manual and online catalogs, print and online periodical indexes, major reference books, online searching, and the evaluation of information sources. Discussion of basic research methodology, search strategies, and standard bibliographic format. CSU

### **LMTECH 103 LIBRARY CIRCULATION SYSTEMS**

1 unit

3 hours lecture weekly

Surveys types of circulation systems, patron registration systems, loan policies, and circulation procedures for print and audiovisual materials. Covers statistics, inventory and shelving operations, interlibrary loan services, theft detection, and bibliographic checking through OCLC, Melvyl and other systems. CSU

**LMTECH 104 CATALOGING AND TECHNICAL SERVICES**

3 units

3 hours lecture weekly

Introduces basic tenets of descriptive and subject cataloging, Library of Congress, and Dewey Decimal classification systems. Provides practical skills necessary to catalog and classify a variety of library materials, using cataloging tools in both online and print formats.

Discusses MARC format, minimal-level and full-level cataloging, and vendor-supplied catalog records.

Surveys and evaluates selected online/Web catalogs.

Discusses various aspects of technical service operations in relation to cataloging. CSU

**LMTECH 106 LIBRARY COLLECTIONS: PRINT**

1 unit

3 hours lecture weekly

Provides an overview of book, government document, periodical, pamphlet, and microfilm collections.

Introduces the skills necessary to select, order, organize and maintain these library materials. CSU

**LMTECH 107 LIBRARY COLLECTIONS: NON-PRINT**

1 unit

3 hours lecture weekly

Provides an overview of non-print collections including audio and videotapes, compact discs, CD-ROMs, video laser discs, software, maps, and archival materials.

Introduces the skills necessary to select, order, organize and maintain these library materials. CSU

**LMTECH 108 AV EQUIPMENT OPERATION**

1 unit

1.5 hours lecture, 1.5 hours lab weekly

Introduction to major types of audiovisual equipment and materials, equipment operation, simple repairs and maintenance. CSU

**LMTECH 110 LIBRARY/MEDIA CENTER INTERNSHIP**

2 unit

0.5 hours lecture, 4.5 hours lab weekly

*Prerequisite: Completion of at least three (3)*

*Library/Media Technology units with a minimum grade of C or better. Enrollment in Library/Media Technology courses within the past two years.*

Provides structural on-the-job experience in a minimum of two different libraries/media centers or library departments.

The required seminar is scheduled during the first, fourth, eighth, twelfth, and final weeks of the semester. CSU

**LMTECH 112 SCHOOL LIBRARY/MEDIA CENTER SERVICES**

1 unit

3 hours lecture weekly

Survey of library/media services for elementary, junior and senior high schools. Topics covered include public relations, promotional programming, storytelling, book talks, student behavior and collection development.

CSU

**LMTECH 114 LIBRARY/MEDIA SUPERVISORY SKILLS**

1 unit

1 hour lecture weekly

Introduces supervisory skills within the context of a library/media center department or branch. How to train, motivate, counsel and evaluate employees; time management, delegation of work, preparation of memos, and statistical reports will be covered. Discussion of stress factors, problem patrons, and disaster preparedness will also occur. CSU

**LMTECH 115 INTERNET IN LIBRARIES**

1 unit

1 hour lecture weekly

An introduction to the Internet, its use in libraries, and the role of libraries in the digital age. Topics include using the Internet as a research tool, evaluating and selecting appropriate electronic resources for the library's virtual collection, and integrating these resources with the library's print collection. Students learn how to: use a Web browser, a variety of search tools, and assess the value of different free and proprietary databases on the World Wide Web. Additional topics include managing public access, filtering, and privacy. CSU

**MANUFACTURING TECHNOLOGY****MFGT 100 MEASUREMENT AND COMPUTATIONS**

3 units

3 hours lecture weekly

This occupational application of measurements and computations is used by manufacturing technology students. The topics include fractions, decimals, percents, ratio, proportions, English and metric measuring systems, applied algebra, plane geometry and practical trigonometry as they pertain to a machine shop.

Emphasis will be on the use of a scientific calculator when applicable. Applications such as current measuring tools (micrometer, caliper, and protractor), geometric

# MANUFACTURING TECHNOLOGY

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constructions, blueprint reading, computer numerical control, and the binary numeration system may be included. CSU

## **MFGT 101 MATERIALS AND PROCESSES IN MANUFACTURING**

3 units

2 hours lecture, 3 hours lab weekly

A survey of methods to process various raw materials into finished products. Materials include metals, plastics, ceramics, and composites. Processes include machining, casting, forming, joining and nontraditional methods. Emphasis is placed on the relationship between materials and processes and the manufacture of finished products. Each student receives a hands-on introduction to machining operations and manual high-speed machine tools, capabilities and use of metrology equipment, and shop safety. Laboratory production processes include grinding, milling, drilling, turning, deburring, and use of a variety of layout and metrology equipment. CSU

## **MFGT 102 ENGINEERING DRAWING INTERPRETATION**

3 units

3 hours lecture weekly

This course covers basic engineering drawings used in contemporary manufacturing industries. Both the visualization and interpretation facets of reading are given extensive coverage, including geometric dimensioning and tolerancing. Exposure to analysis of common drawing types, views, lines, dimensions, tolerances, call-outs, notes, symbology, and revision procedures are included. CSU

## **MFGT 103 INTRODUCTION TO AUTOMATED MANUFACTURING**

3 units

2 hours lecture, 3 hours lab weekly

As a first course in manufacturing automation, emphasis is placed on the building blocks of automation, application of robotics and various types of automated manufacturing systems. Students gain experience and understanding of the basic components of automated manufacturing systems including sensors, switches, actuators, drive systems, vision systems, robots, and programmable logic controllers. Application of such systems in industry is also explored. CSU

## **MFGT 111 MACHINE TECHNOLOGY**

2 units

1 hour lecture, 3 hours lab weekly

Additional training in the operation of manual machine tools in the layout, fabrication and measurement of more complicated and closer-tolerance parts. Course format includes discussion, demonstrations, hands-on practice, and manufacturing plant visitations. CSU

## **MFGT 121 CNC 1: OPERATION AND MANUAL PROGRAMMING**

3 units

2 hours lecture, 3 hours lab weekly

Students learn the necessary skills to set up, operate, and produce mill and lathe parts on computer numerical control machine tools (3-axis). This course explores the history of NC/CNC, elementary CNC programming conventions, cutting tool types, automatic tool changing, tool offsets and compensation, CNC set up procedures, and CNC mill and lathe practice. CSU

## **MFGT 122 CNC 2: CONCEPTS AND PROGRAMMING**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: MFGT-121*

This is a more advanced computer numerical-control course to cover the study of CNC programming, industrial machine controllers, and CNC production applications. Students learn the necessary skills to program and set up for mill and lathe parts on computer numerical control machine tools (3-axis). Course content includes programming standards and format, feedback systems, adaptive control, computer-to-computer machine interface, cutting-tool selection and sequencing, automatic tool changing, tool offsets and cutter compensation, and CNC mill and lathe practice. CSU

## **MFGT 131 CAD/CAM 1**

3 units

2 hours lecture, 3 hours lab weekly

This is an introduction to Computer Aided Design and Manufacturing using SURFCAM as a CAD/CAM environment. It is intended primarily for manufacturing-technology students and industrial practitioners who are new to SURFCAM. Course content includes a review of machining and CNC programming fundamentals, the SURFCAM environment and process overview, basic 2D geometry construction and modification, process and toolpath planning, 2-axis toolpath generation and editing. CSU

**MFGT 132 CAD/CAM 2**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: MFGT-131*

This course provides intermediate level CAD/CAM training using SURFCAM. It is intended primarily for manufacturing-technology students and industrial practitioners who have some experience with SURFCAM.

Contents of this course includes construction of 3D wireframe models, surface-modeling fundamentals and creation, derived and composition surfaces, 3-axis surface modeling, and 4-axis and 5-axis programming.

CSU

**MFGT 133 CAD/CAM 3**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: MFGT-132*

This course provides advanced level CAD/CAM training using SURFCAM. It is intended primarily for manufacturing-technology students and industrial practitioners who have intermediate experience with SURFCAM.

Course content includes construction of 3D wireframe models, complex surface modeling creation, derived and composite surfaces, 3-axis surface modeling, and 4-axis and 5-axis simultaneous programming. CSU

**MFGT 141 CATIA I**

3 units

2 hours lecture, 3 hours lab weekly

*Completion of the following courses or equivalent knowledge recommended: DAT-150, geometry & trigonometry, keyboarding skills, familiarity with CAD programs.*

This course teaches the emphasis on 2D projection from a 3D solid model on a Dessault system computer-aided three-dimensional interactive application (CATIA) software. CSU

**MFGT 142 CATIA II**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: Satisfactory Completion of MFGT-141 or knowledge of CATIA I interactive concepts.*

This class teaches students to utilize CATIA solid- and surface-modeling in advanced 3-dimensional design, and challenges them to undertake complex design as well as career enhancement as a base for future growth and professional endeavors. CSU

**MFGT 143 CATIA III**

3 units

3 hours lecture weekly

*Prerequisite: Satisfactory completion of MFGT-141 and 142. Advisory reading level 4 or better recommended.*

This class teaches students to utilize CATIA basic manufacturing fixed and multi-axis CNC milling for various manufacturing environments. CSU

**MATHEMATICS****MATH 010 MATHEMATICS LABORATORY FOR MEDIATED LEARNING**

1 unit, may be taken four times

TBA

*Co-requisite: Must currently be enrolled in a mediated-learning mathematics course (Math 026 or Math 059) or in the process of completing requirements for a previously taken mediated-learning mathematics class.*

Not degree applicable.

A laboratory where students work on materials that accompany the mediated-mathematics course in which they are enrolled. Computers and assistance will be available. Offered on a credit/no credit basis only.

**025 ARITHMETIC**

5 units

5 hours lecture weekly

*(Not open to students who have credit for a higher mathematics course.) Co-requisite: Math 010. Note: Student may not receive credit for more than one of Math 025, 026, and 030.*

Not degree applicable.

Nature and properties of numbers. Review of fundamentals of addition, subtraction, multiplication, division, fractions, decimals, percentages, and applications. Includes an introduction to algebra.

**MATH 026 ARITHMETIC - MEDIATED LEARNING**

4 units

4 hours lecture weekly

*Co-requisite: Math 010. (Not open to students who have credit for a higher mathematics course.) Note: Students may not receive credit for more than one of Math 025, 026, and 030.*

Not degree applicable.

# MATHEMATICS

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Nature and properties of numbers. Review of fundamentals of addition, subtraction, multiplication, division, fractions, decimals, percentages, area, volume, perimeter, metric system, graphs, techniques in solving word problems. Includes an introduction to algebra.

## **MATH 030 WORKPLACE MATHEMATICS**

5 units

4 hours lecture, 1 hour lab weekly

*Note: Students may not receive credit for more than one of Math 025, 026, and 030.*

Not degree applicable.

Review of fundamentals of addition, subtraction, multiplication, and division of fractions and decimals along with percents, perimeter, area, volume, metric measurement, graphs, and techniques in problem-solving as they relate to the workplace. Includes an introduction to algebra. May be taken as an alternative to Math 025 or 026.

## **MATH 058 ALGEBRA PREPARATION**

5 units

10 hours lecture weekly

*Prerequisite: Math 025 or 026 with a grade of C or CR.*

Not degree applicable.

An introduction to elementary algebra at a relaxed pace. Emphasis is placed on the student's gaining confidence through interaction with the instructor and other students in an open and non-threatening atmosphere. The course is designed primarily for the student who is unable to achieve at an acceptable level in an elementary algebra course.

## **MATH 059 DEVELOPMENTAL ALGEBRA (Alternate course to 057/058)**

4 units

4 hours lecture weekly

*Prerequisite: Satisfactory completion of Math 025, 026, or 030, or appropriate placement as determined by the COC assessment process. Co-requisite: Math 010.*

Not degree applicable.

An introduction to the basic elements of algebra in a computerized mediated learning environment. This course is designed to promote success as the student goes on to elementary algebra.

## **MATH 060 ELEMENTARY ALGEBRA**

5 units

5 hours lecture weekly

*Prerequisite: Satisfactory completion of Math 057/058 or 059, or appropriate placement as determined by the COC assessment process.*

Not degree applicable.

A beginning course in elementary algebra, designed to develop the manipulative skills of algebra. Introduction to the fundamental concepts of operating within the real number system, to working with first-degree equations in one unknown, to factoring of and multiplication of polynomials, and dealing with algebraic fractions. Linear functions and graphs, systems of linear equalities, exponents and radicals, quadratic equations, and applications are studied.

## **MATH 063 GEOMETRY**

5 units

5 hours lecture weekly (May also be offered as an 8-week course)

*Prerequisite: One year of high school algebra with a grade of B or better and appropriate placement as determined by the assessment process; or satisfactory completion of Math 060.*

Geometric theory and concepts, and their application to the solutions of practical geometric problems.

## **MATH 070 INTERMEDIATE ALGEBRA**

5 units

5 hours lecture weekly

*Prerequisite: One year of high school algebra with a grade of B or better and appropriate placement as determined by the assessment process; or satisfactory completion of Math 060.*

Review of properties of real numbers, operations, linear equations and inequalities. Second-degree equations and inequalities, functions and graphs, systems, exponential and logarithmic functions. Designed to prepare the student for college-level mathematics and professional courses.

## **MATH 102 TRIGONOMETRY**

3 units

4 hours lecture weekly

*Prerequisite: Two years of high school algebra with a grade of B or better and appropriate placement as determined by the assessment process; or Math 063 and Math 070 with a grade of C or better.*

A study of the circular and trigonometric functions, inverse trigonometric functions, identities, trigonometric equations, solutions of triangles, complex numbers, vectors, and applications. CSU

**MATH 103 COLLEGE ALGEBRA**

4 units

5 hours lecture weekly

*Prerequisite:* Two years high school algebra with a grade of B or better and appropriate placement as determined by the assessment process; or Math 070 with a grade of C or better.

Linear and nonlinear algebraic relations and functions, conic sections, exponential and logarithmic functions, matrices and determinants, complex numbers and selected topics from theory of equations, and sequences and series. (CAN: MATH 10) CSU:UC

**MATH 130 MATHEMATICS FOR ELEMENTARY TEACHERS**

3 units

3 hours lecture weekly

*Prerequisite:* High school geometry with a grade of C or better and either two years of high school algebra and appropriate placement as determined by the assessment process; or Math 070 with a grade of C or better.

Language of sets, systems of numeration, nature of numbers and fundamentals of operations, domain of integers, fields of rational, real, and complex numbers. Not part of the preparation for mathematics majors. CSU:UC

**MATH 140 INTRODUCTORY STATISTICS**

4 units

5 hours lecture weekly

*Prerequisite:* Two years of high school algebra with a grade of B or better and appropriate placement as determined by the assessment process, or Math 070 with a grade of C or better.

Includes a study of probability and counting techniques. Emphasis is placed on the understanding of statistical methods. Topics include empirical and theoretical frequency distributions, sampling, estimation, hypothesis testing, correlation, and regression. (CAN: STAT 2) CSU:UC

**MATH 144 BUSINESS MATHEMATICS (See Business 144)**

*Note:* This class satisfies part of the requirement for the associate degree under Language and Rationality.

**MATH 211 CALCULUS I**

5 units

5 hours lecture weekly

*Prerequisite:* High school mathematical analysis and appropriate placement as determined by the assessment process; or both Math 102 and 103 with a grade of C or better.

Introduction to limits, derivatives and integrals.

Applications including rate of change, maxima-minima, curve sketching, and area problems. (CAN: MATH 18 or CAN MATH SEQ B combined with MATH-212) CSU:UC

**MATH 212 CALCULUS II**

5 units

5 hours lecture weekly

*Prerequisite:* Math 211 or equivalent with a grade of C or better.

A continuation of Math 211. Topics include differentiation and integration of transcendental functions, techniques of integration, infinite series with radii of convergence, improper integrals and applications. (CAN: MATH 20 or CAN: MATH SEQ B combined with MATH-211) CSU:UC

**MATH 213 CALCULUS III**

5 units

5 hours lecture weekly

*Prerequisite:* Math 212 or equivalent with a grade of C or better.

A continuation of Math 212. Vectors and vector calculus, functions of several variables, partial derivatives, multiple integrals, line and surface integrals. (CAN: MATH 22) CSU:UC

**MATH 214 LINEAR ALGEBRA**

3 units

4 hours lecture weekly

*Prerequisite:* Math 211 or equivalent, with Math 212 and 213 recommended.

Linear algebra including real vector spaces, inner product spaces, linear transformations, matrices, determinants and eigen values. (CAN: MATH 26)CSU:UC

**MATH 215 DIFFERENTIAL EQUATIONS**

3 units

4 hours lecture weekly

*Prerequisite:* Completion of, or concurrent enrollment in, Math 213

A first course in ordinary differential equations, systems of linear differential equations, the Laplace transforms, numerical methods, series solutions and applications. (CAN: MATH 24) CSU:UC

## MUSIC

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### **MATH 240 MATH ANALYSIS FOR BUSINESS AND SOCIAL SCIENCE**

5 units

5 hours lecture weekly

*Prerequisite:* Two years of high school algebra with a grade of B or better and appropriate placement as determined by the assessment process; or Math 103 with a grade of C or better.

A review of functions: linear, quadratic, logarithmic, and exponential. The three main topics of calculus: limits of functions, derivatives of functions, and integrals of functions. Applications of these concepts are studied in depth. (CAN: MATH 34) CSU:UC

## MUSIC

### **MUSIC 080 THE PRELUDE STRINGS ENSEMBLE**

0.5 unit, may be taken four times

0.5 hour lecture, 0.5 hour lab weekly

*Prerequisite:* Music 081

Not degree applicable

Beginning class and introduction to orchestral performance for string players. Intended for both Suzuki and "traditional" students with no previous orchestral experience. Emphasis is placed on note-reading and ensemble skills. Repertoire consists of short pieces of easy to moderate difficulty. Offered on a credit/no credit basis. Not degree applicable.

### **MUSIC 081 SANTA CLARITA VALLEY YOUTH ORCHESTRA**

1 unit, may be taken four times

1 hours lecture, 2 hours lab weekly

*Prerequisite:* One year of instrumental instruction

Not degree applicable

Concurrent private lessons strongly encouraged. A performing experience in instrumental ensembles, it aims to survey the evolution of orchestral forms from the baroque to the 20th century. Emphasis on the theory and practice of music. Offered on a credit/no credit basis.

### **MUSIC 082 SANTA CLARITA VALLEY YOUTH PHILHARMONIC**

1.5 units, may be taken four times

1 hour lecture, 2 hours lab weekly

*Prerequisite:* Audition required

Not degree applicable

Students will be asked to perform any major scale. Requested scales need to be played at both slow and fast tempi. In addition, they will need to perform an excerpt of their choice to assist the auditioning committee in determining the student's musical abilities. To conclude the process, the candidate will be given one or several excerpts from the baroque, classical and/or romantic repertoire to demonstrate his/her sight-reading skills. The course is offered to students able to demonstrate more advanced musical skills performing on any orchestral instrument as a progressive step above the level of proficiency required by those playing in the Santa Clarita Valley Youth Philharmonic. As a prerequisite, students are expected to present auditions to showcase their sight-reading abilities, technical expertise on the instrument of choice, and musical sensibility. Offered on a credit/no credit basis.

### **MUSIC 100 FUNDAMENTALS OF MUSIC**

3 units

3 hours lecture weekly

Introduction to the elements of music and musical notation, music-reading and sight-singing, scales and intervals. Study of musical skills useful in working with children and youth, basic keyboard skills. CSU:UC

### **MUSIC 101 MUSICIANSHIP SKILLS I**

1 unit

3 hours lab weekly

*Prerequisite:* Strongly recommended for music majors: concurrent enrollment in Music 120 (Tonal Harmony), Music 121 (Chromatic Harmony), Music 122 (Tonal Counterpoint), and/or Music 123 (Modal Counterpoint)

First level in a series of four. Comprehensive training workshops for musicians through the intensive practice of sight-singing, melodic and rhythmic dictations, chords recognition as well as applied music-theory exercises. CSU:UC

### **MUSIC 102 MUSICIANSHIP SKILLS II**

1 unit

3 hours lab weekly

*Prerequisite:* Strongly recommended for music majors: concurrent enrollment in Music 120 (Tonal Harmony, Music 121 (Chromatic Harmony, Music 122 (Tonal Counterpoint), and/or Music 123 (Modal Counterpoint)

Second level in a series of four. Comprehensive training workshops for musicians through the intensive practice of sight-singing, melodic and rhythmic dictations, chords recognition as well as applied music-theory exercises. CSU:UC

**MUSIC 103 MUSICIANSHIP SKILLS III**

1 unit

3 hours lab weekly

*Prerequisite: Strongly recommended for music majors: concurrent enrollment in Music 120 (Tonal Harmony), Music 121 (Chromatic Harmony), Music 122 (Tonal Counterpoint), and/or Music 123 (Modal Counterpoint)*

Third level in a series of four. Comprehensive training workshops which provide musicians with intensive practice in sight-singing, melodic and rhythmic dictations, chords recognition and applied music-theory exercises. CSU:UC

**MUSIC 104 MUSICIANSHIP SKILLS IV**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Strongly recommended for music majors: concurrent enrollment in Music 120 (Tonal Harmony), Music 121 (Chromatic Harmony), Music 122 (Tonal Counterpoint), and/or Music 123 (Modal Counterpoint)*

Fourth in a series of four. Comprehensive training workshops for musicians through the intensive practice of sight-singing, melodic and rhythmic dictations, chords recognition as well as applied music theory exercises. CSU:UC

**MUSIC 105 UNDERSTANDING MUSIC**

3 units

3 hours lecture weekly

A survey of musical thought and musical masterpieces through all eras of musical evolution. Development of the student's understanding of music in relation to other arts and general culture through listening experiences, lectures, and discussion. CSU:UC

**MUSIC 106 DEVELOPMENT OF JAZZ**

3 units

3 hours lecture weekly

The study of jazz as a cultural medium: its historical background and its development in the United States. CSU:UC

**MUSIC 110 INTRODUCTION TO MUSIC TECHNOLOGY (Same as CMPELC-110)**

3 units, may be taken four times

3 hours lecture weekly

This course is an introduction to the production of electronic music. Topics covered include operating systems and system software; data structures for computer information; the hardware mechanics of a computer; instruc-

tional software for musicians; acoustics; data structures for sampling and MIDI; data structures for laser audio and video; hardware devices for music publishing; music notation software; software for music sequencing; MIDI hardware; software for creating, organizing and editing sound; hardware for digital sampling and recording; software for communication; networking hardware; and multimedia hardware. CSU

**MUSIC 120 TONAL HARMONY**

3 units

3 hours lecture weekly

*Prerequisite: Music 100 or equivalent credit*

A comprehensive study of the theory and practice of western harmony from the 17th century to the beginning of the 20th century. Major topics include diatonic triads, seventh chords, principles of voice-leading, non-chordal tones and harmonic analysis of music from the classical period. It is strongly recommended that music majors concurrently enroll in Music 101 (Musicianship Skills I), Music 102 (Musicianship Skills II), Music 103 (Musicianship Skills III), or Music 104 (Musicianship Skills IV). CSU:UC

**MUSIC 121 CHROMATIC HARMONY**

3 units

3 hours lecture weekly

*Prerequisite: Music 120 (Tonal Harmony) or equivalent credit, OR: ability to demonstrate knowledge of the fundamentals of tonal harmony.*

Emphasis on modulatory techniques, altered chords, formal analysis of romantic, impressionist and modern music literature. Introduction to late 20th century compositional techniques. It is strongly recommended that music majors concurrently enroll in Music 101 (Musicianship Skills I), Music 102 (Musicianship Skills II), Music 103 (Musicianship Skills III), or Music 104 (Musicianship Skills IV). CSU:UC

**MUSIC 122 TONAL COUNTERPOINT**

3 units

3 hours lecture weekly

A study of the forms of counterpoint with emphasis placed on the tonal concept. Composition and analysis of contrapuntal forms in the eighteenth century style of J.S. Bach, including imitative forms, canon, invention, and fugue. It is strongly recommended that music majors concurrently enroll in Music 101 (Musicianship Skills I), Music 102 (Musicianship Skills II), Music 103 (Musicianship Skills III), or Music 104 (Musicianship Skills IV). CSU:UC

# MUSIC

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## **MUSIC 123 MODAL COUNTERPOINT**

3 units

3 hours lecture weekly

*Prerequisite:* Music 100, Fundamentals of Music, or ability to demonstrate knowledge of basic music theory.

The study of composition practices of the 16th century with emphasis on species counterpoint. Analysis and emulation of motet and mass, fugue, and other musical forms using imitative techniques. It is strongly recommended that music majors concurrently enroll in Music 101 (Musicianship Skills I), Music 102 (Musicianship Skills II), Music 103 (Musicianship Skills III), or Music 104 (Musicianship Skills IV). CSU:UC

## **MUSIC 125 STUDIES IN MUSIC COMPOSITION**

4 units, may be taken four times

2 hours lecture weekly, 6 hours lab weekly

Technical and historical analysis of works in various music languages. Students will compose individual pieces to be performed by college-based music ensembles. Students will have access to computer-based music laboratory. May be repeated for a total of 12 units. It is strongly recommended that music majors concurrently enroll in Music 101 (Musicianship Skills I), Music 102 (Musicianship Skills II), Music 103 (Musicianship Skills III), or Music 104 (Musicianship Skills IV). CSU:UC

## **MUSIC 126 POP AND JAZZ THEORY**

3 units

3 hours lecture weekly

Directed towards the contemporary music student interested in contemporary popular music, this course focuses on the theoretical principles found within the styles of jazz and pop. Students will be encouraged to compose original music utilizing techniques taught in class.

CSU:UC

## **MUSIC 127 ORCHESTRATION I**

3 units

3 hours lecture weekly

*Prerequisite:* Music 100

A study of orchestration as it applies to the instruments of the standard symphonic ensemble. Course will also deal with the use of computers, samplers and synthesizers as tools for the contemporary composer and arranger, as well as with the use of instruments from non-European traditions. CSU:UC

## **MUSIC 128 ORCHESTRATION II**

3 units

3 hours lecture weekly

*Prerequisite:* Music 100

Second part of a series of two courses devoted to the study of orchestration as it applies to the instruments of the standard symphonic ensemble. Course will also deal with the use of computers, samplers and synthesizers as tools for the contemporary composer and arranger as well as with the use of instruments from non-European traditions. CSU:UC

## **MUSIC 129 MUSIC PRODUCTION FOR FILM AND TELEVISION (Same as RTVF-129)**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

Designed to provide the technical and aesthetic tools needed for the production of music for motion pictures and video, this course focuses on the artistic issues as well as the mechanics of matching sounds with a visual counterpart. CSU

## **MUSIC 131 KEYBOARD INSTRUCTION I**

2 units

1 hour lecture, 2 hours lab weekly

*Prerequisite:* An ability to read music

Fundamentals of piano playing; includes scales, chords, sight-reading, technical exercises, transposition, improvisation, keyboard theory and beginning piano literature. CSU:UC

## **MUSIC 132 KEYBOARD INSTRUCTION II**

2 units, may be taken four times

1 hour lecture, 2 hours lab weekly

*Prerequisite:* Music 131, Keyboard Instruction I or equivalent

Level Two piano-playing, music-reading, technique, scales, transposition, keyboard harmonization and simple to intermediate piano literature. May be repeated for a total of eight units. CSU:UC

## **MUSIC 140 STUDIO SINGING**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite:* Audition and concurrent enrollment in Music 174, College Chorus.

An intensive study of all music-reading and vocal skills required of professional studio singers. Many styles of commercial music will be explored and public performances will be scheduled. This course is intended for the

serious professionally-oriented student who is willing to devote time and energy to developing talent. A demo tape will be produced. CSU

**MUSIC 141 VOICE DEVELOPMENT**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Co-enrollment in chorus, choir or ensemble. Music 100 recommended.*

Techniques and concepts for mastering the art of singing. Emphasis on posture, breathing, tone production, musicianship and interpretation. CSU:UC

**MUSIC 151 JAZZ IMPROVISATION WORKSHOP**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Audition by instructor to ensure satisfactory performance ability on an acceptable wind, string, or percussion instrument.*

Designed to assist the jazz-oriented musician in improving ability to improvise. Other emphasis on organization of and participation in small combo groups. Course may be repeated for a total of four units. CSU:UC

**MUSIC 153 STUDIO JAZZ ENSEMBLE**

1 unit, may be taken four times

3 hours weekly

*Prerequisite: Audition to ensure satisfactory performance ability on an acceptable wind, string, or percussion instrument.*

Development of performance standards in Big Band jazz. Investigation of new concepts in the field of jazz music. Workshop experience for composers and arrangers. Course may be repeated for a total of four units. CSU:UC

**MUSIC 160 GUITAR STUDIES I**

2 units

1 hour lecture, 3 hours lab weekly

The study and application of basic skills on the guitar. Course focuses on the introduction of chord structures, sight-reading (open strings and first position), as well as rhythm techniques. CSU:UC

**MUSIC 161 GUITAR STUDIES II**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

A continuation course concentrating on the study and application of basic skills on the guitar. Emphasis on chord structures, sight-reading (open strings through 5th position), as well as rhythm techniques. CSU:UC

**MUSIC 165 SYMPHONY OF THE CANYONS**

2 units, may be taken four times

1 hour lecture weekly, 3 hours lab weekly

*Prerequisite: Audition to ensure satisfactory performance ability on an orchestral instrument*

The study of musical styles and rehearsal techniques as they relate to performance of symphonic literature, as well as orchestra accompaniment of operatic and major choral works. CSU:UC

**MUSIC 167 JAZZ GUITAR STUDIES I**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

*Prerequisite: Music 161 or audition by instructor to ensure proper level placement.*

A study of position-playing for jazz guitar. Topics include: jazz chordal structures; rhythm comping and structural analysis of jazz forms. CSU:UC

**MUSIC 168 JAZZ GUITAR STUDIES II**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

An intermediate level study of position-playing for jazz guitar. Topics include jazz chordal structures, rhythm comping, and structural analysis of jazz forms. CSU:UC

**MUSIC 169 IMPROVISATION FOR GUITARISTS**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

Primarily designed for guitarists (other instrumentalists are welcome), this course focuses on the many facets of improvising including usage of pentatonic, major, minor, and harmonic minor scales along with relative harmonic chord progressions. Performances by soloists from different eras in various styles ranging from the '20s through the '90s in jazz, rock, fusion, country, and Latin will be analyzed. Students will develop techniques to enhance natural abilities of "playing by ear" by utilizing scales and positions on the instrument. CSU:UC

**MUSIC 170 BASS GUITAR STUDIES I**

2 units

1 hour lecture, 3 hours lab weekly

The study and application of basic skills on the electric bass guitar. Course focuses on the construction and performance of bass lines through chord changes in standard popular and jazz repertoire. Students will learn note-reading skills on the instrument. CSU

# MUSIC

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## **MUSIC 171 BASS GUITAR STUDIES II**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

Second in the series on the application of skills on the electric bass guitar, this course focuses on the construction of complex bass lines through chord changes in standard popular and jazz repertoire. Students will learn advanced note-reading skills on the instrument. CSU

## **MUSIC 174 COLLEGE CHORUS**

1 unit, May be taken four times

3 hours lab weekly

*Prerequisite: Audition by Instructor*

Study and interpretation of music for the vocal chamber group from all eras in music history. CSU:UC

## **MUSIC 175 FESTIVAL CHOIR: VOICES OF THE CANYONS**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Ability to sing a choral part as demonstrated in class participation.*

A study of musical styles, performance practices and rehearsal techniques through rehearsal and performance of selected choral literature suitable to festival participation. This choral group refines individual selections to high performance standards and represents the College at intercollegiate festivals, on-campus performances, and in the community. CSU:UC

## **MUSIC 176 CHAMBER SINGERS**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Enrollment subject to standard audition administered by the College staff that demonstrates that the student's ability and technical proficiency is at a level necessary for group public performance.*

Study and performance of sacred and secular chamber choral repertoire from the 15th to the 20th centuries. Emphasis on the cultivation of skills needed to sing from a variety of choral styles and historical periods. Attendance at all scheduled performances is required. CSU:UC

## **MUSIC 177 LES CHANTEUSES: WOMEN'S CHOIR**

1 unit, may be taken four times

3 hours lab weekly

*Prerequisite: Music 101*

A study of musical styles, performance practices and rehearsal techniques through the learning of selected

choral literature written specifically for the female voice. This choral group refines individual selections to high performance standards and represents the College at intercollegiate festivals, on-campus events, and within the community. May be repeated for up to four units. CSU:UC

## **MUSIC 178 COLLEGE OF THE CANYONS MARCHING BAND**

2 units, may be taken four times

6 hours lab weekly

Rehearsal and performance of music suitable for marching band with strong emphasis on marching skills. Ample opportunities for participation in public performances such as football games, field shows, parades and tours will be provided. CSU:UC

## **MUSIC 179 COC MARCHING/DANCE TROUPE (Same as DANCE-179)**

2 units, may be taken four times

6 hours lab weekly

Rehearsal and performance of rifle, flag, and dance units auxiliary to the College of the Canyons Marching Band. Subsequent enrollment will provide the student an opportunity for additional skill and competency development within the subject matter. CSU

## **MUSIC 180 MUSIC BUSINESS**

3 units

3 hours lecture weekly

A study of the music industry as it relates to production, recording, manufacturing, publishing, and copyrights, performing rights and marketing. CSU

## **MUSIC 181 APPLIED MUSIC STUDIES I**

2 units

1 hour lecture, 3 hours lab weekly

First in the series of four progressive studio lessons on a specific woodwind, brass, string, percussion instrument, voice, or conducting. Emphasis on technical development and the learning of musical repertoire. Students must participate in a recital while enrolled in the class. CSU:UC

## **MUSIC 182 APPLIED MUSIC STUDIES II**

2 units

1 hour lecture, 3 hours lab weekly

Second in a series of four progressive studio lessons on a specific woodwind, brass, string, percussion instrument, voice, or conducting. Emphasis on a technical development and the learning of musical repertoire.

Students must participate in a recital while enrolled in the class. CSU:UC

**MUSIC 183 APPLIED MUSIC STUDIES III**

2 units

1 hour lecture, 3 hours lab weekly

Third in a series of four progressive studio lessons on a specific woodwind, brass, string, percussion instrument, voice, or conducting. Emphasis on technical development and the learning of musical repertoire. Students must participate in a recital while enrolled in the class. CSU:UC

**MUSIC 184 APPLIED MUSIC STUDIES IV**

2 units

1 hour lecture, 3 hours lab weekly

Fourth in a series of four progressive lessons on a specific woodwind, brass, string, percussion instrument, voice, or conducting. Emphasis on technical development and the learning of musical repertoire. Students must participate in a recital while enrolled in the class. CSU:UC

**NURSING**

The Allied Health Division offers a variety of courses and programs in the health-care field. Semester-length courses include the Emergency Medical Technician-I and Nurse Assistant courses, both of which prepare students to apply for and take their respective certifying examinations. Other courses offered to help the health-care student include a home health aide course, a medical terminology course and a health-based nutrition course. Programs in medical assisting (1-2 semesters), vocational nursing (two years part-time), registered nursing (2 semesters) and three options for the VN-RN career ladder are available. These programs are described under the Certificate and Degree requirements section of this catalog.

**HEALTH SCIENCES****HLHSCI 150 NUTRITION**

3 units

3 hours lecture weekly

A comprehensive study of nutrition, which includes the nutritional needs of the human life cycle. This class examines the biological function and chemical classification of nutrients and relates nutrition concepts to health and disease. This class is also designed to increase awareness of food, nutrition, and physical activity and their interrelationships. CSU:UC

**HLHSCI 151 EMERGENCY MEDICAL TECHNICIAN I**

7.5 units

7.5 hours lecture/skills weekly plus 32 hours lab TBA

*Prerequisite: CPR certification (BLS for Healthcare Provider or Professional Rescuer CPR). Must be 18 years or older for state certification.*

Seventeen-week EMT-1 course that covers techniques of emergency medical care presently within the scope of practice of the EMT-1 technician. Seven hours weekly lecture/skills lab plus 16 hours emergency department observation and 16 hours ambulance ride-along. Health clearance required prior to start of clinical rotations. Eligible for L.A. County certification exam upon successful completion of the course. CSU

**HLHSCI 153 EMERGENCY MEDICAL TECHNICIAN REFRESHER**

1.5 units, unlimited repeats

24 hours lecture, 6 hours lab weekly, one-week course

*Prerequisite: Current CPR certification (American Heart or Red Cross) and current EMT certification.*

The Emergency Medical Technician Refresher Course offers 24 hours of classroom lecture as required by the County of Los Angeles for EMT certification. The lecture portion of the course includes a review of all topics covered in the Emergency Medical Technician-Basic course and any new subject material required by the County of Los Angeles. The final class session provides skills testing for those emergency medical technicians in a skills testing cycle. CSU

**HLHSCI 243 WOMEN & HEALTH (Same as NURSNG-243 and formerly INTGR 101)**

3 units

3 hours lecture weekly

This course provides a broad perspective of women relating as providers and consumers to the health care system. Explores past and current health care issues, explores philosophical, historical, cross-cultural, ethical, and political issues surrounding women's health. The unique role of women in the health care system will also be discussed in terms of current and future trends. Also, there will be specific topics that include sexuality, mental health, reproductive health, women in the health profession, and men in non-traditional careers. CSU:UC

# NURSING

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## HLHSCI 249 MEDICAL TERMINOLOGY

3 units

3 hours lecture weekly

Designed to familiarize those interested in a medical field with the correct spelling, pronunciation and meaning of common medical terms, with emphasis on word components. CSU

## NURSING

### NURSNG 050 NURSE ASSISTANT TRAINING

5 units

4.6 hours lecture, 9.2 hours lab weekly (13 weeks)

*Prerequisite: TB test, history and physical examination within the last six months. Proof of vaccination for hepatitis B (or signed waiver), rubeola, rubella, mumps, diphtheria, and tetanus required. Criminal clearance and current CPR card (for health-care providers) required. Recommended English 090 or assessment at English 090 level.*

Selected fundamental nursing skills needed to care for the hospitalized patient. Includes clinical practice in a skilled-nursing facility with emphasis on the role and responsibilities of the nurse assistant, safety principles and infection control, basic patient-care skills, and emotional, social, and spiritual needs of the patient. This is the first level of the nursing career ladder. Upon completion, the student will be eligible to take the California test for certification.

### NURSNG 051 HOME HEALTH AIDE

1.5 units

5.2 hours lecture, 5 hours lab weekly (four weeks)

*Prerequisites: CNA or nurse aide training course (mandated by the Department of Health Services), TB test, physical examination within the last six months. Proof of vaccination for hepatitis B (or signed waiver), rubeola, rubella, mumps, diphtheria, and tetanus. Criminal clearance and current CPR card (for health-care providers) required. Recommended English 090 or assessment at English 090 level.*

This course is structured to provide theory and practical application of knowledge and skills needed to function as a home health aide. Emphasis is on the role of the home health aide; interpretation of client needs, personal-care services, nutrition; and cleaning and care tasks in the home. Upon completion, the student will be eligible for California certification.

### NURSNG 052 INTRODUCTION TO MEDICAL ASSISTING

3 units

3 hours lecture weekly

An introduction to the role of the medical assistant and the history of the field. Covers principles of law and ethics, critical thinking, study skills, multicultural issues, performance evaluation, nutrition, patient education, and customer service. Includes theory, medical terminology, demonstration and application of asepsis, safety, obtaining a history, and assisting with a patient examination.

### NURSNG 053 BEGINNING MEDICAL ASSISTING

3 units

3 hours lecture weekly

Anatomy and physiology of sense organs, musculoskeletal, reproductive, and digestive systems are presented. Assisting the physician with related clinical procedures such as ear irrigation, laser treatments, orthopedic appliances and colon procedures are practiced in a clinical simulation. Client-screening procedures including vital signs, vision, and hearing are also learned.

### NURSNG 054 INTERMEDIATE MEDICAL ASSISTING

3 units

3 hours lecture weekly

Anatomy and physiology of the urinary, respiratory and endocrine systems are presented. Theory, demonstration and practice performing routine lab procedures in clinical simulation. Also included are the role of the medical assistant in minor surgery, skin preparation, wound care, and maintaining a sterile field.

### NURSNG 055 ADVANCED MEDICAL ASSISTING

3 units

3 hours lecture weekly

Anatomy and physiology of circulatory, neurological, and immune systems are presented, as well as theory and practice in obtaining an electrocardiogram. Basic mathematics and principles of pharmacology including drug classifications, safety, preparation and administration of medications are demonstrated and practiced in clinical simulation. Office emergencies and CPR are also covered.

**NURSNG 090 CRITICAL THINKING IN NURSING**

1 unit

1 hour lecture weekly

Covers the basic concepts of critical thinking: definitions, characteristics, barriers and strategies which are then applied through the use of case studies, scenarios, and critical-thinking questions. Prepares the student nurse for state board exams or the working nurse with better critical-thinking skills.

**NURSNG 091 PEDIATRIC NURSING**

3 units

3 hours lecture weekly

Focuses on the differences in children and adults. Includes assessment, growth and development according to Erickson and Piaget, disease process and treatment pertinent to the different age groups of children from newborn to the adolescent, pediatric procedures, and calculation of dosage for children. Discusses the hospitalized child and pediatric variations of nursing interventions, including immunizations, and the role of the pediatric nurse. Incorporates cultural aspects of pediatric care, communication with various aged children and critical thinking when caring for the pediatric client.

**NURSNG 098 SPECIAL TOPICS IN HEALTHCARE**

1-1.5 units

1-1.5 hours weekly

Provides special topics that include new medications, latest information on disease processes and treatments, alternative therapies in healthcare, assessment, lab values, professional issues, and in-depth special topics.

**NURSNG 101A FUNDAMENTALS OF NURSING A**

4 units

4 hours lecture weekly

*Prerequisite: Must take concurrently with Nursing 101A-L, 101B, 101 B-L.*

This is the first course of the medical-surgical nursing series. In this class, the student studies the biopsychosociocultural-spiritual requisites and deficits of the adult, including geriatric clients with non-complex health deviation self-care requisites. The curriculum strands--knowledge, nursing process, psychomotor skills, communication, management of care, professional- legal-ethical practice, collaboration and self- direction--are integrated at a basic level. The knowledge strand includes the self-care deficit theory; growth and development; and selected non-complex health deviations of

balance between activity and rest. The last-named portion of the strand consists of etiologies, pathophysiology, diagnostic assessments and basic primary, secondary, and tertiary management, including medication, nutrition, and teaching. The course stresses principles of psychomotor skills and management of one client. Collaboration with nursing staff and factors contributing to self-direction are discussed.

**NURSNG 101 AL FUNDAMENTALS OF NURSING A-L**

4.5 units

13 hours lab weekly

*Prerequisite: Admission to Registered Nursing Science Program. Must be taken concurrently with NURSNG 101, 101B and 101B-L.*

This is the first clinical course of the medical-surgical series in which the student applies knowledge and skills learned in NURSNG-101A & B to care for one client. The student utilizes the nursing process with the instructor's assistance, focusing on non-complex nursing diagnoses and applying wholly compensatory and supportive, educative nursing actions to assist the client toward self-care. Primary, secondary and tertiary interventions - including medication, nutrition and teaching - are integrated in the nursing actions. The student applies basic communication skills and principles of management in the care of one client and begins to recognize the importance of self-direction and collaboration with the nursing staff. Clinical experience is obtained in secondary-care facilities.

**NURSNG 101B FUNDAMENTALS OF NURSING B**

0.5 unit

1 lecture hour every other week

*Prerequisites: Admission to the ADN program. Must be taken concurrently with NURSNG 101A, NURSNG 101 A-L, and NURSNG 101 B-L.*

This first-semester course enables the student to gain knowledge in pharmacokinetic, pharmacodynamic, psychomotor, psychological, legal and safety aspects of topical, oral/enteral, intradermal, subcutaneous and intramuscular medication administration. Additionally, basic information relating to intravenous therapy is introduced. Considers cultural aspects of drug therapy, self-medicating, medicating the elderly, and nutritional concerns such as fluids electrolytes and enteral feedings. Integrates concepts and principles derived from the curriculum strands in NURSNG-101A and NURSNG-101AL are integrated. CSU

# NURSING

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## NURSNG 101 B-L FUNDAMENTALS OF NURSING B-L

1 unit

3 hours lab weekly

*Prerequisite: Admission to the ADN Program. Must be taken concurrently with NURSNG 101B, NURSNG 101A and NURSNG 101 A-L*

This is a laboratory course for NURSNG-101B in which the student applies the concepts and principles learned in the theory component. The steps of the nursing process, in simulated actions, are utilized in the administration of topical, oral/enteral, intradermal, subcutaneous and intramuscular medications. Basic concepts of IV therapy are introduced. The student uses computer-assisted instruction to master calculation of dosages. Other psychomotor skills are learned, including blood-glucose monitoring. The student gains competency in psychomotor skills in the laboratory before applying them to actual clients.

## NURSNG 102 BEGINNING MEDICAL-SURGICAL NURSING

2.5 units

6 hours lecture weekly (7.5 weeks)

*Prerequisite: NURSNG 101A, 101 A-L, 101B, 101 B-L. Concurrent enrollment in NURSNG 102L.*

This is the second course of the medical-surgical series in which the student learns about the biopsychosocial-cultural-spiritual requisites and deficits of the adult, including the geriatric client, with beginning complex health deviations in self-care requisites for the maintenance of eliminative, regulatory, and reproductive processes. Curriculum strands of theoretical and empirical knowledge, nursing process, communication, psychomotor skills, management of care, professional-legal-ethical practice, collaboration, and self-direction are integrated throughout the course. The knowledge strand includes, self-care deficit theory, health deviations and their etiologies, pathophysiologies, manifestations and management that entails primary, secondary, and tertiary care, including medications, nutrition and teaching. The student learns the theories behind beginning complex psychomotor skills such as venipuncture, total parenteral nutrition, colostomy care, urinary bladder irrigation, and management of two clients. CSU

## NURSNG 102L BEGINNING MEDICAL-SURGICAL NURSING LAB

1.5 units

13 hours lab weekly (7.5 weeks)

**Prerequisite: NURSNG 101A, 101 A-L, 101B, 101 B-L.**

This is the second clinical course of the medical-surgical series in which the student learns to care for the client with simple to beginning complex health deviations associated with eliminative, regulatory, and reproductive processes. The student utilizes knowledge and skills gained in NURSNG 102 and previous courses to make nursing-practice decisions. The student continues to use nursing process with assistance, targeting beginning complex nursing diagnoses and implementing wholly compensatory, partly compensatory and supportive/educative nursing actions to assist the client toward self-care or significant others to provide client with dependent care. Primary, secondary, and tertiary care including medications, nutrition and teaching are integrated in the nursing actions. The student utilizes previously learned and new beginning complex communication techniques, and manages the care of one to two clients. The student begins to collaborate with other disciplines, and begins to display more self-direction in learning and providing nursing care. Clinical experience is obtained in primary and secondary care facilities.

CSU

## NURSNG 103 LVN-RN BRIDGE CLASS

1.5 units

4 hours lecture weekly (6 weeks)

*Prerequisite: Admission to Registered Nursing Program*

This is a transition course in which the student learns information necessary to perform as a second year Associate Degree Nursing Program student. The curriculum strands of nursing process, communication, management of care, professional-legal ethical practices, collaboration, self-direction and knowledge are integrated throughout the course or are introduced. The knowledge strand includes the self-care deficit theory, selected health deviations and their etiologies, pathophysiologies, manifestations and management including medications, nutrition, and teaching. The student learns the theory behind physical assessment, stress management, and role transition. CSU

**NURSNG 106 MATERNAL-NEWBORN/PEDIATRIC NURSING**

3 units

5.5 hours lecture weekly (10 weeks)

*Prerequisite:* NURSNG 102, 102L. Must be taken concurrently with NURSNG 106L.

This is a study of the biopsychosociocultural-spiritual requisites and deficits of the childbearing family and the pediatric client utilizing the nursing process. The focus is on family-centered care. Curriculum strands of theoretical and empirical knowledge, nursing process, communication, psychomotor skills, management of care, professional-legal-ethical practices, collaboration, and self-direction are integrated throughout the course. The knowledge strand includes the self-care deficit theory, health deviations and their etiologies, pathophysiologies, manifestations, and management that entails primary, secondary, and tertiary care including medications, nutrition and teaching. Also included are developmental stages, child and family responses to hospitalization, pediatric variations in nursing care, parental interaction, fetal issues during pregnancy and care of the newborn. The student learns the theories behind the psychomotor skills such as medication administration to a young client, electronic fetal monitoring, newborn assessment, and post-partum assessment. Principles of management of one to two childbearing and pediatric clients are discussed. CSU

**NURSNG 106L MATERNAL-NEWBORN/PEDIATRIC NURSING LAB**

2.5 units

13 hours lab weekly (10 weeks)

*Prerequisite:* NURSNG 102, 102L. Must be taken concurrently with NURSNG 106.

This is the clinical course of Maternal-Newborn/Pediatric Nursing. In this course the student learns to care for the childbearing family and the pediatric client. The student utilizes knowledge and skills gained in Nursing Science 106 and previous courses to make nursing-practice decisions. With assistance, the student uses the nursing process in implementing wholly compensatory, partly compensatory and supportive/educative nursing actions, integrating primary, secondary and tertiary care, including medication, nutrition and teaching, to assist the client toward self-care or significant others to provide client with dependent care. The student utilizes new and previously learned communication techniques and manages the care of one or two clients. The student begins

to collaborate with other disciplines, and begins to display more self-direction in learning and in providing nursing care. Clinical experience is obtained in primary and secondary care facilities. CSU

**NURSNG 200 PSYCHIATRIC NURSING**

2.5 units

6 hours lecture weekly (7 weeks)

*Prerequisite:* NURSNG 106/106L except for the LVN to RN students who need NURSNG 103. Concurrent enrollment in NURSNG 200L.

This course is a study of the psychosociocultural-spiritual and relevant biological self-care requisites and deficits of the adult, including the geriatric client, in mental health settings with health deviations in the maintenance of balance between solitude and social interaction, prevention of hazards to life, functioning and well-being, and promotion of normalcy and development. Curriculum strands of knowledge, nursing process, nursing diagnosis, psychomotor skills, communication, management of care, professional-legal-ethical practices, collaboration and self-direction are integrated throughout the course. The knowledge strand consists of the personality/developmental theories, health deviations, and their etiology, manifestations and management that entails primary, secondary, tertiary preventions including medications, nutrition and teaching. There is an in-depth study of therapeutic communication techniques utilized in mental health settings. CSU

**NURSNG 200L PSYCHIATRIC NURSING LAB**

2 units

15 hours lab weekly (7 weeks)

*Prerequisite:* NURSNG 106/106L except for LVN to RN students who need NURSNG 103. Concurrent enrollment in NURSNG 200.

This is the clinical course of NURSNG 200 where the student learns to care for the client with health deviations in the maintenance of balance between solitude and social interaction, prevention of hazards to life, functioning and well-being, and promotion of normalcy and development. Concepts and principles learned in the curriculum strands of knowledge, nursing process, nursing diagnosis, psychomotor skills, communication, management of care, professional-legal-ethical practices, collaboration and self-direction are applied in the clinical area. Knowledge includes personality/developmental theories, health deviations and their causative factors, manifestations, primary, secondary and tertiary

preventions including medications, psychotherapeutic approaches, nutrition, and teaching. The student continues to assist up to two clients in achieving self-care. The nursing process is more focused and communication skills become more psychotherapeutic. The student develops more confidence in collaborating with the health team and in self-direction. CSU

## **NURSNG 202 INTERMEDIATE MEDICAL-SURGICAL NURSING**

3 units

6 hours lecture weekly (8.5 weeks)

*Prerequisite: NURSNG 200/200L. Concurrent enrollment in NURSNG 202L.*

This is the third course of the medical-surgical series in which the student learns about the biopsychosociocultural-spiritual requisites and deficits of the adult, including the geriatric client, with complex health deviation in the maintenance of sufficient intake of air, and balance between activity and rest. Curriculum strands of knowledge, nursing process, nursing diagnosis, psychomotor skills, communication, management of care, professional-legal-ethical practices, collaboration, and self-direction are integrated throughout the course. The knowledge strand includes the self-care deficit theory, health deviations and their pathophysiology, etiology, manifestations and management that entails primary, secondary and tertiary preventions including medications nutrition, and teaching. Principles of management of care of up to three clients are studied. The student learns ways of increasing collaboration with the health team and increasing self-direction in providing complex nursing care. CSU

## **NURSNG 202L INTERMEDIATE MEDICAL-SURGICAL NURSING LAB**

2 units

13 hours lab weekly (8.5 weeks)

*Prerequisite: NURSNG 200/200L. Concurrent enrollment in NURSNG 202.*

This is the third clinical course of the medical-surgical series in which the student learns to care for the client with complex health deviations associated with maintenance of sufficient intake of air and balance of activity and rest. The student utilizes knowledge and skills learned in Nursing 202 and previous courses to make nursing practice decisions. Student utilizes the nursing process, targeting complex nursing diagnoses and implementing wholly compensatory, partly compensa-

tory and supportive/educative nursing actions to assist the client toward self-care or significant others to provide client with dependent care. Primary, secondary and tertiary interventions including medication, nutrition and teaching are integrated in the nursing actions. The student uses new and previously learned communication techniques and manages the care of up to three clients. The student collaborates with increasing numbers of personnel and displays more self-direction in learning and in providing nursing care. Clinical experience is obtained in secondary care facilities. CSU

## **NURSNG 204 ADVANCED MEDICAL-SURGICAL NURSING**

5.5 units

5.5 hours lecture weekly

*Prerequisite: NURSNG 202/202L. Concurrent enrollment in NURSNG 204L.*

This is the final medical-surgical nursing course. Students will integrate prior theory as well as learn the biopsychosociocultural-spiritual requisites and deficits of adult and geriatric clients with critical and chronic health deviations in the maintenance of sufficient intake of air, elimination, balance between activity and rest and between solitude and social interaction. Hazards to human life and the promotion of normalcy are studied. The curriculum strands are integrated throughout the course: knowledge, nursing process, nursing diagnosis, psychomotor skills, communication, management, professional-legal-ethical practices, collaboration, and self-direction. The knowledge strand includes self-care deficit theory, growth and development, health deviations, nutrition, pharmacology, teaching, the continuum of care as well as psychosociocultural-spiritual values. Principles of the management of up to six clients and the economics of health care are included. CSU

## **NURSNG 204L ADVANCED MEDICAL-SURGICAL NURSING LAB**

4.5 units

13 hours lab weekly

*Prerequisite: NURSNG 202/202L. Concurrent enrollment in NURSNG 204.*

This is the final clinical medical-surgical course. Students are expected to integrate relevant prior clinical skills and classroom theory, as well as to apply new theory and practice new skills in a variety of settings in which their role as a professional, a manager and a provider of care becomes more independent. The student collaborates in

the management of up to six adult clients with complex deviations of healthcare requisites as well as in the care of clients with critical and chronic deviations associated with the maintenance of sufficient intake of air, elimination, balance between activity and rest, and between solitude and social interaction. The student promotes the elimination of hazards and the promotion of normalcy. The student independently utilizes the nursing process by analyzing for nursing diagnoses, determining outcomes, and planning, applying or supervising nursing interventions which are wholly compensatory, partly compensatory, or supportive/educative to assist the client toward self care. In addition, the student evaluates the outcomes and nursing interventions, revising the plan as needed. The student collaborates with professional nurses in managing the care of the clients in the intensive care, oncology unit, the perioperative areas, in clinics, in home health, and other speciality areas. The student is expected to communicate independently in writing as well as verbally in each area as dictated by the course objectives. Clinical experience is obtained primarily in secondary and tertiary facilities. CSU

#### **NURSNG 206 OPERATING ROOM NURSING**

5 units

5 hours lecture weekly

*Prerequisite: Must be a registered nurse with a current license.*

A one-semester course in operating-room nursing designed for registered nurses. Lecture and clinical objectives encompass three areas of perioperative nursing care: preoperative assessment and planning, intraoperative implementation, and postoperative evaluation. It is highly recommended that students be sponsored by a clinical facility, which will provide a preceptor for an average of eight hours each week so the student can integrate the seven hours of theory taught at College of the Canyons. CSU

#### **NURSNG 208 OBSTETRICAL NURSING**

7 units

7 hours lecture weekly

*Prerequisite: Must be a registered nurse with current license.*

This course provides seven hours of lecture each week. Lecture content focuses on the obstetrical patient undergoing the four states of labor and include anatomy, physiology, assessment factors. In the clinical set-

ting, the student works directly with a staff nurse preceptor. Student applies lecture theory to patients in the labor/delivery/recovery suite of the hospital. It is highly recommended that students be sponsored by a clinical facility, which will provide a preceptor for an average of eight hours each week so the student can integrate the seven hours of theory taught at College of the Canyons.

#### **NURSNG 210 NURSING INTERNSHIP**

3 units, may be taken four times

9 hours lecture (total in 6 weeks), 24 hours lab weekly for 6 weeks

*Prerequisite: Graduate of RN program. All health requirements current, including proof of vaccination for hepatitis B (need positive titer), rubeola, rubella, mumps, diphtheria, and tetanus. Also must have a positive varicella titer and current CPR (type C) card.*

Six-week class designed for nurses who have graduated from a registered nursing program. Course is designed to bridge the way for graduates from their educational program to employment. One-hundred forty-four (144) hours are spent with a preceptor at a clinical site—either a hospital or home health agency. Nine (9) hours of lecture include topics such as resumé-writing, interviewing skills, and role transition from student to registered nurse. Certificate of completion is given to student to assist in job search.

Offered January and June. Schedule is determined by student and instructor and preceptor.

#### **NURSNG 212 PHYSICAL ASSESSMENT**

2.5 units, may be taken two times

*Prerequisite: RN or Nursing Student*

Lecture content is designed to develop an in-depth review and synthesis of physical assessment skills and knowledge covering the life span. Integration of the health history, physical examination techniques, and the nursing process is emphasized.

#### **NURSNG 214 GERONTOLOGICAL NURSING**

3 units

3 hours lecture weekly

A comprehensive study of gerontological nursing that includes the normal aging process—functional and structural. This class also examines neurological and behavioral problems in the elderly, medical and nursing management in cardiovascular problems, diabetes mellitus, gastrointestinal problems, hearing loss, hypertension,

## VOCATIONAL NURSING COURSES

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incontinence and other urinary problems, muscular skeletal problems, cancer and other problems such as chronic diseases in the elderly.

### NURSNG 241 CRITICAL CARE NURSING I

3 units

3 hours lecture weekly

Introduction to principles of electrocardiography and arrhythmia recognition with special emphasis on the physiology and treatment of arrhythmias. Pharmacology of drugs used in the treatment of cardiac arrhythmias and CPR. CSU

### NURSNG 242 CRITICAL CARE NURSING II

3 units

3 hours lecture weekly plus one 8-hour lab

Primarily designed for allied health personnel currently working in field. Review of anatomy and physiology of the pulmonary and cardiovascular system with special emphasis on arterial blood gases, physical diagnosis of the chest and the use of respirators in the treatment of pulmonary diseases. Current concepts in fluid and electrolytes will be presented, and the various mechanisms of acid-base balance control will be included. Emphasis is also placed on cardiac physiology as a basis for the understanding and treatment of cardiac failure. The final section will deal with new concepts in critical care including pressure-monitoring, septic shock, disseminated intravascular coagulation and adult respiratory distress syndrome. CSU

## VOCATIONAL NURSING COURSES

The Vocational Program consists of the following vocational nursing courses: Vocational Nursing (VOCNSG) 100, 101, 102, 103, 104, 105, 106, and 107

### VOCNSG 100 FUNDAMENTALS I

5 units

6 hours lecture, 12 hours lab weekly (8 weeks)

*Prerequisite: Acceptance into the Vocational Nursing Program.*

This is the first of two nursing courses in the first semester that introduces the student to basic concepts and skills. Orem's Self-Care Deficit Theory of Nursing is used as the program's conceptual framework.

Professional/legal/ethical practices, communication techniques, both oral and written, and collaboration are studied. The nursing process is explained thoroughly to provide a solid basis for succeeding courses. Through

simulated clinical experiences provided in the laboratory, the student learns assessment of the universal, developmental, and health-deviation self-care requisites, self-care deficits and therapeutic self-care demands of a client; selection of appropriate nursing diagnoses; planning of goals and criteria; selection of nursing interventions in the wholly compensatory, partly compensatory and educative/supportive categories, implementation of interventions and evaluation of effectiveness of nursing interventions. The student learns basic nursing skills in the laboratory. CSU

### VOCNSG 101 FUNDAMENTALS II

5 units

6 hours lecture, 12 hours lab weekly (8 weeks)

*Prerequisite: VOCNSG 100*

This is the second of two fundamentals courses in the first semester. The student learns about nutrition, mental health concepts, cultural aspects of care, client education, advanced nursing skills, the musculoskeletal system and gerontology. The advanced nursing skills are learned in the laboratory. The student begins actual clinical experience in a hospital setting. The nursing process based on Orem's Self-Care Deficit Theory is applied utilizing current and previously learned knowledge and skills. The student will provide care to one client with simple health deviations, primarily of the musculoskeletal system. CSU

### VOCNSG 102 PHARMACOLOGY

3 units

3 hours lecture, 1 hour lab weekly

*Prerequisite: VOCNSG 101*

In this course the student gains knowledge about medications that includes classification of drugs, methods and routes of administration, distribution, absorption, excretion, and desired and toxic effects. Skills of converting measures, calculating dosages for adults, infants and children are learned. Simulated clinical experiences are provided in the laboratory for students to learn the skills and to use the nursing process for a client receiving medications. This course is taken concurrently with Medical-Surgical I in which the student actually administers medications to clients. CSU

**VOCNSG 103 MEDICAL-SURGICAL NURSING I**

8 units

6.5 hours lecture weekly, 12 hours lab weekly

*Co-requisite: VOCNSG 102*

This is the first course of the medical-surgical series in which the student gains knowledge and skills needed to care for clients experiencing health deviations of the respiratory (air), endocrine (activity and rest) and gastrointestinal (food elimination) systems. It includes study of fluids and electrolytes, and basic acid-base imbalances. Skills appropriate to the health deviations are learned. The nursing process based on Orem's Self-Care Deficit Theory is applied in the clinic utilizing the knowledge and skills learned in the classroom. This course is taken concurrently with Nursing 153/153L Pharmacology, and the student integrates pharmacological concepts in the care of clients. CSU

**VOCNSG 104 MEDICAL-SURGICAL NURSING II**

5 units

3 hours lecture weekly, 12 hours lab weekly

*Prerequisite: VOCNSG 103*

This is the second course of the medical-surgical series offered in the summer following the first year of the program in which the student gains knowledge in gerontology; health deviations of the integumentary (elimination) and immune systems; the human immunodeficiency virus (HIV); and sexually transmitted diseases. It includes a study of death and dying and the grief process. The nursing process based on Orem's Self-Care Deficit Theory is applied in the clinic utilizing the knowledge and skills learned in the classroom. Therapeutic communication techniques, collaboration, and professional/ethical/legal practices are integrated in the nursing process. CSU

**VOCNSG 105 MEDICAL-SURGICAL NURSING III**

11 units

7 hours lecture, 12 hours lab weekly

*Prerequisite: VOCNSG 104*

This is the third course in the medical-surgical series in which the student gains knowledge and skills needed to care for clients with health deviations of the cardiovascular/blood/lymph (air) and renal (elimination) systems; clients with oncologic problems and clients undergoing surgery. It includes a study of substance abuse. Skills needed to care for clients in this unit of study are learned in the laboratory. The student applies the knowledge and skills in the clinical area during the nursing

process utilizing Orem's Self-Care Deficit Theory.

Communication techniques, collaboration, and professional/ethical/legal practices are integrated in the nursing process. CSU

**VOCNSG 106 MATERNAL-NEWBORN PEDIATRIC NURSING**

6 units

6 hours lecture, 12 hours lab weekly (10 weeks)

*Prerequisite: VOCNSG 105*

In this course the student gains knowledge and skills needed in the care of the perinatal mother and the newborn as well as the pediatric client. The nursing process based on Orem's Self-Care Deficit Theory is applied utilizing the knowledge and skills learned in the classroom. Communication techniques, collaboration, and professional/ethical/legal practices are integrated in the nursing process. CSU

**VOCNSG 107 MEDICAL-SURGICAL NURSING IV**

5 units

3 hours lecture, 12 hours lab weekly

*Prerequisite: VOCNSG 106*

This is the fourth and last course of the medical-surgical nursing series in which the student acquires the knowledge and skills needed to care for clients with health deviations of the neurological and sensory systems (regulatory). Concepts of home health and leadership/supervision in long-term care are included. The knowledge and skills learned are applied clinically and in home care during the nursing process utilizing Orem's Self-Care Theory of Nursing. Communication techniques, collaboration, and professional/legal/ethical practices are integrated in the nursing process. The student learns team leading in a long term facility. CSU

**PERSONAL DEVELOPMENT****PERDEV 010 CAREER PLANNING**

1-2 units (8-16 weeks)

This course focuses on the various components of career choice and long-term life planning. Assessment of interests, values, personal preferences and skills is featured, as is the use of occupational information and the development of job-search skills. Also featured are resumé-writing and visits to the college Career Center. Offered on a credit/no credit basis only.

## **PERSONAL DEVELOPMENT**

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### **PERDEV 020 SELF AWARENESS**

1-2 units (8-16 weeks), may be taken two times  
This course led by professional counselors emphasizes the understanding of self and others through group discussion and interaction. The identification of values and personal alternatives in interpersonal situations is stressed so that better decision-making is facilitated. Offered on a credit/no credit basis only.

### **PERDEV 051 PEER ADVISEMENT**

3 units, may be taken two times  
3 hours lecture weekly  
This course prepares students in assisting other students with the necessary knowledge and skills to interact effectively with selected populations. The course provides an overview of principles, skills and methods used in peer advisement. In addition, students will be exposed to a variety of campus student services. Peer advisors will participate in locally scheduled field work activities on and off campus.

### **PERDEV 060 LIFE SKILLS AND PERSONAL GROWTH**

1-4 units (4-16 weeks open entry/exit)  
4 hours lecture weekly, 1 hour lab weekly TBA  
This course emphasizes personal, educational, and career-development skills for single parents/displaced homemakers. Class is taught in four modules and may be taken for 1-4 units. Included are study skills, parenting skills, career development, and aspects of self-esteem. Offered on a credit/no credit basis only.

### **PERDEV 080 TRANSFER SUCCESS**

1 unit  
1 hour lecture weekly  
This course is designed to provide students with information and resources to facilitate a smooth transfer to four-year colleges and universities. Topics include UC/CSU applications, major and general-education requirements, financial aid/scholarships, personalized student-education plans, and factors involved in choosing the right college. The course will increase the student's ability to understand the benefits of the transfer process.

### **PERDEV 090 COLLEGE ORIENTATION**

0.5 unit  
8 hours lecture total  
This course is part of the Steps to Success program designed for all new students to orient them to the college environment and educational opportunities. It pro-

vides students with pre-enrollment and enrollment services designed to improve opportunities for success in pursuing their educational and occupational goals. The Steps to Success program consists of the following: an assessment of skill levels in English writing, reading, and math, and interpretation of results; an orientation to college services, programs, policies and procedures; assistance with identifying education and career goals; and pre-enrollment counseling/advising to assist in course selection and registration. Offered on a credit/no credit basis only.

### **PERDEV 098 TOPICS IN PERSONAL DEVELOPMENT**

0.5-1.0 unit  
This course emphasizes presentation, discussion and study of personal development issues. Topics may include body-image awareness, stress management, assertive training, conflict resolution, and other relevant topics. Units vary depending on the topic and number of meetings scheduled. Intended for students wishing to deal with issues relating to their own personal development.

### **PERDEV 099 ENSURING TRANSFER SUCCESS**

1 unit  
This course is designed to assist the student in the transfer process. Topics include UC/CSU applications, major and general-education requirements, financial aid/scholarships, and choosing the right college. The course will increase students' ability to understand and benefit from the transfer process.

### **PERDEV 100 LEADERSHIP DEVELOPMENT**

3 units, may be taken four times  
3 hours lecture weekly  
This course focuses on developing within each student leadership skills, knowledge, and techniques that have a carry-over value to campus clubs, organizations, student government and/or any formal or informal group that entails a leadership position. CSU

### **PERDEV 101 LEADERSHIP PRACTICUM**

2 units, may be taken four times  
6 hours lab weekly  
This course provides opportunities for practical application of leadership skills, techniques and strategies for students involved with on-campus organizations such as the Associated Student Government or clubs and organizations. CSU

**PERDEV 111 PLANNING FOR COLLEGE SUCCESS**

1 unit

1 hour lecture weekly

This course focuses on the various components necessary for college planning and academic success.

Readiness for college will be explored with special attention given to students' responsibilities, study skills assessment, personal values, motivation, and goal-setting. Topics include values clarification, decision-making, study skills, choosing a major, the responsible student, and educational planning. Students will identify their educational goals and develop a personal plan to reach those goals. CSU

**PERDEV 150 EOPS STUDENT READINESS AND SUCCESS**

3 units

3 hours lecture weekly

This guidance course is designed for first-time EOPS students as a complete orientation to provide a comprehensive overview of the responsibilities and benefits of higher education. Educational planning, goal-setting, career choice/search/acquisition/maintenance are examined. Study and survival skills are provided to ensure a successful academic experience. CSU

**PHILOSOPHY****PHILOS 101 INTRODUCTION TO PHILOSOPHY**

3 units

3 hours lecture weekly

*Recommended Preparation: English 090*

Topical introduction to philosophy, including western and non-western philosophy. This course surveys major philosophical figures and philosophical issues including theory of knowledge, nature of reality, the mind/body problem, and ethical theory. (CAN: PHIL 2) CSU:UC

**PHILOS 102 INTRODUCTION TO EASTERN RELIGION AND PHILOSOPHY**

3 units

3 hours lecture weekly

An introductory examination designed to give a basic understanding of the philosophies contained in Hinduism, Buddhism, Confucianism, Taoism, and Zen. CSU:UC

**PHILOS 110 HISTORY OF EARLY PHILOSOPHY**

3 units

3 hours lecture weekly

A survey of ancient and medieval European philosophical thought from the pre-Socratics to the great Athenian philosophers - Socrates, Plato, and Aristotle - through medieval philosophy including the philosophical works of Anselm, Augustine, Abelard, Aquinas, and Plotinus. CSU

**PHILOS 111 HISTORY OF PHILOSOPHY: RENAISSANCE THROUGH THE NINETEENTH CENTURY**

3 units

3 hours lecture weekly

A historical survey of developing western philosophical thought from the Renaissance through the nineteenth century, including philosophical systems of empiricism, rationalism, skepticism, and idealism, etc. CSU

**PHILOS 112 HISTORY OF PHILOSOPHY: 20TH CENTURY**

3 units

3 hours lecture weekly

A survey of philosophical activity relating to the notions of human nature, the place of individuals in history, and the determination of value and choice in the 20th century, including European existentialism, analytical philosophy, and recent thinkers and movements. CSU

**PHILOS 205 INTRODUCTION TO LOGIC**

3 units

3 hours lecture weekly

This course introduces students to the understanding and application of critical reasoning skills for the analysis of arguments from everyday life and college-level courses. Students will learn and strengthen skills for evaluating and understanding arguments including using deductive and inductive logic, identifying common fallacies and evaluating beliefs, claims, and forms of evidence. (CAN: PHIL 6) CSU:UC

**PHILOS 210 INTRODUCTION TO ETHICS**

3 units

3 hours lecture weekly

A survey of some of the major classical and contemporary ethical theories with emphasis on their application to typical life situations in a modern society. (CAN: PHIL 4) CSU:UC

**PHILOS 220 INTRODUCTION TO COMPARATIVE RELIGION**

3 units

3 hours lecture weekly

# PHOTOGRAPHY

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A philosophical overview and study of major world religions, both eastern and western. Includes historical roots, major doctrines and figures, central concerns.

CSU:UC

## PHILOS 230 SYMBOLIC LOGIC

3 units

3 hours lecture weekly

*Previous coursework in philosophy and/or English 090 or higher is recommended preparation.*

An introduction to the symbolism and methods of modern logic, including translation of arguments in English into formal logic, development of the idea of logical validity, evaluation of arguments by using truth tables and methods of natural deduction. CSU

## PHILOS 240 CONTEMPORARY MORAL PROBLEMS

3 units

3 hours lecture weekly

An introduction to ethical theory by means of the philosophical and applied analysis of contemporary moral issues in areas such as medicine, business, health care, technology, and the environment. CSU

# PHOTOGRAPHY

## PHOTO 090L PHOTOGRAPHY OPEN LAB

1-2 units, may be taken four times

3-6 hours lab weekly

*Prerequisite: Concurrent enrollment in another college photography class.*

Not degree applicable

An open lab for the currently enrolled photography student who wishes to increase skills through the use of the photography lab facility. May be repeated for a maximum of 16 units. Offered on a credit/no credit basis only.

## PHOTO 140 HISTORY OF PHOTOGRAPHY

3 units

3 hours lecture weekly

History and appreciation of photography from the nineteenth century to the present; relationship with history, culture, technology, art, social values, and other concerns. CSU:UC

## PHOTO 150 CAMERAS AND COMPOSITION

3 units

3 hours lecture weekly

A lecture/critique class for non-majors designed to provide information in the use of cameras, lenses, film and

exposure to produce good photographs. Students will also review photographic works that have been a major influence and that reflect broader artistic and societal issues. No laboratory. Students must have a 35mm camera capable of taking color slides. CSU

## PHOTO 160 PHOTOGRAPHY

3 units

2 hours lecture, 3 hours lab weekly

A beginning course in photography and layout. It acquaints students with the history, mechanics, optics, chemistry, aesthetics and lighting principles of elementary photography. Class includes darkroom procedures in developing and printing 35mm black-and-white materials. (CAN: ART 18) CSU:UC

## PHOTO 165 DIGITAL PHOTOGRAPHY I (Same as DAT-105)

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

An advanced course training students to use several graphically based programs such as Adobe Photoshop to manipulate photographic images. Macintosh computer experience recommended. May be repeated for a maximum of 12 units. CSU:UC

## PHOTO 175 INTERMEDIATE PHOTOGRAPHY

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

Continuation of beginning black-and-white photography. Offers further training in technical, aesthetic and historical issues that surround photography. Students must furnish a fully manual/adjustable 35mm camera. CSU:UC

## PHOTO 180 DOCUMENTARY AND LANDSCAPE

3 units

2 hours lecture, 3 hours lab weekly

*Recommended preparation: Photography 160*

This course will explore documentary and landscape genre photography for its aesthetic, social, and political impact. The class will consist of fieldwork with field trips to off-campus locations. Students must furnish a fully manual/adjustable 35mm camera. CSU

**PHOTO 185 ALTERNATIVE PROCESSES IN PHOTOGRAPHY**

3 units

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

An intermediate-level photography course designed to teach alternative processes in photography. The course will cover the arts of cyanotype and Van Dyke printing, as well as sepia-toning, hand-coloring, image transfer and some digital manipulation of photographic images. CSU

**PHOTO 190 STUDIO AND THE PORTRAIT**

3 units

2 hours lecture, 3 hours lab weekly

This course covers the exploration of the portrait and the photographic studio through lectures and practical demonstrations. A critical look at the history of portraiture will also be discussed. CSU

**PHOTO 195 COLOR PHOTOGRAPHY**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

Studies in the theory of light and color in photography and its relationship to exposure and color printing type R. Color-printing techniques and basic quality control are studied and practiced. Offers further training in technical, aesthetic and historical issues that surround photography. Students must furnish a full manual/adjustable 35mm camera. CSU

**PHOTO 205 ADVANCED DIGITAL PHOTOGRAPHY**

3 units

2 hours lecture, 3 hours lab weekly

*Recommended preparation: DAT 105 or PHOTO-165.*

An advanced course covering expert skills in digital-imaging software and hardware. Topics include sophisticated image compositing and color correction, as well as utilizing the software for complex web imagery, optimization and animation. CSU

**PHOTO 260 PHOTOJOURNALISM (same as Journalism 260)**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

Emphasizes composition of news and feature pictures for use in mass communications media and stresses

the use of the photograph as an art form in telling the story. Picture editing, cropping, caption-writing, and layout are included. Basic course for students planning careers in journalism, public relations, advertising, and commercial and industrial photography. As a production class, may be repeated for a maximum of 12 units. CSU

**PHOTO 285 ADVANCED PHOTOGRAPHY (Formerly Photography 170)**

3 units, may be taken two times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Photography 160*

Advanced theory and practice in the contemporary use of the camera. Expands technical skills and develops artistic expression, including special-effects procedures with an emphasis on creative thinking and idea execution. Students must have a 35mm camera. CSU:UC

**PHOTO 299 DIRECTED STUDIES IN PHOTOGRAPHY**

1-3 units, may be taken four times

3 hours lab weekly per unit

Provides students with further work and experience in the photography field. CSU:(UC limited credit)

**PHYSICAL EDUCATION-KINESIOLOGY**

*Note: A limit of four units of activity credit is allowable by the UC system.*

**PHYSED 071 ATHLETIC CONDITIONING FOR INDIVIDUAL & TEAM SPORTS**

3 units, may be taken four times

3 hours lecture weekly

Not degree applicable

Specific physical fitness related to athletic conditioning. An understanding of and participation in physical activities that contribute to enhanced athletic performance. Emphasis is placed on individual and group activities. Sport specific skills and conditioning emphasized. Offered on a credit/no-credit basis only.

**PHYSED 099 WORKSHOP**

0.5 - 3 units

Lecture and/or lab as required by unit formula

**PHYSED 100 HEALTH EDUCATION**

3 units

3 hours lecture weekly

This survey course examines the physical, emotional and social dimensions of health. Topics include physical

# PHYSICAL EDUCATION-KINESIOLOGY

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fitness, nutrition, weight management, substance abuse, tobacco and alcohol use, diseases, sexuality, mental health, stress management, consumerism, environmental health, dying and death. (Does not satisfy the physical education activity requirement for the associate degree.) CSU:UC

*Note: Health Education 100 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "The Human Condition." Refer to this catalog for information on College by Television and to the schedule of classes published each semester.*

## **PHYSED 101 INTRODUCTION TO PHYSICAL EDUCATION**

3 units

3 hours lecture weekly

An introduction to the field of physical education as a profession and an academic discipline, covering the purposes, philosophical and historical, biological, biomechanical, sociological, and psychological foundations of physical education. Also focuses on educational preparation, the job market, and alternative careers in physical education. CSU

## **PHYSED 102 PRINCIPLES OF PHYSICAL EDUCATION**

3 units

3 hours lecture weekly

A comprehensive fitness course including the study of the human body. Focuses on fitness concepts based on physiological principles and the conditioning process. CSU

## **PHYSED 104 FOOTBALL THEORY**

3 units , May be taken four times

Analysis of advanced football fundamentals, theory, and philosophy of offensive and defensive strategy. Principles of the kicking game, of football coaching organization and implementation. (This is not a PE activity course.) CSU:UC

## **PHYSED 105 PERSONAL TRAINER CERTIFICATION PREPARATION**

2 units

2 hours lecture weekly

Preparation for taking the CPT (certified personal trainer) exam through the National Strength and Conditioning Association (NSCA). This course covers methods of client assessment, measurement, and eval-

uation. Highlights include resistance-training program design, nutrition, body composition, and cardio-respiratory fitness. CSU

## **PHYSED 109 EMERGENCY PROCEDURES**

2 units

2 hours lecture weekly

Introduces procedures to maintain health in emergency situations. Successful course completion qualifies a student for the American Red Cross Community First-Aid and Safety, CPR for the Professional Rescuer and Automated External Defibrillation cards. CSU

## **PHYSED 110 PREVENTION AND CARE OF ATHLETIC INJURIES**

3 units

3 hours lecture weekly

An introductory course in athletic training. The role of the athletic trainer shall be explored in relations to the physician, coach, and athlete. Emphasis is placed on prevention, recognition, treatment of the most common sports injuries. CSU:UC

## **PHYSED 110L PREVENTION AND CARE OF ATHLETIC INJURIES LAB**

1 unit

3 hours lab weekly

This lab course covers the principles and techniques for application of protective taping, padding, wrapping and bracing with emphasis on the prevention of sport and exercise injuries. CSU:UC

## **PHYSED 112 ATHLETIC TRAINING CLINICAL EXPERIENCE**

1-3 units, may be taken four times

3-9 hours lab weekly

*Prerequisite: PE 110 or concurrent enrollment and approval of the instructor.*

Designed to provide clinical experience for students interested in sports-related injury care and prevention. Experiences include prevention, recognition, treatment and rehabilitation of sports injuries. CSU

## **PHYSED 113 ATHLETIC TRAINING, FALL SPORTS**

2 units

6 hours lab weekly

*Prerequisite: PE 112*

This course provides exposure to immediate recognition and treatment of sports injuries unique to fall sports with an emphasis on rehabilitation and taping technique to enable athletes to return to competition. CSU

**PHYSED 114 ATHLETIC TRAINING, SPRING SPORTS**

2 units

6 hours lab weekly

*Prerequisite: PE 112*

Exposure to immediate recognition and treatment of sports injuries unique to spring sports with an emphasis on rehabilitation and taping technique to enable athletes to return to competition. CSU

**PHYSED 115 ADVANCED ATHLETIC TRAINING, FALL SPORTS**

2 units

6 hours lab weekly

*Prerequisite: PE 113*

This course provides additional exposure to the immediate recognition and treatment of sports injuries unique to fall sports. Students will have hands-on experience and be able to apply different techniques in the treatment of injuries. CSU

**PHYSED 116 ADVANCED ATHLETIC TRAINING, SPRING SPORTS**

2 units

6 hours lab weekly

*Prerequisite: PE 114*

This course gives students additional exposure to the immediate recognition and treatment of sports injuries unique to spring sports. Students will have hands-on experience and be able to apply different techniques in the treatment of injuries. CSU

**PHYSED 117 SWIMMING ACTIVITIES**

1 unit, may be taken four times

3 hours lab weekly

A class designed to introduce students to swimming activities and water games. These will include water polo, water basketball, relays, and an introduction to the skill of skin diving. CSU:UC

**PHYSED 118 RED CROSS ADVANCED LIFESAVING**

1 unit, may be taken four times

3 hours lab weekly

*NOTE: Student must be 15 years of age and able to perform the following skills: standing front dive, swim 500 yards using crawl stroke, side stroke, breaststroke, inverted scissor kick or breaststroke kick on the back, surface dive to 8 feet, swim underwater 20 feet, and tread water for 1 minute.*

The primary purpose of the Red Cross lifeguard-training program is to provide lifeguard candidates and lifeguards with the skills and knowledge necessary to keep patrons at an aquatic facility safe in and around the water. Upon successful completion of the course, students receive Red Cross certification in lifeguard training, waterfront lifeguarding, and CPR for the professional rescuer. CSU:UC

**PHYSED 119 WATER SAFETY INSTRUCTOR**

1 unit, may be taken four times

3 hours lab weekly

*Note: Student must be at least 17 years of age, be in sound physical condition, and have a current advanced life saving certificate (within three years).*

The student will become qualified to teach Red Cross swimming classes including seven (7) levels of the "Learn to Swim program"; infant/preschool aquatic; basic rescue and emergency water safety. CSU:UC

**PHYSED 120 AQUA AEROBICS**

1 unit, may be taken four times

3 hours lab weekly

Aquatic aerobic exercises for swimmers and non-swimmers designed to improve cardiovascular endurance, strength, and flexibility through free dynamic movement in the water. The water provides resistance and buoyancy that promotes a workout virtually free of orthopedic stress. CSU:UC

**PHYSED 121 DEEP-WATER RUNNING AND CONDITIONING**

1 unit, may be taken four times

3 hours lab weekly

An exercise program incorporating various practices while running in deep water. This class is well suited for those unable to run because of chronic injuries to the lower extremities or in rehabilitation from injury. CSU:UC

**PHYSED 126 PHYSICAL FITNESS: RUNNING**

1 unit, may be taken four times

3 hours lab weekly

Cardiovascular fitness training utilizing running and jogging. Principles and theories of aerobic, cardiovascular training. Individual exercise programs will be created to attain desired levels of cardiovascular efficiency and fitness goals. Strength, flexibility, and jogging/running programs will be emphasized. CSU:UC

# PHYSICAL EDUCATION-KINESIOLOGY

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## **PHYSED 127 PHYSICAL FITNESS: BOWLING**

1 unit, may be taken four times

3 hours lab weekly

Introduction to the fundamentals of indoor bowling.

Includes techniques of bowling, scoring, rules, and etiquette along with social and recreational benefits.

Practice and class competition are provided to enhance skill development and strategy. CSU

## **PHYSED 128 SPIN CYCLING FITNESS**

1 unit, may be taken four times

3 hours lab weekly

Group cardiovascular conditioning utilizing stationary cycles. Emphasis is placed on proper cycling technique and safety while students are guided through a training ride encountering various cycling modes (hills, sprints etc.). Participants utilize basic principles of exercise physiology, nutrition, and wellness to improve fitness levels and cycling ability. CSU

## **PHYSED 129 BEGINNING GOLF**

1 unit, may be taken four times

3 hours lab weekly

Golf instruction for the individual who has little or no background in the fundamentals of golf. The student will learn the basic skills necessary to enable the student to begin playing the game. CSU:UC

## **PHYSED 130 BEGINNING TENNIS**

1 unit, may be taken four times

3 hours lab weekly

A course designed to teach the fundamentals of tennis, including grip, ground strokes, and service for the beginner. CSU:UC

## **PHYSED 131 BEGINNING BEACH VOLLEYBALL**

1 unit, may be taken four times

3 hours lab weekly

Provides the student with a basic knowledge and the fundamental skills of beach volleyball, very different in format, skills, and strategy from the indoor game.

Includes serving, passing, setting, hitting, digging, and blocking with variations in technique unique to this sport. Students will be required to learn the Federation of International Volleyball and the California Beach Volleyball Association rules. CSU

## **PHYSED 133 BEGINNING SOCCER**

1 unit, may be taken four times

3 hours lab weekly

Instruction and practice in the techniques of the sport of soccer. Class is designed to develop the knowledge and

skills for the beginning-level player. Emphasis will be placed on basic skills, laws of the game, and proper attitude toward participation. CSU:UC

## **PHYSED 134 SOFTBALL**

1 unit, may be taken four times

3 hours lab weekly

A beginner's-level course in the avocational and recreational game of softball. CSU:UC

## **PHYSED 138 BEGINNING VOLLEYBALL**

1 unit, may be taken four times

3 hours lab weekly

The methods, techniques, and strategy associated with an introductory course in volleyball. CSU:UC

## **PHYSED 145 STEP AEROBICS**

1 unit, may be taken four times

3 hours lab weekly

Group cardiovascular conditioning utilizing a step platform. Emphasis is placed on proper technique and safety while students exercise to music. Participants utilize basic principles of exercise physiology, nutrition, and wellness to improve their level of fitness. CSU:UC

## **PHYSED 146 BODY MECHANICS**

1 unit, may be taken four times

3 hours lab weekly

Introduction to physical conditioning, physiology of exercise, nutrition, and weight control. This course is open to anyone who has a desire for physical fitness. Some weight training will be included. CSU:UC

## **PHYSED 149 BASKETBALL**

1 unit, may be taken four times

3 hours lab weekly

A low-key approach to the fundamentals of basketball, primarily dealing with the very basic skills needed to play. The course is designed for all levels of basketball ability with an emphasis on big muscle activity. CSU:UC

## **PHYSED 150 BODY CONDITIONING/FITNESS LAB**

1 unit, may be taken four times

3 hours lab weekly

A physical fitness laboratory course designed to develop and encourage positive attitudes and habits in a personalized exercise program. The program is designed to work the five health related components of fitness. The primary training activity is aerobic weight training utilizing a sequence of specific weight lifting machines and stationary bicycles organized into aerobic activity stations. CSU:UC

**PHYSED 151 WEIGHT TRAINING**

1 unit, may be taken four times

3 hours lab weekly

Instruction and practice at the beginning level in resistance training with an emphasis on techniques of lifting. Individual program adaption is stressed. Principles of different weight-training techniques and program design along with basic nutrition and wellness education will be covered. CSU:UC

**PHYSED 152A CONDITIONING FOR INTERCOLLEGIATE SPORTS**

1-2 units, may be taken four times

3-6 hours lab weekly

Specific physical fitness related to in-season intercollegiate athletic participation. An understanding of and participation in advanced exercise programs contributing to the advancement of athletic performance. Emphasis is placed on individual and group activities that contribute to specific sport advancement. CSU:UC

**PHYSED 152B OFF-SEASON CONDITIONING FOR INTERCOLLEGIATE SPORTS**

1-2 units, may be taken four times

3-6 hours lab weekly

Specific physical fitness related to off-season intercollegiate athletic participation. An understanding of and participation in advanced exercise programs contributing to the advancement of athletic performance. Emphasis is placed on individual and group activities that contribute to specific sport advancement. CSU:UC

**PHYSED 160 INTERMEDIATE BASEBALL**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

This course is designed to accommodate a large number of students interested in building proficiency in baseball skills and knowledge. Fundamentals of individual and team play are stressed. CSU:UC

**PHYSED 161 FOOTBALL TECHNIQUES & WEIGHT TRAINING**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Instruction and practice in weight training and football, with emphasis on weight training and its relationship to football. Individual programs are stressed. CSU:UC

**PHYSED 162 INTERMEDIATE FOOTBALL**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Advanced football fundamentals as they relate to intercollegiate football. An understanding of and participation in advanced football techniques and schemes. Intended for individuals interested in competing on the intercollegiate football team. CSU:UC

**163 INTERMEDIATE TRACK AND FIELD**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Introduction to intermediate techniques and strategies of all track-and-field events. Prepares the student for a competitive season emphasizing skills needed for proficiency. Topics covered include methods of training, conditioning, proper technique, and competitive tactics of track and field. CSU

**PHYSED 165 INTERMEDIATE SOCCER**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Instruction and practice in the techniques of soccer designed to develop skills for the intermediate-level player, knowledge of the rules, background, analysis of technique and desirable attitude toward participation. CSU:UC

**PHYSED 166 INTERMEDIATE GOLF**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

A review of the fundamentals of golf skills and the developing of techniques for playing "trouble shots." CSU:UC

**PHYSED 167 INTERMEDIATE SWIMMING**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

A class designed to encompass a large range of swimming skills. The student should have had some previous

## PHYSICAL EDUCATION-KINESIOLOGY

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swimming experience. The course, when completed, will provide the student with Red Cross intermediate swimming card. CSU:UC

### **PHYSED 168 INTERMEDIATE TENNIS**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Designed to enable students to become proficient in the intermediate skills of tennis. Progressive instruction includes the volley, overhead, singles and doubles strategy. Instruction also covers tennis scoring, court position, rules and strategy. CSU:UC

### **PHYSED 169 INTERMEDIATE VOLLEYBALL**

1 unit, may be taken two times

3 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

Basic skills are taught with an emphasis on play, strategy and rules. CSU:UC

### **PHYSED 170 INTERMEDIATE SOFTBALL**

2 units, may be taken four times

6 hours lab weekly

*Recommended preparation: Completion of a beginning course or its equivalent.*

This course is designed to prepare a student to be strong in the fundamentals of softball, i.e., hitting, fielding, throwing and catching. Also included are weight-training and conditioning. A lead-up class for intercollegiate softball. CSU:UC

### **PHYSED 171 INTERMEDIATE BEACH VOLLEYBALL**

2 units, may be taken four times

6 hours lab weekly

Provides the student with an opportunity for further development of skills and strategies. Emphasis is placed on a review of the fundamentals, adding basic offensive and defensive strategies. Also adds advanced skills such as tipping/dinking, roll, shot, drop shot, jump serve, reading the opposing hitter, and one-hand set. Later emphasis is on strategy and tournament play along with officiating matches to ensure a thorough knowledge of the rules and their interpretation. Incorporates four-person and doubles play into competitive formats. Students will be required to use the Federation of International Volleyball and the California Beach Volleyball Association rules. CSU

### **PHYSED 177 ADVANCED GOLF**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of an intermediate course or its equivalent.*

Course is designed to assist the student in gaining an understanding of the mechanics involved in developing the distance and direction of the golf swing. CSU:UC

### **PHYSED 178 ADVANCED SWIMMING**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of an intermediate course or its equivalent. A swimmer's card or a lifesaving course or equivalent.*

The class is designed to provide the individual with the additional strokes and miscellaneous water skills that will produce an all-round swimmer. This class is for the accomplished swimmer who plans to qualify for an advanced swimmer's card. CSU:UC

### **PHYSED 179 SWIM STROKE MECHANICS**

2 units

6 hours lab weekly

*Recommended preparation: Completion of an intermediate course or its equivalent.*

This course covers the four basic swim strokes including starts and turns. No prior competitive swim experience necessary. CSU

### **PHYSED 180 ADVANCED VOLLEYBALL**

1 unit, may be taken four times

3 hours lab weekly

*Recommended preparation: Completion of an intermediate course or its equivalent.*

Advanced volleyball skills with an emphasis on tournament play and advanced strategy. Additional emphasis on spiking and blocking. CSU:UC

### **PHYSED 181 SONG AND YELL LEADERS**

2 units, may be taken four times

6 hours lab weekly

A physical-activity class designed for spirit-squad members, as well as others interested in cheer, dance, gymnastics, and stunting. Extensive choreography in all areas of dance; hip-hop, jazz, and pom. Cheers will consist of straight arm movements as well as stunting and proper spotting techniques. CSU

**PHYSED 194 OFFICIATING FALL SPORTS**

2 units, may be taken four times

2 hours lecture weekly

Introduction to the rules, methods, and techniques of officiating the fall sports of football and basketball. The student will receive a complete overview of officiating opportunities at the youth level in fall sports, the role of responsibilities of the official, and develop a working knowledge of the principles of officiating fall sports.

CSU:UC

**PHYSED 195 OFFICIATING SPRING SPORTS**

2 units, may be taken four times

2 hours lecture weekly

CSU:UC

**PHYSED 250 INTERCOLLEGIATE FOOTBALL (Men's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in the sport of football. Student must meet California community college eligibility requirements as established by the California Commission on Athletics. CSU:UC

**PHYSED 251 INTERCOLLEGIATE CROSS COUNTRY (Men's and Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition and preparation in cross-country at the community college level. Emphasis is placed on training methods, conditioning, proper techniques, and competition tactics of cross-country racing. CSU:UC

**PHYSED 252 INTERCOLLEGIATE BASKETBALL (Men's and Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate Basketball: For those interested in competing on the college-level intercollegiate basketball

team. Includes 28-game schedule with both home and road competition. CSU:UC

**PHYSED 253 INTERCOLLEGIATE SOCCER (Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in the sport of soccer. Student must meet California community college eligibility requirements as established by the California Commission Athletics. CSU:UC

**PHYSED 254 INTERCOLLEGIATE TRACK AND FIELD (Men's and Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition and preparation in track and field at the community college level. Emphasis is placed on training methods, conditioning, proper techniques, and competition tactics of track and field events. CSU:UC

**PHYSED 255 INTERCOLLEGIATE BASEBALL (Men's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in the sport of baseball. Student must meet California community college eligibility requirements as established by the CCJCA Commission on Athletics and the Western State Conference. CSU:UC

**PHYSED 256 INTERCOLLEGIATE GOLF (Men's and Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Study and execution of the theory and technique necessary to enable an individual to compete in golf at the community college level. CSU:UC

### **PHYSED 257 INTERCOLLEGIATE VOLLEYBALL (Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Designed to provide an opportunity for students with advanced skills to participate in intercollegiate competition. Must meet SCCIAC eligibility requirements.

CSU:UC

### **PHYSED 258 INTERCOLLEGIATE SOFTBALL (Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in the sport of softball (for women). Student must meet California community college eligibility requirements as established by the CCJCA Commission of Athletics and the Western State Conference. CSU:UC

### **PHYSED 259 INTERCOLLEGIATE SWIMMING AND DIVING (Men's and Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in swimming. CSU:UC

### **PHYSED 260 INTERCOLLEGIATE WATER POLO (Women's)**

2 units, may be taken four times

10 hours lab weekly (daily practice)

*Recommended preparation: Advanced skills and/or previous competitive experience. Intercollegiate competition.*

Intercollegiate competition in the sport of water polo. Student must meet California community college eligibility requirements as established by the California Commission on Athletics. CSU:UC

## **PHYSICAL SCIENCE**

### **PHYSICI 101 PHYSICAL SCIENCE**

4 units

4 hours lecture weekly

A survey of the basic physical phenomena of mechanics, heat, light, sound, electricity, chemistry, geology, meteorology, and astronomy. Emphasizes basic principles, relationships, status and applications to modern civilization. Topics are developed within a minimum of mathematical presentation. Designed for all non-science, industrial technology and education majors. CSU

## **PHYSICS**

### **PHYSIC 101 INTRODUCTION TO PHYSICS**

4 units

3 hours lecture, 3 hours lab weekly

An introductory survey course in classical and modern physics: motion, gravity, heat, light, sound, electricity, magnetism, atomic and nuclear physics, relativity, and quantum mechanics. CSU:UC

### **PHYSIC 110 GENERAL PHYSICS I (Trig-Based)**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Math 102 or equivalent course with a grade of C or better.*

Mechanics, heat, and sound. Physics 110 is not open for credit to students who have credit for Physics 220 or the equivalent. (CAN: PHYS 2) CSU:UC

### **PHYSIC 111 GENERAL PHYSICS II (Trig-Based)**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Mathematics 102 or equivalent course with a grade of C or better.*

Electricity and magnetism, light, and atomic physics. Physics 111 is not open for credit to students who have credit for Physics 221 or the equivalent. (CAN: PHYS 4) CSU:UC

### **PHYSIC 220 PHYSICS FOR SCIENTISTS AND ENGINEERS: MECHANICS OF SOLIDS AND FLUIDS**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Mathematics 211.*

Dynamics and statics of particles and rigid bodies, harmonic vibrations, and fluid mechanics. Physics 220 uses calculus and is designed for students majoring in courses of study such as: chemistry, engineering, and physics. (CAN: PHYS 8 or CAN: PHYS SEQ B combined with PHYSIC 221 and 222) CSU:UC

**PHYSIC 221 PHYSICS FOR SCIENTISTS AND ENGINEERS: ELECTRICITY AND MAGNETISM**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisite: Completion of Physics 220 and Mathematics 212 with a grade of C or better.*

This course is an introductory study of electricity and magnetism. Emphasis is placed on an understanding of field theory and its application to solving problems.

Physics 221 uses calculus and is designed for students majoring in courses of study such as: chemistry, engineering, and physics. (CAN: PHYS 12 or CAN: PHYS SEQ B combined with PHYSIC 220 and 222) CSU:UC

**PHYSIC 222 PHYSICS FOR SCIENTISTS AND ENGINEERS: WAVE MOTION, HEAT, OPTICS, AND MODERN PHYSICS**

4 units

3 hours lecture, 3 hours lab weekly

*Prerequisites: Completion of Physics 220 and Mathematics 213 with a grade of C or better.*

Heat, introduction to thermodynamics and kinetic theory, wave motion and sound, geometric and physical optics, introduction to modern physics. (CAN: PHYS 14 or CAN: PHYS SEQ B combined with PHYSIC 220 and 221) CSU:UC

**POLITICAL SCIENCE****POLISC 150 AMERICAN GOVERNMENT AND POLITICS**

3 units

3 hours lecture weekly

An examination of the institutions, activities, and issues of American and California governments. This course satisfies the Title V, U.S. Constitution requirement and the California State and Local Government requirement. CSU:UC

*Note: Political Science 150 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Voices of Democracy." Refer to the section in this catalog under "College by Television" and to the schedule of classes published each semester.*

**POLISC 250 COMPARATIVE GOVERNMENT AND POLITICS**

3 units

3 hours lecture weekly

A study of the governments of other countries as compared to the United States with a particular emphasis on

the parliamentary form as represented by the United Kingdom. CSU:UC

**POLISC 270 INTERNATIONAL RELATIONS**

3 units

3 hours lecture weekly

An analysis of the basic historical, geographical, economic, ideological, and strategic factors that underlie conflict and cooperation among nations. CSU:UC

**POLISC 290 ETHNIC AND GENDER POLITICS**

3 units

3 hours lecture weekly

An overview of the history, issues, and political processes that affect the status and power of groups that have traditionally been politically and socially disadvantaged in the United States. These groups include, but are not restricted to, African-Americans, Asians, Native Americans, Latinos, and women.

**PSYCHOLOGY****PSYCH 101 INTRODUCTION TO PSYCHOLOGY**

3 units

3 hours lecture weekly

Scientific study of behavior through an exploration of major concepts, methods, and research findings. Topics include biological, physiological, and cognitive processes; learning and motivation; life-span development; individual differences; behavioral disorders and therapies; social behavior; and applied psychology. (CAN: PSY 2) CSU:UC

*Note: Psychology 101 is sometimes also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Psychology' The Human Experience." Refer to the section of this catalog on College by Television and the schedule of classes published each semester for more information.*

**PSYCH 102 PHYSIOLOGICAL PSYCHOLOGY**

3 units

3 hours lecture weekly

*Prerequisite: Psychology 101*

This course offers a detailed consideration of the functional and anatomical aspects of the nervous system in order to interpret behavior in terms of physiological processes. In addition, this course covers such topics as muscles and glands as response mechanisms, the structure and physiological basis of complex behavior,

## **PUBLIC RELATIONS**

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and mental processes and the function of the sense organs. CSU:UC

### **PSYCH 103 INTRODUCTION TO BEHAVIORAL RESEARCH METHODS**

3 units

3 hours lecture weekly

Classic studies in psychology are highlighted as students learn the basic principles and concepts of research through a survey of methods currently used in psychology including: naturalistic observation, case study, questionnaire, correlation research and laboratory experiments. Students have the opportunity to examine research designs and the process of data analysis to gain added insight into the scientific method. Requires research study and manuscript writing using APA guidelines and format. CSU

### **PSYCH 105 PERSONAL GROWTH AND ADJUSTMENT**

3 units

3 hours lecture weekly

This course discusses personality, emphasizing the application of theoretical psychology to the issues of personal growth. Students will examine a diverse variety of concepts of the psyche, including several cross-cultural perspectives on human nature. CSU:UC

### **PSYCH 150 CRISIS INTERVENTION AND MANAGEMENT**

3 units

3 hours lecture weekly

*Prerequisite: Psychology 101 completion or concurrent enrollment recommended*

An introduction to the strategies used to assist people in crisis will be provided in a variety of areas. Students will have the opportunity to understand the crisis state and stages of the crisis; understand and perform the steps and strategies of crisis intervention; and become familiar with the skills necessary to intervene with persons in crisis. CSU

### **PSYCH 172 DEVELOPMENTAL PSYCHOLOGY**

3 units

3 hours lecture weekly

This course surveys human development: emphasizing the changes occurring throughout the lifespan. Students will examine the physical, emotional, cognitive, and social growth of infants, toddlers, preschoolers, school-children, adolescents, and adults. CSU:UC

*Note: Psychology 172 is sometimes also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Time to Grow." Refer to the section of this catalog on College by Television and the schedule of classes published each semester for more information.*

### **PSYCH 230 HUMAN SEXUALITY**

3 units

3 hours lecture weekly

*Prerequisite: Psychology 101*

This course studies the psychological range of human sexuality. Topics explored include the social and biological foundations of sexuality, human anatomy, reproduction, the birth process, sexual behavior and attitudes in contemporary society, historical views of sexuality, cross cultural views of sexuality, sexual dysfunction, sexually transmitted diseases, and sexual problems and issues in society. CSU:UC

### **PSYCH 235 PSYCHOLOGY OF GENDER ROLES**

3 units

3 hours lecture weekly

*Prerequisite: Psychology 101 recommended*

This course presents a survey of gender issues which affect the psychological development of women and men. The development of sex roles and the extent to which these roles influence, or are influenced by physiology, the family, education, work, and interpersonal relationships will be explored. CSU:UC

## **PUBLIC RELATIONS**

### **PUBREL 125 PUBLIC RELATIONS**

3 units

3 hours lecture weekly

*Recommended preparation: JOURN 105*

A survey of public-relations theories and practices with emphasis on the applications to businesses, agencies and institutions. A practical "how to" in the use of media and the creation of publicity releases is investigated. Career opportunities of particular interest to journalism majors are explored. CSU

### **PUBREL 126 PUBLIC RELATIONS PRACTICUM**

1 unit, may be taken four times

3 hour lab per week

*Prerequisite: Completion of, or concurrent enrollment in Public Relations 125*

A practical application of public-relations theory. The student will create publicity for the College community

by effectively using media designed to reach a target audience. CSU

**PUBREL 299 DIRECTED STUDIES IN PUBLIC RELATIONS**

1-3 units

3 hours lab weekly per unit

Provides students with further work and experience in the public-relations field. CSU:(UC limited credit)

**QUALITY TECHNOLOGY****QCTECH 100 THE QUALITY CONTROL FUNCTION**

3 units

3 hours lecture weekly

Presents the fundamentals of quality control. The basic organizational and functional responsibilities are discussed along with a general overview of occupations within the field of quality assurance CSU

**QCTECH 101 MEASUREMENT-MECHANICAL/ELECTRICAL TECHNOLOGY (Formerly Mechanical Technology 051 and 052)**

4 units

3 hours lecture, 3 hours lab weekly

Provides technical information applicable to mechanical and electrical inspection devices. The primary thrust will be toward measurement and the relation of mechanical and electrical to quality inspection. CSU

**QCTECH 150 INTERPRETATION OF SPECIFICATIONS**

2 units

2 hours lecture weekly

Covers the facets of specifications used in conjunction with engineering drawings and quality policies. Subject matter includes ISO and other related specifications. CSU

**QCTECH 151 STATISTICAL CONCEPTS**

2 units

2 hours lecture weekly

*Prerequisite: Math 025 or concurrent enrollment*

Designed to outline the basic statistical techniques which have a wide range of industrial applications. Special emphasis is placed on statistical concepts for quality control and sampling inspection. CSU

**QCTECH 152 PROCESS CONTROL**

4 units

4 hours lecture weekly

Provides the method and technique required to control manufacturing processes such as plating, metal removal, heat treating, foundry practices, and welding certification. The manufacturing process is discussed in detail and how the control of a process sequence is properly traceable to measurement. CSU

**QCTECH 153 NON-DESTRUCTIVE TESTING**

3 units

3 hours lecture weekly

This course establishes minimum requirements for the training, qualifying, examining and certification of non-destructive inspection personnel for the inspection of materials and parts by eddy current, liquid penetrant, magnetic particle, radiographic, and ultrasonic test methods. CSU

**RADIO/TELEVISION/FILM****RTVF 090L OPEN PRODUCTION LAB**

1 - 2 units, may be taken four times

3 hours per week, one per unit

*Co-requisite: Concurrent enrollment in any RTVF production course(s).*

Not degree applicable

Direct access to RTVF facilities and equipment for students to work independently on projects/assignments related to RTVF production courses. Open weekdays, evenings and Saturday during flexible scheduled hours. One unit averages three hours a week and applies to one production course. Students with multiple production courses will need an additional unit. Offered on a credit/no credit basis only.

**RTVF 100 MEDIA & SOCIETY (Same as Journ-100)**

3 units

3 hours lecture weekly

A general survey and evaluation of the mass media. The course content discusses the history, relationships, ethics, rights and responsibilities of media as well as topics of current interest. CSU: UC

**RTVF 101 STRUCTURE OF THE MOVING IMAGE**

3 units

3 hours lecture weekly

A breakdown of dramatic structure as it applies to narrative theory within motion picture storytelling.

## QUALITY TECHNOLOGY • RADIO/TELEVISION/FILM

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Representative films and television programs are exhibited and analyzed. CSU

### **RTVF 112 VIDEO PRODUCTION**

3 units, may be taken four times  
2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF 090L*

An introduction to video studio operations and portable video equipment for the field. This course stresses the fundamentals of electronic audio/visual technique while surveying key crew positions and equipment found in most broadcast-television environments. Students will be expected to gain a comprehensive understanding of an entry-level video-production work environment. CSU

### **RTVF 115 WRITING FOR BROADCAST**

3 units  
3 hours lecture weekly

Language and style as it applies to the media environment. Students will analyze and perform script development for radio and television broadcast. CSU

### **RTVF 118 FILM/VIDEO EDITING**

3 units, may be taken two times  
2 hours lecture, 3 hours lab weekly.

*Co-requisite: 090L Open Production Lab*

Introduction to motion picture editing theory and basic technology, including individual exercises designed to develop students' skills in basic editing arrangements. It is highly recommended to take this course concurrently with RTVF 168 DIGITAL EDITING. CSU

### **RTVF 125 TELEVISION PRODUCTION**

3 units  
2 hours lecture/ 3 hours lab weekly

*Co-requisite: 090L Open Production Lab*

Broadcast journalism in the television news format. Students practice the role of the professional videojournalist as a reporter and operate as production crew. Topics include: producing news segments (electronic newsgathering), operating portable video equipment, and editing videotape. Includes equipment and operations of the television broadcast studio and control room. CSU

### **RTVF 129 MUSIC PRODUCTION FOR FILM AND TELEVISION (Same as Music-129)**

3 units, may be taken four times  
2 hours lecture, 3 hours lab weekly

Designed to provide the technical and aesthetic tools

needed for the production of music for motion pictures and video, this course focuses on the artistic issues as well as the mechanics of matching sounds with a visual counterpart. CSU

### **RTVF 144 ACTING FOR THE CAMERA (Same as Theatre-144)**

3 units, may be taken four times  
2 hours lecture, 3 hours lab weekly

*Prerequisite: Successful completion of Theatre 126 or 140 or 141.*

The practice and study of the fundamental techniques required in acting before the camera in contrast to the variance from stage work. Students will address areas of voice and movement for the camera; blocking; memorization and audition techniques including the preparation and presentation of headshots and resumés. CSU

### **RTVF 151 RADIO/TELEVISION ANNOUNCING (Same as SPCOM-151)**

3 units  
3 hours lecture weekly

*Co-requisite: RTVF-090L*

Theory and practice in Radio/TV announcing for newscasts, commercials, sportscasters, and talk-show hosting; with a focus on developing the individual "Air Personality." Open to non-majors as well as majors. CSU

### **RTVF 168 DIGITAL EDITING (Same as DAT-172)**

3 units, may be taken four times  
2 hours lecture, 3 hours lab weekly

*Co-requisite: DAT 097L*

An introductory-level course designed to teach software applicable to desktop computer non-linear editing programs such as Adobe Premier and After Effects. The course will include making short video projects. CSU

### **RTVF 170 AUDIO PRODUCTION**

3 units, may be taken four times  
2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF 090L*

An introduction to aural theory and related audio hardware found in media-production environments including new digital technologies. Training in the operation of the studio console, multi-channel recorders, and microphones. Audio-editing projects/assignments. CSU

**RTVF 175 RADIO PRODUCTION**

3 units

2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF 090L*

Broadcasting on the Internet as KGUR, students produce audio/radio program media. Introductory techniques of programming, writing, editing, producing, directing and announcing will be used for developing music formats and news broadcasts. Operation of digital-based broadcasting systems to include Internet/broadband-streaming technologies. CSU

**RTVF 190 FILM PRODUCTION**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF 090L*

A course in the basic principles and production techniques of filmmaking. The beginning student will learn the fundamentals of equipment operation, terminology, aesthetic values, and editing techniques for film production. CSU:UC

**RTVF 195 SCREENPLAY WRITING**

3 units

2 hours lecture, 3 hours lab weekly

This course covers the basic tools to write an effective screenplay. Includes: understanding a film premise; triangular character relationships; inciting incidents; turning points, crisis, climax and resolution; how to build non-cliche, and three-dimensional characters. CSU

**RTVF 218 ADVANCED FILM/VIDEO EDITING**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Recommended preparation: RTVF 118 and 112.*

An advanced course in post-production film/video technique and aesthetics including the analysis, application and mastery of editing styles. CSU

**RTVF 250 FILM/VIDEO CINEMATOGRAPHY  
(CAMERA & LIGHTING)**

3 units, may be taken two times

2 hours lecture, 3 hours lab weekly

*Prerequisite: RTVF-112*

*Co-requisite: RTVF-090L*

An introduction to well-disciplined creative control of the film or video camera lighting technique for both the studio and field. Attention will be paid to producing highly stylized images as well as standard applications for typi-

cal locations and studio situations. Students will be taught the main aspects of the role "Director of Photography" has in productions. This course features new digital-video techniques. CSU

**RTVF 255 ADVANCED SCREENPLAY WRITING**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

This course will focus on advanced aspects of screenplay including main plots, subplots, progressive complications, 1st, 2nd, and 3rd act turning points and primary and incidental characters. Students' work will be critiques and examined, resolving individual writing problems, and allowing each script to find its voice in a powerful, dramatic narration. CSU

**RTVF 270 ADVANCED AUDIO PRODUCTION**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF-090L*

Techniques of studio and remote-audio production as they apply to sound design for film/video post-production. Training in multi-source mixing and multi-track digital recording as well as the sculpting and application of sound effects. CSU

**RTVF 280 ADVANCED FILM PRODUCTION**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF-090L*

Working within the medium of film, students will learn to make short motion picture projects and be involved in a critical discussion concerning film as an art form and mode of popular culture. Course material will include hand-processing, scriptwriting, lighting design, and group projects. CSU

**RTVF 290 RADIO TELEVISION FILM PORTFOLIO**

3 units, may be taken three times

2 hours lecture, 3 hours lab weekly

*Co-requisite: RTVF-090L*

Designed for advanced students who have completed or are currently enrolled in available courses in their chosen area of concentration within RTVF. Students will pursue film/video portfolio work and develop the necessary skills for entry-level positions in media environments or transfer to four-year film schools and art institutions. Topics include contemporary trends within media production featuring visiting artists and profes-

## **REAL ESTATE • SIGN LANGUAGE**

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sionals. Class time will also focus on creating internship opportunities as well as feedback and critique of project work. CSU

### **RTVF 299 DIRECTED STUDIES IN RADIO/TELEVISION/FILM**

1-3 units, may be taken four times

3-9 hours lab weekly

Provides students with further work and experience in the radio, television and film fields. CSU

## **REAL ESTATE**

### **REAL 100 REAL ESTATE PRINCIPLES**

3 units

3 hours lecture weekly

Introduces the student to real estate fundamentals, including the economics of land ownership and the responsibility of the real estate agent, seller and purchaser. Covers terminology and definitions and the varied vocational opportunities in the general field of real estate. CSU

### **REAL 101 REAL ESTATE PRACTICES**

3 units

3 hours lecture weekly

*Prerequisite: Real Estate 100 or current license*

Important phases of practical day-to-day operations in a real estate company. Includes study of real estate office operation having to do with listings, valuations, prospecting, selling, financing, exchanging, taxation, and specialized brokerage operations. CSU

### **REAL 105 FINANCING**

3 units

3 hours lecture weekly

*Prerequisite: Real Estate 100 or a current real estate sales license*

A study of the principles and practical aspects of financing real estate in California. Includes a detailed analysis of the financing of real estate, including sources of loans and loan processing, governmental loans, methods of financing residential property, appraisal. CSU

### **REAL 115 LEGAL ASPECTS OF REAL ESTATE**

3 units

3 hours lecture weekly

*Prerequisite: Real Estate 100*

California real estate law with emphasis on practical applications. Includes a study of sources of real estate

law, classes of property, fixtures, easements, estates or interests in real property, contracts, agency, conveyancing, and security devices. CSU

### **REAL 120 REAL ESTATE APPRAISAL**

3 units

3 hours lecture weekly

*Prerequisite: Completion of or concurrent enrollment in Real Estate 101 or valid real estate license*

An introductory course covering the purposes of appraisals, the appraisal process and the different approaches, methods, and techniques used to determine the value of various types of property. Emphasis will be on residential and single-unit property. CSU

### **REAL 121 REAL ESTATE APPRAISAL II**

3 units

3 hours lecture weekly

*Prerequisite: Completion of Real Estate 120 with a grade of C or better*

An advanced appraisal course covering the methods and techniques used in the appraisal of specialty and more complex income-producing properties. Emphasis will be placed on selecting and applying the correct approach to the valuation of these types of properties. CSU

### **REAL 130 ESCROW PROCEDURES AND PROCESSING**

3 units

3 hours lecture weekly

Designed to familiarize the student with the documentation and paperwork involved in processing a simple escrow and the basic functions of the escrow holder in a real estate transaction. CSU

## **SIGN LANGUAGE**

### **SIGN 101 SIGN LANGUAGE I**

4 units

4 hours lecture weekly

A fundamental study of American Sign Language (ASL), which is designed to develop the student's proficiency in ASL vocabulary, and grammatical structure, as well as an introduction to deaf culture. Students will be able to produce grammatically correct ASL by developing visual/gestural communication, while using the effect of an adult native user of ASL. CSU:UC

**SIGN 102 SIGN LANGUAGE II**

4 units

4 hours lecture weekly

*Prerequisite: Sign Language 101 or equivalent*

A continuing study of American Sign Language (ASL) that is designed to increase the development of the student's proficiency in ASL vocabulary, grammatical structure, and basic understanding of the deaf community. Students will further build their comprehension of grammatically correct ASL and visual/gestural communication skills, while using the effect of an adult native user of ASL. CSU:UC

**SIGN 103 SIGN LANGUAGE III**

4 units

4 hours lecture weekly

*Prerequisite: Sign Language 102 or equivalent*

A continuing study of American Sign Language (ASL) that is designed to increase the development of the student's proficiency in ASL vocabulary, grammatical structure, and basic understanding of the deaf community. Students will further build their comprehension of grammatically correct ASL and visual/gestural communication skills, while using the effect of an adult native user of ASL. CSU:UC

**SIGN 110 AMERICAN DEAF CULTURE**

3 units

3 hours lecture weekly

*Prerequisite: Sign Language 102*

The study of various aspects of American deaf culture, including description of deafness, deaf people, the deaf community as defined by audiology and/or cultural means, service for and by deaf people, and culture as reflected in the arts and language of deaf people. This course is taught in American Sign Language. CSU:UC

**SIGN 111 FINGERSPELLING**

2 units, may be taken two times

2 hours lecture weekly

*Prerequisite: Sign Language 102*

This course is designed to develop basic skills in receptive and expressive fingerspelling. Deals with specific individual problems and techniques for correction. Strongly recommended for prospective teachers, interpreters, and other professionals working with deaf people. This course is taught in Sign Language. Offered for credit/no credit only. CSU

**SOCIOLOGY****SOCI 100 CHICANO/A CULTURE**

3 units

3 hours lecture weekly

Chicano/a Culture provides an overview of the academic field of Chicano studies. As an introductory survey, this course focuses on the political, social, and artistic life of the Mexican and Mexican-American people in the U.S.A. CSU:UC

**SOCI 101 INTRODUCTION TO SOCIOLOGY**

3 units

3 hours lecture weekly

Survey of the tools of sociological theory and the characteristics and processes of social life such as culture, values, roles, norms, social interaction, social stratification, and social change. (CAN: SOC 2) CSU:UC

*Note: Sociology 101 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "The Sociological Imagination." Refer to the section in this catalog under "College by Television" and to the schedule of classes published each semester.*

**SOCI 102 SOCIOLOGICAL ANALYSIS**

3 units

3 hours lecture weekly

Scientific logic and procedure are used to collect, interpret, and analyze social phenomena. The characteristics, strengths, and weaknesses of qualitative and quantitative-research practices are examined as students learn to conceptualize and relate social variables as they develop measurable hypotheses. This course fulfills Sociology 202 as part of the sociology major at CSUN. CSU:UC

**SOCI 103 THE CHANGING FAMILY**

3 units

3 hours lecture weekly

Changing definitions of what comprises a family are examined within a multicultural American society. This course analyzes the concepts of commitment, love, and intimacy found in human relationships, and explains their importance to forming lasting partnerships. Controversial issues involving marriage, divorce, singlehood, dating, and parenting are discussed. Diversity of function and form is central to understanding the contemporary family from a sociological perspective. CSU:UC

## **SOCIOLOGY**

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*Note: Sociology 103 is also offered as a CTV (College by Television) course. Offered in this mode, the course title is "Portrait of a Family." Refer to the section in this catalog under "College by Television" and to the schedule of classes published each semester.*

### **SOCI 105 MULTICULTURALISM IN AMERICA (Formerly INTERD 100)**

3 units

3 hours lecture weekly

Multiculturalism in America explores the benefits and limitations of cultural diversity in a complex modern society. Students are asked to explore such concepts as prejudice and sexism, while considering the major societal forces that shape the problems that multiculturalism presents. The course will develop alternative cultural perspectives, and students will formulate opinions on the major cultural barriers separating American citizens. Comparing the human experience across cultural and gender lines will equip students with the knowledge and skills to live in an increasingly diverse society. CSU:UC

### **SOCI 108 THINKING CRITICALLY ABOUT SOCIAL ISSUES**

3 units

3 hours lecture weekly

This course examines the definitional and contextual nature of social issues and specifically explores how the media and scientific community collect, interpret, and report social data. Eligibility for English 101 is advised. CSU

### **SOCI 197 SOCIAL SCIENCE PRACTICUM**

1 unit, may be taken four times

1 hour lecture weekly

*Prerequisite: Concurrent enrollment in Sociology 101.*

This is a collaborative, interdisciplinary course that introduces students to sociological methodology, library-information technology, and research-writing skills. Taken concurrently with Sociology 101, this course provides students with the opportunity to receive additional support in completing their semester projects. CSU:UC

### **SOCI 200 INTRODUCTION TO WOMEN'S STUDIES**

3 units

3 hours lecture weekly

Provides an overview of the academic field of women's studies. As an introductory survey, this course addresses several basic topics such as socialization and cultur-

al images, being different, maintaining patriarchy, gender-based inequality, feminism in the future. CSU:UC

### **SOCI 203 SOCIOLOGY OF WORK, ORGANIZATIONS, AND COMMUNITY**

3 units, may be taken three times

3 hours lecture weekly

Course uses the sociological perspective to examine the role of the modern organization in both community and society. Students will participate in an ethnographic field of study which will require them to participate in 25 hours of community service outside of the classroom at an organization's site. Observations recorded in field journals will provide students with the data from which they will analyze and reach sociological generalizations. Students complete an organizational analysis of their workplace by interpreting ethnographic data gathered through participant observation. Work-site placement is arranged through the Volunteer and Service-Learning Center. CSU

### **SOCI 207 SOCIAL PROBLEMS**

3 units

3 hours lecture weekly

Application of sociological principles to the identification and analysis of selected social problems in contemporary American society, relative to such problems as crime and delinquency, mental illness, death and dying, alcoholism, drug addiction, poverty, inter-group conflict, aging, and ecology. (CAN: SOC 4) CSU:UC

### **SOCI 208 SOCIOLOGY OF DEATH AND DYING**

3 units

3 hours lecture weekly

The study of the cultural, social, and political meaning of death as it exists within the United States and abroad. Using the sociological perspective, this course examines the importance of death and its related processes as parts of socially constructed meanings recognized and practiced by societal members. The inevitability and consequences of death influence social interaction among groups, institutions, and nations and results in conflicting relationships based on moral, ethical, and fiscal concerns. CSU:UC

**SOCI 210 SOCIOLOGY OF DEVIANCE, CRIME AND SOCIAL CONTROL**

3 units

3 hours lecture weekly

This course provides a sociological explanation of deviance, crime, and social control in the United States. Through the examination of American society, specifically by identifying cultural norms, values, and beliefs, and with the use of cross-cultural comparisons, students will learn the basic theories, methods, and concepts used to understand deviant behavior. The goals of this course are to develop a sociological awareness among students and to recognize the social forces that influence deviant behavior and its relationship with groups, institutions, and society. CSU:UC

**SOCI 233 SOCIOLOGY OF AGING**

3 units

3 hours lecture weekly

This course examines the cultural, social, and political structures that define the aging process. The worldwide variation between "sociological age" and "chronological age" is explored to illustrate how culturally prescribed attitudes determine the value of growing old. Course discussion will focus on modern western society and the diminished status of the aged. CSU:UC

**SPANISH****SPAN 080A INTENSIVE ELEMENTARY SPANISH I**

2 units

*2 hours lecture weekly*

This course is intended for students with basic listening, speaking, reading and writing skills in Spanish. Designed for students with little or no previous experience in the Spanish language. Intensive practice in the expression and comprehension of spoken Spanish.

**SPAN 080B INTENSIVE ELEMENTARY SPANISH II**

2 units

2 hours lecture weekly

This course develops a working knowledge of reading and writing skills in Spanish. It is intended to review and further develop the grammar, vocabulary and conversation acquired in Spanish 080A.

**SPAN 082A INTENSIVE INTERMEDIATE SPANISH I**

2 units

2 hours lecture weekly

This intensive course especially builds oral proficiency while presenting a balanced-skills approach to listening, speaking, reading, and writing.

**SPAN 082B INTENSIVE ELEMENTARY SPANISH II**

2 units

2 hours lecture weekly

This intensive course especially builds oral proficiency while presenting a balanced-skills approach to listening, speaking, reading, and writing. A continuation of Spanish 082A.

**SPAN 084A INTENSIVE ADVANCED SPANISH I**

2 units

2 hours lecture weekly

This course emphasizes oral proficiency while strengthening reading, and writing skills in a cultural context. A continuation of Spanish 082B.

**SPAN 101 ELEMENTARY SPANISH I**

4 units

5 hours lecture, 1 hour laboratory weekly

Practice in understanding, speaking, reading, and writing simple Spanish using a basic vocabulary and stressing idiomatic expressions. Intensive drill in pronunciation and the fundamentals of Spanish. This course corresponds to the first two years of high school Spanish. CSU:UC

**SPAN 101A SPANISH FOR SPANISH SPEAKERS I**

4 units

4 hours lecture weekly

*Note: No credit is given to students who have taken Spanish 101.*

This course will focus on developing and strengthening reading and writing skills. Emphasis is placed on spelling, punctuation, lexical variations, idioms and cultural components of the Spanish language. This class is designed for students who communicate in Spanish and/or have near-native fluency. This might include students who have acquired the language outside of the classroom setting. CSU:UC

## **THEATRE**

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### **SPAN 102 ELEMENTARY SPANISH II**

4 units

5 hours lecture, 1 hour laboratory weekly

*Prerequisite: Spanish 101 or two years of high-school Spanish or equivalent*

Review and further study of the fundamentals of the Spanish language with emphasis upon correct pronunciation and mastery of a practical vocabulary. Practice in oral and written expression. This course corresponds to the third year of high-school Spanish. CSU:UC

### **SPAN 102A SPANISH FOR SPANISH SPEAKERS II**

4 units

4 hours lecture weekly

*Note: No credit is given to students who have taken Spanish 102.*

A continuation of Spanish 101A. This course will focus on developing reading and writing skills. This class is designed for students who communicate in Spanish and/or have near-native fluency. This might include students who have acquired the language outside of the classroom setting. CSU:UC

### **SPAN 150 CONVERSATIONAL SPANISH**

3 units, may be taken two times

3 hours lecture weekly

*Prerequisite: One year of college Spanish or three years of high-school Spanish or equivalent*

A course of intensive practice in the expression and comprehension of spoken Spanish. The verbal active method used stresses oral communication. CSU:UC

### **SPAN 160 SPANISH FOR PUBLIC SAFETY**

#### **PERSONNEL**

3 units, may be taken four times

3 hours lecture weekly

*Enrollment is recommended for students majoring or working in the fields of fire science, police science, nursing, emergency medical personnel and related vocational areas.*

A specialized course of basic Spanish for public-safety personnel with emphasis on communication with the Spanish-speaking community. Main emphasis will be on acquiring a practical, working knowledge of Spanish with a vocabulary suitable to the student's area of specialization. Extensive use of audio-visual materials and the language laboratory. CSU

### **SPAN 201 INTERMEDIATE SPANISH I**

4 units

5 hours lecture, 1 hour laboratory weekly

*Prerequisite: Spanish 102 or three years of high-school Spanish or equivalent*

Comprehensive review of Spanish grammar with special emphasis on practical and idiomatic usage. Readings of short stories in Spanish by famous Latin American authors. Discussions and written and oral reports in Spanish based upon reading selections. This course corresponds to the fourth year of high-school Spanish. Offered fall semesters only. CSU:UC

### **SPAN 202 INTERMEDIATE SPANISH II**

4 units

5 hours lecture, 1 hour laboratory weekly

*Prerequisite: Spanish 201 or four years of high-school Spanish or equivalent*

Complete review of Spanish grammar. Oral discussion and written composition dealing with assigned readings of current Spanish prose. Intensive reading of outstanding Spanish and Latin American literature. Offered spring semesters only. CSU:UC

### **SPAN 240 LATIN AMERICAN LITERATURE**

3 units

3 hours lecture weekly

A survey course of the literature of Latin America from the time of the discovery to the 20th century. Readings and lectures will be entirely in English. This course is especially recommended for Spanish majors and students enrolled in History 240. CSU:UC

## **THEATRE**

### **THEATR 090L OPEN THEATRE LAB**

0.5 - 2 units, may be taken four times

1.5 - 3 hours lab weekly

Not degree applicable

An open lab for currently enrolled theatre students who wish to rehearse and prepare for performance in a theatrical environment. Provides access to additional coaching and instruction.

### **THEATR 110 UNDERSTANDING THEATRE**

3 units

3 hours lecture weekly

A critical analysis of theatre from the audience perspective. Examination of the functions of producer, architect, playwright, director, actor, designer, and critic through lecture and reading of selected plays. CSU:UC

**THEATR 126 IMPROVISATION**

2 units, may be taken four times

1 hour lecture, 3 hours lab weekly

An introduction to the principles and practice of theatrical improvisation. This course focuses on the development of spontaneity, physicalization and interaction as they pertain to the creation of improvised character and ensemble performance techniques. Exercises, games and improvised situational scenes are utilized to create an understanding of improvisation as a means to achieving enhanced performance skills. CSU:UC

**THEATR 140 ACTING FUNDAMENTALS**

3 hours lecture

Introduction to the basic principles and techniques of acting as an artistic discipline. Analysis of plot, character and language. Development of voice and movement skills. Provides theory and process through the use of games, exercises, performances of scenes, monologues, readings, and lecture. (CAN: DRAM 8) CSU:UC

**THEATR 141 SCENE PERFORMANCE**

3 units, may be taken four times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Theatre 140*

A refinement of the art, craft and discipline of acting, designed to further develop voice, movement and the ability to analyze dramatic text and characters through exercises, improvisations and extended scene work. CSU:UC

**THEATR 144 ACTING FOR THE CAMERA (Same as RTVF-144)**

3 units, May be taken four times

2 hours lecture, 3 hours lab weekly

*Prerequisite: Successful completion of Theatre 126 or 140 or 141*

The practice and study of the fundamental techniques required in acting before the camera in contrast to the variance from stage work. Students will address areas of voice and movement for the camera; blocking; memorization and audition techniques including the preparation and presentation of headshots and resumés. CSU:UC

**THEATR 175 INTRODUCTION TO STAGE DIRECTING**

3 units, may be taken four times

3 hours lecture weekly

*Prerequisite: Successful completion of Theatre 110*

An introduction to the fundamental techniques of stage direction including text analysis, styles and genres, stage composition, blocking, working with actors, and designers. Incorporating study of the works of the great directors, students will create a directorial vision and means of working and apply them during in-class scene work. CSU:UC

**THEATR 190 THEATRE PRODUCTION**

1-4 units, may be taken four times

3-12 hours lab weekly

*Note: May be repeated four times for up to 12 THEATR units for credit.*

Provides study and laboratory exploration of all aspects of theatre production involving actors, technician and manager, and their contributions to the total aesthetic effect of the dramatic production before a public audience. CSU:UC

**THEATR 192 THEATRE FOR YOUNG AUDIENCES**

2-3 units, may be taken four times

1 hour lecture, 3-6 hours lab weekly

*Prerequisite: Audition; consent of instructor.*

Audition, rehearsal, staging and live performance of theatrical play scripts suitably targeted for audiences composed of children from the ages of 6 to 14. CSU

**THEATR 194 READER'S THEATRE WORKSHOP**

2-3 units, may be taken four times

1 hour lecture, 3-6 hours lab weekly

Techniques and practices of adapting prose material into theatrical performance. Prose material selected will be analyzed, scripted, cast, staged and performed before a live audience. CSU:UC

**THEATR 220 THEATRE HISTORY I: THE LIVING THEATRE**

3 units

3 hours lecture weekly

A survey of theatre as a product or reflection of its time. Examination and analysis of the effects of major historical epochs to the eighteenth century on audience, playwright, actor, director, and technician as they have evolved. Readings of representative plays and attendance at performances. CSU:UC

## WELDING

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### THEATR 221 THEATRE HISTORY II: 18TH CENTURY THROUGH CONTEMPORARY

3 units

3 hours lecture weekly

A study of theatre as a product and reflection of its time from the late eighteenth century to the present.

Examination and analysis of the effect of the audiences on playwright, actor, director and setting. Readings of representative plays. CSU:UC

### THEATR 230 INTRODUCTION TO PLAYWRITING (Same as ENGL-107)

3 units

3 hours lecture weekly

Introduction to playwriting through discussion and analysis of structure, development of character, writing dialogue, and composition of a two act play. CSU

### THEATR 240 ACTING SHAKESPEARE

3 units, may be taken three times

3 hours lecture, 2 hours lab weekly

*Prerequisite: Theatre 140*

An exploration of Shakespeare's plays and poetry through research, exercises, monologues and scene study. Introduction to the process and technique of analyzing play scripts and poetry while establishing a performance discipline. Includes textual analysis, historical research, scansion, imagery, vocal technique, period movement, song and dance. CSU:UC

### THEATR 241 MOVEMENT FOR THE PERFORMER

3 units, May be taken three times

3 hours lecture weekly

Develops the performer's instrument as it pertains to the body through awareness, relaxation, flexibility, and responsiveness in order to communicate openly and effectively. Includes movement as a key to character development and as an aid to understanding the complex relationship between the actor, character, and text. CSU

### THEATR 242 VOICE FOR THE PERFORMER

3 units, may be taken three times

3 hours lecture weekly

An introduction to the fundamentals of vocal production for the performer. Develops the performer's instrument as it pertains to the voice by eliminating negative habits and tension and improving vocal support, tonal production, vocal quality, and articulation. Explores voice as an aid in understanding the complex relationship between the actor, the character, and the text. CSU

## WELDING

### WELD 090 WELDING CERTIFICATION PREPARATION WORKSHOP

0.5 unit

9 hours lecture weekly

Designed to meet the needs of the industrial community as they are identified. Emphasis is on welding and welding-certification processes.

### WELD 100 INTRODUCTION TO OXY-ACETYLENE WELDING

2 units, may be taken four times

1 hour lecture, 3 hours laboratory weekly

Provides the beginning student with a solid foundation in oxyacetylene welding, arc welding, welding techniques, brazing, and flame-cutting on ferrous and non-ferrous metals. Includes basic weld-joint design, expansion, contraction, and residual stress in welding of metals. CSU

### WELD 101 INTRODUCTION TO ARC WELDING

2 units, may be taken four times

1 hour lecture, 3 hours laboratory weekly

*Prerequisite: Welding 100*

An extension of Welding 100 with an emphasis on developing basic skills acquired in Welding 100. This course will include vertical and overhead oxyacetylene and arc welding. CSU

### WELD 102 INTRODUCTION TO TUNGSTEN ARC AND GAS METAL ARC WELDING

2 units, may be taken four times

1 hour lecture, 3 hours laboratory weekly

Provides students with a solid foundation in gas tungsten arc welding (GTAW) and gas metal arc welding (GMAW). Includes basic weld-joint design, expansion, contraction, and residual stress in welding of metals. Students are encouraged to earn weld certifications that can lead to employment opportunities in aerospace, entertainment, nuclear, and automotive industries. Job placement is available. CSU

### WELD 103 METAL SCULPTURING

2.0 units, may be taken three times

1 hour lecture, 3 hours laboratory weekly

Provides students with a basic foundation in torch soldering, oxyacetylene welding, and shielded metal arc welding. Includes proper safety procedures in the use of shop tools and equipment. Demonstration of methods of proper cutting, forming and shaping of metals. Also cov-

ers basic weld-joint design, expansion, contraction, and residual stress in welding of ferrous and non-ferrous metals. Students learn to sketch, fabricate, and assemble projects relative to metal/sculpture. CSU

**WELD 120 INDUSTRIAL WELDING I**

5 units, may be taken four times

3 hours lecture, 6 hours laboratory weekly

A trade-technical course offering related theory and vocational skills in oxyacetylene, shielded-metallic arc, TIG, and MIG welding. Also included are related mathematics, theory, labor management and organization, safety and fire control, shop metallurgy, testing and welding design. CSU

**WELD 122 INDUSTRIAL WELDING II**

5 units, may be taken four times

3 hours lecture, 6 hours laboratory weekly

*Prerequisite: Welding 120*

A continuation of Welding 120. Enables the student to further develop the required manual/manipulative skills required in oxyacetylene and arc welding. CSU

**WELD 124 INDUSTRIAL WELDING III**

5 units, may be taken four times

9 hours weekly, including laboratory

*Prerequisite: Welding 122*

Specialized instruction in welding techniques used in industry, including TIG and MIG welding along with building proficiency in the shielded metallic arc and oxyacetylene processes. Designed for certification. CSU

**WELD 125 INDUSTRIAL WELDING IV**

1 unit, may be taken four times

3 laboratory hours weekly

*Prerequisite: Current enrollment in or completion of Welding 124*

Provides extended lab hours for continuing students to develop skills necessary to pass welding certification. May be repeated for a total of four units. Offered on a credit/no-credit basis only. CSU 130

**WELD 130 WELDING METALLURGY**

3 units, may be taken four times

3 hours laboratory weekly

*Prerequisite: Welding 100 and 101 or Welding 120.*

*(High school basic chemistry recommended)*

Basic metallurgy as applied to welding, metal structures, and strength of materials. Weldability of metals, heat treatment, weld procedures, welding stresses and con-

trol. Physical and mechanical properties, selection, identification and use of steel, cast iron, stainless steel, nonferrous metals and alloys. CSU

**WELD 140 WELDING INSPECTION**

3 units, may be taken four times

3 hours lecture weekly

*Prerequisite: Welding 120 or equivalent.*

Welding inspection procedures and techniques are studied and demonstrated to enable those with the necessary work experience to qualify for L.A. City, International Conference of Building Officials (I.C.B.O.) and American Welding Society-certified welding inspector employment. CSU

**WELD 150 WELDING TECHNOLOGY 1**

13 units (open-entry/open-exit) 5 hours lecture 25 hours laboratory weekly, may be taken four times

Designed to produce trained, proficient welders.

Emphasis on certification, shielded metal arc, MIG, TIG, and flux-cored arc on steel, stainless steel, and aluminum alloys. Equivalent to the four night courses, Industrial Welding I, II, III, and IV. May be repeated for a total of 52 units. CSU

**WELD 155 GTAW AND ORBITAL WELDING**

4 units, may be taken four times

2 hours lecture, 4 hours laboratory weekly

*Prerequisite: Welding 150, 120 or one year in the industry*

Designed to produce trained, proficient welders.

Emphasis on certification, shielded metal arc, MIG, TIG, and flux-cored arc on steel, stainless steel, and aluminum alloys. Equivalent to the four night courses, Industrial Welding I, II, III, and IV. May be repeated for a total of 52 units. CSU