

## ART

### ART 100 ART OF THE WESTERN WORLD

*Telecourse: Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* "Art of the Western World" traces the Western tradition in the visual arts from ancient Greece to the present day. Chronologically introducing the societies, values, and ideals that gave birth to Western Art, it explores the connection between great works and the environment that stimulated their creation. Not intended for Art majors. Transfer: CSU: C1.

### ART 101 ANCIENT, CLASSICAL AND MEDIEVAL ART HISTORY (CAN ART 2)

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description:* Survey of the historical development of the visual arts from Prehistory to the early Middle Ages, with an emphasis on architecture and sculpture. Themes include the inception of methods and techniques of art, the evolution of architectural principles, how religious philosophies and social and political systems are reflected in art, and the emergence of humanism. Transfer: CSU: C1, UC. (IGETC: 3A)

### ART 102 LATE MEDIEVAL, RENAISSANCE AND BAROQUE ART HISTORY

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description:* Survey of the historical development of the visual arts from the late Middle Ages to the 17th century. Themes include the rise of Renaissance humanism, comparison of the emergence of important art centers in Italy and Flanders, patronage, the role of the artist in society, development of new techniques, and the impact of the Protestant Reformation and Catholic Counter-Reformation on the form and content of art. Transfer: CSU: C1, UC. (IGETC: 3A)

### ART 103 EIGHTEENTH AND NINETEENTH CENTURY ART HISTORY

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description:* Survey of the historical development of the visual arts from the 1700 to 1900, with an emphasis on the Enlightenment, the French Revolution, the industrial, political, and technological revolutions of the 19th century, and their influence on art. Focus is on Romanticism, the rise of the avant-garde, the importance of Paris as a center of art, the emergence of Impressionism, and the art of England and America. Transfer: CSU: C1, UC. (IGETC: 3A)

### ART 104 HISTORY OF MODERN ART

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Survey of major styles in western art from 1888 to 1999, Post-Impressionism to Post-Modernism. How art forms reflect the complexity and diversity of the modern world. Topics include the changing role of the

artist in society, the impact of world events and technology on the arts, and art criticism. Transfer: CSU: C1, UC. (IGETC: 3A)

### ART 105 ART OF ASIA AND THE NEAR EAST

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description:* An introduction to some of the major monuments and themes of the visual arts of Asia and the Near East, this course will explore the connection between great works of art and the societies, values and ideals that stimulated their creation. Transfer: CSU.

### ART 201 FORM AND COMPOSITION I (Through Fall 2008)

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* The fundamentals of representational composition, with emphasis on the individual and combined use of line, mass, shape, color (value only), and space organization. Students complete both drawing and painting projects. Transfer: CSU: C1, UC.

### ART 201 FORM AND COMPOSITION I (Effective Spring 2009)

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* The fundamentals of representation and pictorial composition with emphasis on the use of line, mass, shape, value, and space organization. Students complete both drawing and painting projects. Field trip required. Transfer: CSU: C1, UC.

### ART 202 FORM AND COMPOSITION II

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201. Description:* An intermediate course in composition, ART 202 emphasizes the creative use of subject matter and the development of compositional versatility. Diverse media is used. Transfer: CSU, UC.

### ART 204 DRAWING I (CAN ART 8) (Through Fall 2008)

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* This fundamental course in drawing emphasizes perception development through specific drawing exercises to develop an orderly approach, a disciplined perception, and an increased attention span. Dry media, pencil, charcoal and Conte crayon are used. Transfer: CSU: C1, UC.

### ART 204 DRAWING I (CAN ART 8) (Effective Spring 2009)

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* A basic course in drawing emphasizing line, shape, space and value. Students learn perceptual skills while using a variety of media. Transfer: CSU: C1, UC.

### ART 205 DRAWING II

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 204. Description:* Using mixed media, ART 205 continues development of student's visual perception and technique, emphasizing

direct response to visual stimuli and personal interpretation of subject matter. Transfer: CSU, UC.

#### **ART 206 FIGURE DRAWING AND PORTRAITURE**

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Recommended: Open Curriculum; Prerequisite(s): None.* **Description:** Drawing from the live model emphasizing underlying structure of the human body and the expressive use of drawing media. Portraiture is covered as it relates to individual characterization and expression. ART 201 or 204 are recommended. May be repeated for credit up to three times. Transfer: CSU, UC.

#### **ART 207 LIFE DRAWING (Through Fall 2008)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201 or 204.* **Description:** This course is a study of the human figure through the application of various drawing concepts. Perceptual sensitivity and compositional exploitation of the subject are emphasized. Transfer: CSU, UC.

#### **ART 207 LIFE DRAWING (Effective Spring 2009)**

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201 or 204.* **Description:** Drawing the human figure from life. Basic concepts and skills include shape, volume, plane, contour, gesture, value/shading, composition and the study of structural anatomy. Various media will be used including charcoal and graphite. May be repeated for credit up to three times. Transfer: CSU, UC.

#### **ART 210 DRAWING FOR ANIMATION**

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): ART 201 or 204.* **Description:** Techniques and principles of drawing for animation including 2pt perspective, gesture, basic structural human anatomy, and sequential drawing. Emphasis on the use of line to convey form and action. Transfer: CSU.

#### **ART 214 COLOR**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None.* **Description:** Consideration of color, theory, and practice. Relationship of color and form as applied to contemporary painting and design. Transfer: CSU: C1, UC.

#### **ART 221 PAINTING I (CAN ART 10) (Through Fall 2008)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201 or 204.* **Description:** This is a structured course in painting with projects emphasizing continuity of student experience, orderly approach, and increased sophistication in means and mode of expression. Field trips may be required. Transfer: CSU, UC.

#### **ART 221 PAINTING I (CAN ART 10) (Effective Spring 2009)**

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None.* **Description:** Introductory painting course in which students learn basic oil painting techniques. Emphasis is on handling of the medium, use of color, variety of approaches, and representation. ART 201 or 204 are recommended. Transfer: CSU, UC.

#### **ART 222 PAINTING II**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 221.* **Description:** Student awareness to optical potential of the painted surface is developed. Acrylics, oil paint or other media are employed to encourage individual expression. Field trips may be required. Transfer: CSU, UC.

#### **ART 229 LANDSCAPE PAINTING**

*Units (Grade Option) 2; Class Hours: Minimum of 24 lecture/24 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201 or 204 or equivalent.* **Description:** This is a studio course in painting, with emphasis on working outdoors directly from nature. Students study the basics of composition, color, light, and manipulation of space as pertains to the landscape. May be repeated for credit up to three times. Transfer: CSU, UC.

#### **ART 231 WATERCOLOR I**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 201 or 204.* **Description:** Study of transparent and opaque watercolor technique applied to landscape, figure, and still life. Both basic and experimental techniques are emphasized. Field trips may be required. Transfer: CSU, UC.

#### **ART 232 WATERCOLOR II**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 231.* **Description:** Advanced study of transparent and opaque watercolor techniques applied to landscape, figure and still life. Both basic and experimental techniques are emphasized. Field trips may be required. Transfer: CSU, UC.

#### **ART 301 DESIGN**

*Units (Grade Option) 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 420, and ENGL 100; Prerequisite(s): None.* **Description:** An introductory studio course in the fundamentals of art and design. Students use a variety of art media in creating work that explores the use of the basic elements of two dimensional art including line, shape, value, color, space, texture, and pattern. Transfer: CSU: C1, UC.

**ART 303 COLOR DESIGN**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 214 or 301.* **Description:** This course is designed for the student who wishes to deal with the basic concepts of color and/or design beyond the primary level in a series of personalized projects. ART 303 may replace ART 222 for students emphasizing applied design. May be repeated for credit up to three times. Transfer: CSU, UC.

**ART 304 GALLERY DESIGN AND MANAGEMENT**

*Units 2; Class Hours: Minimum of 24 lecture/24 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): None.* **Description:** Introduces the practical skills and theoretical background necessary for working in museums and galleries. Students plan, curate, design, install, maintain, and publicize exhibits on campus. Topics include: selection of artworks, writing of exhibition text, design and preparation of exhibits (matting and framing, props, installation and lighting), publicity, gallery security and maintenance, and care of collections are covered as will criticism, and historical & social context of museums & galleries. Students attend field trips to galleries, museums, and art studios in the Bay Area and create virtual exhibits. Transfer: CSU.

**ART 351 BASIC BLACK AND WHITE PHOTOGRAPHY (CAN ART 18)**

*Units 3; Class Hours: Minimum of 32 lecture/32 lab/16 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): ART 356 or equivalent.* **Description:** An introductory course in black and white photography. Ownership of a 35mm camera and basic understanding of its controls are a prerequisite. Students learn to develop and print their own black and white film. Students must supply their own 35mm camera, film, and paper. Transfer: CSU, UC.

**ASTRONOMY****ASTR 100 INTRODUCTION TO ASTRONOMY**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): None.* **Description:** Survey of modern astronomy, including the study of what mankind knows about the universe and our place in it. Emphasis on how mankind has learned about the planets, stars, and galaxies and their structure and formation. Quasars, pulsars, black holes, and the beginning and the end of the universe are discussed. Transfer: CSU: B1, UC. (IGETC: 5A)

**ASTR 101 ASTRONOMY LABORATORY**

*Units (Grade Option) 1; Class Hours: Minimum of 48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 120 or 122; Prerequisite(s): Completion of or concurrent enrollment in ASTR 100.* **Description:** Introduces techniques of investigation and problem solving in astronomy as a means to understanding man's place in the universe. The identification of constellations, planets, stars and features of the moon; the use of a telescope to locate and identify double stars, galaxies, clusters, and nebulae; the use of astronomical computer software to help locate

and demonstrate the movement of astronomical objects is covered. Transfer: CSU: B1, B3, UC. (IGETC: 5A\*)

**ASTR 110 INTRODUCTION TO COSMOLOGY**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): None.* **Description:** Survey of modern cosmology including the origin and nature of the universe and mankind's place in it. Topics include cosmological models, theories of structure formation in the universe, origin and evolution of galaxies, formation of stars and solar systems, quasars, black holes, dark matter, vacuum energy and the latest theories on the origin and ultimate fate of the universe, latest discoveries in observational cosmology and extra-terrestrial life. Transfer: CSU: B1, UC. (IGETC: 5A)

**BIOLOGICAL SCIENCES****BIOL 100 INTRODUCTION TO THE LIFE SCIENCES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Study of the nature of the physical and chemical aspects of life, the concepts of cellular biology, life as it exists on earth today, plant and animal interrelationships and interdependencies, and the role of humans in the world of living things. Transfer: CSU: B2, UC\*. (IGETC: 5B)

**BIOL 103 NATIVE PLANTS AND WILDFLOWERS**

*Units (Grade Option) 3; Class Hours: Minimum of 32 lecture/48 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Study of the native ferns, trees, shrubs and wild flowers of San Mateo County. Mainly fieldwork, designed to allow the student to acquire skills in collection and identification of the flora of any region. Transfer: CSU: B2, B3.

**BIOL 110 PRINCIPLES OF BIOLOGY**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** This introductory course addresses the biological perspective and scientific method, the chemical and cellular bases of life, cellular transport and energetics, reproduction, heredity, classification of organisms and their evolution, plant and animal physiology, and ecology. Transfer: CSU: B2, B3, UC. (IGETC: 5B\*)

**BIOL 130 HUMAN BIOLOGY**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Study of biological principles using the human body as a model. Topics are structure and function of major organ systems and some common disorders. Heredity, evolution, and human ecological roles are also discussed. Transfer: CSU: B2, UC. (IGETC: 5B)

**BIOL 225 BIOLOGY OF ORGANISMS  
(CAN BIOL SEQ A = BIOL 225 + 230)**

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): MATH 120 or 123, or appropriate score on District math placement test and other measures as appropriate.*

**Description:** Designed for biology majors, this course focuses on principles of evolutionary theory, classification of organisms, and their phylogenetic relationships. Emphasis is on physiological functions and structures of representatives organisms. Topics include development and behavioral biology, ecology, and population genetics. Transfer: CSU: B2, B3, UC.

**BIOL 230 INTRODUCTION TO CELL BIOLOGY  
(CAN BIOL SEQ A = BIOL 225 + 230)**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 192 or 210.*

**Description:** This course is designed for biology majors and provides an introduction to life functions at the cellular level. The course covers the cellular level of structure and the macromolecular architecture of the cell, the functional processes of cellular energetics, chemical regulation, photochemical activities, molecular genetics, recombinant DNA, and genetic engineering. Transfer: CSU: B2, B3, UC. (IGETC: 5B\*)

**BIOL 240 GENERAL MICROBIOLOGY (CAN BIOL 14)**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CHEM 192, 210 or 410 or equivalent, and either BIOL 110 or 130 or equivalent.*

**Description:** Introduction to microbial life in nature, the molecular and biochemical characteristics of microorganisms, and the techniques and procedures used by microbiologists. Emphasis is placed on those microbes that play an important role in human daily life, especially those that cause disease. Laboratory emphasizes isolation, cultivation and identification of bacteria. Transfer: CSU: B2, B3, UC. (IGETC: 5B\*)

**BIOL 250 HUMAN ANATOMY  
(CAN BIOL 10) (CAN BIOL SEQ B = BIOL 250 + 260)**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): BIOL 100, 110 or 130.*

**Description:** Students learn the gross and microscopic structure of the human body through laboratory study of anatomy models and prosected human cadavers. Intended for students in allied health areas such as nursing, radiologic technology, physical therapy, dental hygiene and physical education. This course is an elective for pre-dental, pre-medical and pre-veterinary students. Transfer: CSU: B2, B3, UC. (IGETC: 5B\*)

**BIOL 260 HUMAN PHYSIOLOGY  
(CAN BIOL 12) (CAN BIOL SEQ B = BIOL 250 + 260)**

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): BIOL 110 or 130, and CHEM 192 or 410.*

**Description:** Students learn through lecture and

laboratory experiences how the organ systems function in maintaining homeostasis, regulating change and growth processes in humans. Intended for students in allied health areas such as nursing, radiologic technology and physical education and for those in related fields such as psychology. This course is an elective for pre-dental and pre-medical students. Transfer: CSU: B2, B3, UC. (IGETC: 5B\*)

**BIOL 310 NUTRITION (CAN FCS 2)**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): None.*

**Description:** Comprehensive introduction to scientific principles of nutrition and the interrelationships of metabolism; nutrient functions, structure and food sources; health consequences of nutrient excesses, deficiencies and diet related chronic diseases. Emphasis is placed on evaluating the nutrient content of foods, applying information to personal diet, and using reference tools. Transfer: CSU: E1, UC.

## BUSINESS

(See also courses in Management and Real Estate)

**BUS. 100 SURVEY OF BUSINESS**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.*

**Description:** Introduction to American business practices in the global environment including such topics as economics, ethics, entrepreneurship, organizational development, management, customer/enterprise relations, information management, accounting, securities, and financial institutions. Transfer: CSU, UC.

**BUS. 101 HUMAN RELATIONS IN BUSINESS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.*

**Description:** Broad overview of the basic psychological principles operating in family, social, and business relationships. Other topics examined are perception, self-image, self-management, prejudice, creativity, and resistance to change. Recommended for all business majors. (Qualifies as CEU credits for nurses.) Transfer: CSU.

**BUS. 103 INTRODUCTION TO BUSINESS INFORMATION SYSTEMS**

*Units 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.*

**Description:** Overview of business computer systems which include hardware, software, MIS, networks, the use of the Internet, and security systems used in business are compared and analyzed. Introductory units on the basics of the computer and software applications that include spreadsheets, word processing, presentation graphics, and database management. Security systems used in business are compared and analyzed. This course is designed to meet the requirements of the business transfer major. Transfer: CSU, UC.

**BUS. 108 BUSINESS WRITING AND PRESENTATION METHODS**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 430. Description:* Overview of business writing principles used for letters, memorandums, and reports. Other topics include writing e-mail notes, designing business presentations, and using computer word processing and presentation software packages. Transfer: CSU.

**BUS. 110 BUSINESS ARITHMETIC**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Review of basic arithmetic skills—addition, subtraction, multiplication, division, fractions, and decimals. Problem-solving skills are developed in the use of basic arithmetic operations applied to business problems. Units do not apply toward AA/AS degree. Open entry/Open Exit. May be repeated for credit up to 3 units.

**BUS. 115 BUSINESS MATHEMATICS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): BUS. 110. Description:* This is an introductory course in business mathematics. Students perform calculations and analysis involving taxes, discounts, negotiable instruments, periodic payments, compensation methods, inventory pricing, depreciation, and present value. Transfer: CSU.

**BUS. 128 CORPORATE MEETING AND EVENT PLANNING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course covers skills needed to plan, cost and manage corporate group meetings, conference and special events. The course includes: setting goals and objectives, setting meeting timelines, site selection, negotiating contracts, budgets and financial management, liability and risk management, developing a program that works, ordering food and beverage, selecting speakers and audio-visual needs. Transfer: CSU.

**BUS. 132 STOCK AND BOND INVESTING**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course is an introduction to financial investing. Topics covered include goal setting, risk evaluation, asset allocation, the basics of investing in the stock and bond markets (both domestic and foreign), mutual funds, money managers, retirement plans, and how taxes impact investment decisions. Transfer: CSU.

**BUS. 138 MORTGAGE LENDING**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of procedures and requirements used by financial institutions for mortgage lending. Topics covered include single-family home ownership, lending guidelines, deeds and titles, loan insurance, and refinancing. Transfer: CSU.

**BUS. 150 SMALL BUSINESS MANAGEMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): BUS. 100 or previous business experience. Description:* Introduces the methods used for starting and managing a small business. Analysis and comparison of opportunities and hazards of operating a small business. Transfer: CSU.

**BUS. 170 SALESMANSHIP FUNDAMENTALS**

*Telecourse: Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The role of advertising in our economic life, with emphasis on advertising methods and media. Transfer: CSU.

**BUS. 180 MARKETING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Sales and marketing principles used by modern business, including evaluation and methodologies for implementation of these principles for promoting the sales of consumer goods and services. Strategies of sales and marketing procedures used to conduct multi-phased sales and marketing campaigns for large and small business are covered also. Transfer: CSU.

**BUS. 184 MERCHANDISING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of the structure of the retail industry. Other topics include fashion versus basic goods, nationally distributed products, products for exclusive distribution, and the wholesale marketplace. Transfer: CSU.

**BUS. 186 RETAIL MANAGEMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduction to retail management including inventory performance and financial aspects of retail, planning, purchasing, and pricing retail inventories, reports used to evaluate sales and inventory performance, and fundamental store designs. Transfer: CSU.

**BUS. 201 BUSINESS LAW (CAN BUS 12)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduction to the laws applicable to business institutions and their operation. Topics also covered are sources of law, agencies for enforcement and court procedures, California law applicable to contracts and agency relationships, crimes, and torts. Transfer: CSU, UC.

**BUS. 211 ETHICS IN BUSINESS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Ethics in the business world including the social contract, the relationship between ethics and laws, corporations and social responsibilities, bribery, environmental issues, and cultural differences in business practice. Transfer: CSU.

**BUS. 395 GETTING STARTED IN BUSINESS**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Designed to assist in starting a new business or growing a current business faster, in evaluating a business idea, and in organizing a business by studying important business principles developed by international business consultants. Transfer: CSU.

**BUS. 396 DEVELOPING A BUSINESS PLAN**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn how to design, develop, and implement the most important tool for a successful business—the business plan. Transfer: CSU.

**BUS. 397 DEVELOPING TOOLS TO CREATE A MARKETING PLAN**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn about marketing and advertising tools, including the Internet, and get ready to start your own business; talk to entrepreneurs, identify your target customers and position your company for success. Transfer: CSU.

**BUS. 398 SMALL BUSINESS RESOURCE LAB**

*Units (Credit/No Credit) 0.5-3; Class Hours: Minimum of 24-144 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn to start and operate a small business successfully from consulting sessions located at the Small Business Resource Center. Work at your own pace to evaluate your business idea, develop a business plan, marketing plan, financial plan, and much more. Open entry/Open Exit. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 399 SMALL BUSINESS DEVELOPMENT CENTER TRAINING**

*Units (Grade Option) 1-5; Class Hours: Minimum of 16 lecture hour/semester per unit; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Describes the skills needed to become successful business owners. The following topics are covered also: 1) laws governing small businesses, 2) managing a business, 3) regulations and permits for a business, 4) selecting business site(s), and 5) using Quicken software to manage the finances of a business. May be repeated for credit up to 5 units.

**BUS. 419 ON-SITE MANAGEMENT**

*Units 1; Class Hours: Minimum of 16 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn how to effectively manage the multiple priorities and needs of a group during a corporate meeting or incentive award program. Students learn how to set up registration, how to manage last-minute budget busting costs, skills for effective time management, crisis management, problem solving, and managing difficult attendees. Transfer: CSU.

## CAREER AND PERSONAL DEVELOPMENT

**CRER 112 CAREER ADVANTAGE**

*Telecourse: Units (Credit/No Credit) 2; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* For those who are undecided about career goals or are changing their career direction. Stresses the significance of clearly defined values and the development of strategies and goals for life work. Transfer: CSU.

**CRER 137 LIFE AND CAREER PLANNING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Personal and career inventories are evaluated. Career options are researched and job search techniques are developed. Course stresses the significance of clearly defined values and the development of strategies and goals for life. Transfer: CSU: E1.

**CRER 140 PEER COUNSELING**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* An orientation and training course to develop personal counseling skills which emphasize the experiential process of interpersonal communication as well as the theoretical explanation of the counseling process and behavior. Selected topics involving interpersonal relationships give students an opportunity to explore and communicate feelings while learning principles of personal counseling. May be repeated for credit up to 3 units. Transfer: CSU.

**CRER 300 INTRODUCTION TO SCHOLARSHIPS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduces students to scholarship and financial aid opportunities at the local, state, and national levels. Learn research techniques and utilize publications, software, internet sites, and community resources. Emphasis on development of a personal organizational system to manage the process of the scholarship search. Identify scholarships that meet personal criteria. Personal statements, interview techniques, resumes, organization and time management skills are also covered. Transfer: CSU.

**CRER 401 COLLEGE SUCCESS**

*Units (Grade Option) 0.5-1; Class Hours: Minimum of 8-16 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** In-depth information regarding college policies, procedures, educational requirements and college programs/support services. This course also assists students in assessing time management, setting goals and decision-making skills. May be repeated for credit up to 1 unit. Transfer: CSU, UC.

**CRER 407 EXPLORING CAREERS, MAJORS AND TRANSFER**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Engage in your own career development and become an active participant in planning your educational goals. Learn valuable resources and tools to help with career, major and transfer choices. Assess interests and skills, explore college majors, and research 4-year institutions. Transfer: CSU.

**CRER 410 COLLEGE AND CAREER AWARENESS**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None.* **Description:** Although the course is intended for students in special programs and emphasizes their special needs, all students are welcome to participate. The course deals more thoroughly with topics from CRER 401. Units do not apply toward AA/AS degree.

**CRER 430 CAREER ASSESSMENT**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 24 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Designed to help individuals define career alternatives. Vocational interest, skills, and values instruments are given and results interpreted. A minimum of 24 hours of "by arrangement" testing, research, and counseling are required. Transfer: CSU.

**CRER 650 SPECIAL INTEREST DISCUSSION GROUPS**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None.* **Description:** Any group of students with a common interest may meet under the leadership of a counselor to explore and evaluate personal values, goals, and expectations as they relate to this social and cultural environment. Units do not apply toward AA/AS degree.

## CHEMISTRY

**CHEM 100 SURVEY OF CHEMISTRY**

*Telecourse: Units 3; Class Hours: Minimum of 48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): MATH 111.* **Description:** Chemistry, the study of matter, is a study of organization, chaos and wonder. This is a general survey course of the chemical concepts and phenomena you encounter everyday. (This course is designed for non-science majors and is not open to students who have had or are taking CHEM 210.) Transfer: CSU: B1, UC\*. (IGETC: 5A)

**CHEM 112 CHEMISTRY IN ACTION**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): None.* **Description:** Introduces students to the theories, laws, concepts and language of chemistry as applied to explain chemical processes occurring in the environment and in the body. The laboratory component provides qualitative techniques for the manipulation of selected household chemicals as well as quantitative techniques for more rigorous chemical analyses. Transfer: CSU: B1, B3, UC\*. (IGETC: 5A\*)

**CHEM 192 ELEMENTARY CHEMISTRY**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MATH 110 or satisfactory score on District math placement test and other measures as appropriate that indicate proficiency in Elementary Algebra.* **Description:** Comprehensive introductory chemistry course covering basic concepts, theories and laws with emphasis on reasoning and problem solving skills. Topics include but are not limited to chemical nomenclature, stoichiometry, electron configuration, atomic orbitals, molecular geometry and bonding. The laboratory component of this course introduces students to both qualitative techniques and quantitative techniques appropriate for data collection, manipulation and analysis of a variety of chemical systems. Transfer: CSU, UC\*.

**CHEM 210 GENERAL CHEMISTRY I****(CAN CHEM 2) (CAN CHEM SEQ A = CHEM 210 + 220)**

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MATH 120 or 123, or satisfactory score on District math placement test and other measures as appropriate that indicate proficiency in Intermediate Algebra.* **Description:** This course is the first half of a two-semester sequence in general chemistry intended for students pursuing majors in physical sciences, biological sciences and engineering. Discussion of fundamental concepts, principles and laws that describe the chemistry of solids, liquids, gases and solutions including atomic and molecular structures, bonding, molecular geometry, stoichiometry and thermochemistry with emphasis on critical thinking and problem solving skills. CHEM 192 is recommended. Transfer: CSU: B1, B3, UC\*. (IGETC: 5A\*)

**CHEM 220 GENERAL CHEMISTRY II****(CAN CHEM 4) (CAN CHEM SEQ A = CHEM 210 + 220)**

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 210 or equivalent.* **Description:** This course is the second half of a two-semester sequence in general chemistry intended for students pursuing majors in physical sciences, biological sciences and engineering. Discussion of chemical kinetics, chemical equilibria, thermodynamics, electrochemistry, coordination chemistry, nuclear chemistry with emphasis on critical thinking and problem solving skills. Transfer: CSU: B1, B3, UC. (IGETC: 5A\*)

**CHEM 234 ORGANIC CHEMISTRY I**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 220 or equivalent. Description:* Introduction to the chemistry of hydrocarbons with emphasis on structure and reactivity of alkanes, alkenes, alkynes, alkyl halides, alcohols and ethers. Mechanistic considerations, stereochemistry and spectroscopy are an integral part of the course. Recommended to be taken concurrently with CHEM 237. Transfer: CSU: B1, UC. (IGETC: 5A)

**CHEM 235 ORGANIC CHEMISTRY II**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 234 and 237. Description:* This course is a continuation of CHEM 234. It introduces the chemistry of aromatic compounds, aldehydes, ketones, carboxylic acids, carbohydrates, lipids, amino acids and proteins with emphasis on synthesis and reaction mechanisms. Recommended to be taken concurrently with CHEM 238. Transfer: CSU: B1, UC. (IGETC: 5A)

**CHEM 237 ORGANIC CHEMISTRY LABORATORY I**

*Units 2; Class Hours: Minimum of 96 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 234. Description:* Organic chemistry laboratory designed to accompany CHEM 234. Introduction of the basic techniques of synthesis, separation and purification of organic compounds. Identification of main functional groups by spectroscopic techniques also introduced. Recommended to be taken concurrently with CHEM 234. Transfer: CSU: B1, B3, UC. (IGETC: 5A\*)

**CHEM 238 ORGANIC CHEMISTRY LABORATORY II**

*Units 2; Class Hours: Minimum of 96 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 235. Description:* Organic chemistry laboratory designed to accompany CHEM 235 by emphasizing techniques for the synthesis, isolation, purification and identification of organic compounds. Qualitative analysis of unknowns by preparation of derivatives and spectroscopic methods is an integral component of the course. Recommended to be taken concurrently with CHEM 235. Transfer: CSU: B1, B3, UC. (IGETC: 5A\*)

**CHEM 410 CHEMISTRY FOR HEALTH SCIENCES**

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MATH 110 or equivalent. Description:* A survey of basic concepts in general, organic and biological chemistry relevant to the allied health science fields including nursing, radiological technology, respiratory therapy, etc. Transfer: CSU: B1, B3.

**COMPUTER BUSINESS OFFICE TECHNOLOGY**

(Previously listed under Business/Office Technology)

**CBOT 415 BEGINNING COMPUTER KEYBOARDING**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course is an overview of correct keyboarding techniques using the alphabetic and numeric keys on the computer. Computer software is used to aid in developing a minimum of 20 words per minute. Transfer: CSU.

**CBOT 417 SKILL BUILDING**

*Units (Credit/No Credit) 1.5-3; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester per 1.5 units; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 415. Description:* This course provides individualized, self-paced instruction to improve accuracy and develop keyboarding (typing) speed. Diagnostic tests are given to assess skill levels. May be repeated for credit up to 3 units. Transfer: CSU.

**CBOT 430 COMPUTER APPLICATIONS, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduction to the use of PCs including the basic features of Windows, word processing, and presentation graphics using Microsoft Office. CBOT 415 is recommended. Transfer: CSU, UC\*.

**CBOT 431 COMPUTER APPLICATIONS, PART II**

*Units (Grade Option) 1.5; Class Hours: 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Students learn the basic features of spreadsheets, database applications, and methods of integration using Microsoft Office. CBOT 430 is recommended. Transfer: CSU, UC\*.

**CBOT 435 SPREADSHEETS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Students plan and build worksheets using formulas and functions to solve business problems. The course covers charting, using multiple worksheets, solver, data tables, using and analyzing list data, using What-If Analysis, Pivot Tables, scenario management and macros, and managing workbooks. Integration with other Windows applications included. Transfer: CSU.

**CBOT 436 DATABASE MANAGEMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The use of Microsoft Access to build databases, to establish data entry screens, and to produce business reports. Other topics include relational databases, macros, file operations, and database management. Transfer: CSU.

**CBOT 439 MANAGING BUSINESS DOCUMENTS**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 415. Description:* Learn to create, format, and manage professional-looking business documents using a word processing program. Business documents include business letters, reports, tables, memorandums and electronic mail. Transfer: CSU.

**CBOT 440 MACINTOSH APPLICATIONS, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduces new Macintosh users to the operating system and its basic features such as navigating the Dock, the Finder toolbar, and the folder structure. In addition, the course covers word processing, drawing and painting and the presentation modules. Transfer: CSU.

**CBOT 448 USING MICROSOFT WINDOWS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Students learn the Windows operating system features, work with programs and file management. The course includes how to manage files and folders, maintain the computer, manage hardware, and customize Windows. May be repeated once for credit. Transfer: CSU.

**CBOT 457 PRESENTATION SOFTWARE: POWERPOINT**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 430. Description:* Intermediate features of PowerPoint including importing and exporting data, drawing, linking and embedding objects, using color, and creating and running multiple slide shows. Transfer: CSU.

**CBOT 458 ADVANCED PRESENTATION SOFTWARE: POWERPOINT**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn the advanced features of PowerPoint, including manipulating PowerPoint objects, customizing templates and toolbars, advanced text manipulation, animation and slide show effects, creating charts and tables, flowcharts, organization charts, and diagrams. Transfer: CSU.

**CBOT 470 ADVANCED SPREADSHEETS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL*

*836 or ESL 400; Prerequisite(s): CBOT 435. Description:* Overview of advanced business applications using software for creating spreadsheets with macros, graphs, databases, and database queries. Other topics include integrating spreadsheets into text, creating database reports, and integrating and printing graphs and databases as part of reports. Transfer: CSU.

**CBOT 472 BEGINNING WORD PROCESSING**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Covers the basic Word skills of creating and editing a document; formatting characters and paragraphs; use of AutoComplete, Autocorrect, AutoText, and the Thesaurus as writing tools; Tabs and tabbed columns to align text; different methods of moving and copying text, and review or change text; and character and paragraph formatting using the Find and Replace features. Transfer: CSU.

**CBOT 474 INTERMEDIATE WORD PROCESSING**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 472. Description:* Covers the Intermediate Word skills of changing margins and setting print options; printing envelopes and labels; inserting soft, hard, section breaks, page numbers, and header and footers; creating, modifying, and applying styles, themes; use, create, and modify templates; creating, editing and formatting tables and multiple columns; and mail merge. Transfer: CSU.

**CBOT 475 USING OUTLOOK**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 430. Description:* Students learn Outlook, a personal information management program that helps prepare a wide range of organizational tasks within an office environment. Includes sending and receiving messages and managing the Inbox, scheduling appointments and meetings using the Calendar, creating and managing tasks and journal entries using Outlook with other Office applications and using Outlook with the Internet. Transfer: CSU.

**CBOT 476 ADOBE ADOBE ACROBAT**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn to create, convert, store, and transport documents from various software programs using Adobe Acrobat. The course covers Adobe Reader, security and password protection, consolidation of PDF files into one Adobe PDF file, application of final edits and modifications to enhance those files. Also, learn to create online documents and interactive forms. Working knowledge of using a computer and its operating system is recommended. Transfer: CSU.

**CBOT 477 ADVANCED WORD PROCESSING**

*Units 1.5; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL*

836 or ESL 400; Prerequisite(s): CBOT 474. **Description:** Advanced Word features to create advanced tables; SmartArt & charts; fields and forms; macros; and create long documents using footnotes and endnotes; outlines, indexes and Tables of Contents; and editing features in document sharing. Transfer: CSU.

#### **CBOT 478 INTEGRATING MICROSOFT OFFICE**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 431 or equivalent.* **Description:** Learn how to integrate and share data among Microsoft Word documents, Excel worksheets, Access databases, and PowerPoint presentations. Other topics include object linking and embedding, multi-tasking, task list, and creating compound documents. Transfer: CSU.

#### **CBOT 480 USING THE INTERNET, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 448.* **Description:** Students learn how the Internet works, Internet connection options available, utilization of Internet addresses, mastery of browsers available, and basic e-mail features. Transfer: CSU.

#### **CBOT 483 CREATING WEB PAGES: INTRODUCTION TO HTML**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 480.* **Description:** Creating Web pages using HTML, hypertext markup language, structure, protocols, testing, editors, converters, HTML tags, colors, hex codes, style sheets, and printing are covered. This course teaches the user to create Web pages and develop a Web site. Transfer: CSU.

#### **CBOT 484 CREATING WEB PAGES: INTERMEDIATE HTML**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 483 or equivalent.* **Description:** Learn to create extensive Web pages using intermediate HTML code, hypertext markup language. Tables are explored in depth including merging columns and rows, parameters, alignment of text and images, color, captions, headers; forms and frames, and exploration of design layout is covered also. Transfer: CSU.

## **COMPUTER INFORMATION SCIENCE**

(See also Engineering)

#### **CIS 118 INTRODUCTION TO OBJECT-ORIENTED PROGRAM DESIGN**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): None; Corequisite(s): CIS 119.* **Description:** Introduction to object-oriented computer programming for computer science majors (CSO) and computer professionals. Topics include computer hardware and operating systems; problem-solving

techniques; object-oriented program design; program coding, testing, and implementation; and documentation issues and techniques. Students explore algorithm development, data types, flow of control, classes, objects, methods, vectors, and event-driven programming. May be repeated once for credit. Transfer: CSU, UC.

#### **CIS 119 OPEN COMPUTER LAB I**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): None; Corequisite(s): Concurrent enrollment in CIS 118.* **Description:** Use of microcomputers to complete lab assignments for CIS 118. May be repeated once for credit. Transfer: CSU, UC.

#### **CIS 250 PROGRAMMING METHODS I: C++**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 118, 119 and MATH 120 or 123, or ENGR 215; Corequisite(s): Concurrent enrollment in CIS 251.* **Description:** Introduction to computer science and software engineering for majors (CS1) and computer professionals. A systematic approach to the design, implementation, and management of robust C++ computer programs. Course emphasizes object-oriented design, programming documentation, testing and debugging techniques, and computer ethics. This course conforms to the ACM CS1 standards. Transfer: CSU, UC.

#### **CIS 251 OPEN COMPUTER LAB I: C++**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): None; Corequisite(s): Concurrent enrollment in CIS 250.* **Description:** Use of microcomputers to complete lab assignments for CIS 250. Transfer: CSU, UC.

#### **CIS 252 PROGRAMMING METHODS II: C++**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): CIS 250/251 or equivalent; Corequisite(s): Concurrent enrollment in CIS 253.* **Description:** This course uses Object-Oriented techniques and the C++ programming language to illustrate a variety of data structures including: arrays, stacks, queues, linked lists, trees, dictionaries, sets and graphs. Also covered are sorting and searching topics, including Big O notation and hash tables. This course conforms to the ACM CS2 standards. Transfer: CSU, UC.

#### **CIS 253 OPEN COMPUTER LAB II: C++**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): CIS 250/251; Corequisite(s): Concurrent enrollment in CIS 252.* **Description:** Use of microcomputers to complete lab assignments for CIS 252. Transfer: CSU, UC.

**CIS 284 PROGRAMMING METHODS I: JAVA**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 118, 119 and MATH 120 or 123, or ENGR 215; Corequisite(s): Concurrent enrollment in CIS 285. Description:* Introduction to computer science and software engineering for computer science majors (CS1) and computer professionals. A systematic approach to the design, construction, and management of computer programs, emphasizing object-oriented design and programming documentation, testing and debugging techniques. Focuses on designing and implementing robust, well styled, and maintainable computer programs. Course also includes introduction to basic data structures and computer ethics. This course conforms to the ACM CS1 standards. Transfer: CSU, UC.

**CIS 285 OPEN COMPUTER LAB I: JAVA**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 118/119 or equivalent, and MATH 120 or equivalent; Corequisite(s): Concurrent enrollment in CIS 284. Description:* Use of microcomputers to complete lab assignments for CIS 284. Transfer: CSU, UC.

**CIS 286 PROGRAMMING METHODS II: JAVA**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 284/285 or equivalent; Corequisite(s): Concurrent enrollment in CIS 287. Description:* Data Structures class for computer science majors (CS2) and computer professionals. This course uses Object-Oriented techniques to illustrate a variety of data structures including: vectors, stacks, queues, linked lists, trees, dictionaries, maps, sets and graphs. Also covered are sorting and searching topics, including Big O notation and hash tables. This course conforms to the ACM CS2 standards. Transfer: CSU, UC.

**CIS 287 OPEN COMPUTER LAB II: JAVA**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 118/119 or equivalent, and MATH 120 or equivalent; Corequisite(s): Concurrent enrollment in CIS 286. Description:* Use of microcomputers to complete lab assignments for CIS 286. Transfer: CSU, UC.

**CIS 372 OBJECT-ORIENTED SOFTWARE DEVELOPMENT: ADVANCED TOPICS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 252/253 or 286/287; Corequisite(s): Concurrent enrollment in CIS 373. Description:* Introduction to high level object-oriented software development for computer science majors and computer professionals. Includes conceptualization, analysis, design, implementation, testing and maintenance of software, using the Unified Modeling Language (UML). Students use the above tools to build a project involving the development of a software application in cooperative groups. Transfer: CSU, UC.

**CIS 373 OPEN COMPUTER LAB**

*Units (Credit/No Credit) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 252/253 or 286/287; Corequisite(s): Concurrent enrollment in CIS 372. Description:* Use of microcomputers to complete lab assignments for CIS 372. Transfer: CSU, UC.

**COMPUTER INFORMATION SYSTEMS**

(See also Business, Computer Business Office Technology, Computer Information Technology, and Multimedia)

**COMP 321 JAVASCRIPT I**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/8 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CBOT 483 or familiarity with HTML; access to the Internet. Description:* Introduction to JavaScript Language. JavaScript is a cross-platform object-oriented scripting language developed by Netscape to be used in HTML (Hypertext Markup Language) documents to provide high levels of interactivity without needing server-based CGI (Common Gateway Interface) programs. Transfer: CSU.

**COMP 322 JAVASCRIPT II**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/8 lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): COMP 321; access to the Internet. Description:* Continuation of COMP 321. Topics include creating windows, saving data to cookies, and Java applets. Transfer: CSU.

**COMP 330 INTRODUCTION TO PERL**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/8 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CIS 250/251 or 284/285 or COMP 235 or 236 or CIT 311. Description:* Perl is a fundamental building block for interactive Web pages and an important programming language in the Biotech industry. Perl is examined as a general purpose programming language, and this course focuses on Perl's unique data types, flow of control, pattern matching and the application of these specialized features to real problems. Students write stand alone Perl programs and Web CGI scripts that take full advantage of all the basic features of the language. Transfer: CSU, UC\*.

**COMP 331 INTERMEDIATE PERL**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/8 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): COMP 330. Description:* Continuation of COMP 330. Perl is a fundamental building block for interactive Web pages and an important programming language in the Biotech industry. This course builds on Introduction to Perl focusing on Perl's idioms, reference-based compound data structures, and object-oriented programming. It is the basis for advanced Perl library modules including the CGI module for interacting with the WWW pages. Students write sophisticated object-oriented Perl programs and implement basic library modules. Transfer: CSU, UC\*.

**COMP 422 BEGINNING INTERNET**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 32 lecture/16 lab hours/semester; (Total of 4 weeks); Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.*

**Description:** This course introduces science and engineering students to the worldwide computer network, Internet. The Internet provides exciting access to a wide range of resources such as electronic mail, information servers of all types as well as international sites, and government resources. Through hands-on experience students learn the basic equipment and software requirements and develop an understanding of the Internet and how it can best be used. Topics include navigation through the World Wide Web, E-mail, and Netscape Navigator. Transfer: CSU.

## COMPUTER INFORMATION TECHNOLOGY

(Previously listed under Business or Computer Information Science and/or Systems)

**CIT 311 INTRODUCTION TO THE UNIX OPERATING SYSTEM**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): BUS. 103 or COMP 103 or CIS 118. Description:* This course introduces the UNIX operating system including the UNIX system architecture, file system, UNIX shell, job control, and an introduction to shell scripts. Transfer: CSU, UC.

**CIT 340 INTRODUCTION TO UNIX SYSTEMS ADMINISTRATION**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): Completion of or concurrent enrollment in CIT 311 or equivalent knowledge. Description:* Introduction to UNIX system administration functions including managing user accounts, maintaining file systems, backing up, restoring and managing a UNIX system. Transfer: CSU.

**CIT 411 INTERMEDIATE UNIX**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): CIT 311. Description:* Continuation of CIT 311. Topics include features of UNIX shells, job control, and uses of UNIX utilities. Transfer: CSU, UC.

**CIT 422 HELP DESK**

*Units 1.5; Class Hours: Minimum of 24 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 430. Description:* Introduces students to the functions of Help Desk in the technical support setting. The Help Desk roles and responsibilities, processes and procedures, tools and technologies, and performance measures are explored in detail. In addition the course emphasizes the combination of technical, business, and personal skills important to Help Desk personnel. Transfer: CSU.

**CIT 450 PC MAINTENANCE AND SYSTEM UPGRADES, PART I**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 415. Description:* Introduction to problem-solving skills for computers. Topics covered include a review of hardware, software error codes, replacement of boards, optimization of a hard disk, caring for floppy disk drives, hardware versus software problems, troubleshooting, and analysis of problems associated with printers and software. Transfer: CSU.

**CIT 451 PC MAINTENANCE AND SYSTEM UPGRADES, PART II**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CIT 450. Description:* Continuation of CIT 450. Students learn the use of advanced software utilities and testing equipment to perform software/hardware analysis and troubleshooting. Hands-on installation of operating systems, installation of software, and performing system backups is performed. Transfer: CSU.

**CIT 453 TROUBLESHOOTING SYSTEMS**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CIT 450 and CBOT 480. Description:* The course introduces techniques and resources used to identify, analyze and rectify various hardware, software, connection, and user problems. Using text references, computer, and Internet resources, students learn to apply standard problem-solving procedures relating to personal computer malfunctions. Transfer: CSU.

**CIT 464 ADVANCED WINDOWS OPERATING SYSTEM**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 448 or equivalent. Description:* This course covers all utilities and maintenance utilities that are included with Windows. Also included are installing, upgrading, reinstallation, and troubleshooting Windows. Transfer: CSU.

**CIT 467 INTERNET/NETWORK SECURITY**

*Units 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Provides a fundamental understanding of network security principles and implementation. Students receive an in-depth overview of all the current risks and threats to an organization's data, along with a structured way to addressing and safeguarding these electronic assets. A thorough understanding of computer systems and computer networks is highly recommended before taking this course. Transfer: CSU.

**CIT 480 PERSONAL UNIX SYSTEMS**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 8 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Learn how to install Linux, a UNIX clone, on your home computer system. Topics include hardware issues and where to get your own copy on the Internet. Transfer: CSU.

**CIT 492 NETWORKING ESSENTIALS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Introduces the basics of Local Area Networks to include terminology, network components and their functions, network planning, monitoring, and management of networks with relationships to Microsoft Operating Systems. Transfer: CSU.

**CIT 494 SUPPORTING WINDOWS XP PROFESSIONAL**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 448, and CIT 450 and 492. Description:* Prepares students to install, configure and administer Windows XP Professional in workgroup and domain environments. Topics include installation methods, protocol configuration, user and group management, file, share, and logon security, printing, hardware and software installations, troubleshooting and related Windows XP topics. Transfer: CSU.

**CIT 496 WINDOWS 2000 ACTIVE DIRECTORY**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CIT 498. Description:* Techniques of planning, executing, troubleshooting, and setup of the Windows 2000 Active Directory. Additional topics include: overcoming challenges such as administration, set up user and group accounts, and security. Transfer: CSU.

**CIT 497 WINDOWS 2000 PROFESSIONAL**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CBOT 448 and CIT 492. Description:* Install, configure and administer Windows 2000 Professional in workgroup and Domain networks. Topics include installation methods; protocol configuration; user and group management; file, share, and logon security; printing; hardware and software installations; troubleshooting and related Windows 2000 topics. Preparation for Microsoft 70-210 examination. Transfer: CSU.

**CIT 498 WINDOWS 2000 SERVER**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): CIT 497. Description:* Implement, configure and support a Windows 2000 server as domain controller in a Microsoft enterprise network environment. Topics include network protocols; domain user and group management; share, NTFS and logon security; introduction to Active Directory Service; printing;

server performance optimization and troubleshooting. Prepares student for the Microsoft certification. Transfer: CSU.

**COOPERATIVE EDUCATION**

(See courses under specific subjects in the schedule of classes)

**670 COOPERATIVE EDUCATION/WORK EXPERIENCE**

*Units (Grade Option) 1-4; Class Hours: 1-3 lecture hours/semester (75 to 300 paid job hours/ semester, 60-240 volunteer job hours/ semester.); Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None; Corequisite(s): Spring and Fall Semesters: Enrollment in 7 units, including Cooperative Education/Work Experience and a job or volunteer work site. Summer Session: Enrollment in 0.5 unit, plus Cooperative Education/Work Experience and a job or volunteer work site. Description:* College credit may be earned by students who are employed or on volunteer assignments. The job/volunteer assignment must be related to the student's major or occupational goals. Students learn to set measurable objectives for improving their skills and job performance. May be repeated for credit up to 16 units. Course orientations are held the first three weeks of the semester and attendance at one is obligatory. Transfer: CSU.

**672 COOPERATIVE EDUCATION: INTERNSHIP**

*Units (Grade Option) 1-3; Class Hours: 1-3 lecture hours/semester (60 to 180 volunteer on the job hours/semester); Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None; Corequisite(s): Enrollment in 7 units, including Cooperative Education and a minimum of 12 completed units in the occupational discipline. Description:* Students may enroll in a volunteer, cooperative internship to apply skills learned from classroom instruction at a supervised work site. The internship must be supervised by a job supervisor and an instructor from the chosen occupational discipline. May be repeated for credit up to 16 units. Transfer: CSU.

**DEVELOPMENTAL SKILLS****DSKL 810 DEVELOPMENTAL LEARNING SKILLS**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 8 lecture/8 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Individual and small group activities designed to assist students with identified learning disabilities in the following skill areas: basic skills; memory/organization concentration skills; perceptual skills (auditory/visual); language skills (receptive and expressive), conceptual skills as well as self-advocacy. Verifiable learning disability is recommended. Units do not apply toward AA/AS degree.

**DSKL 811 SPECIFIC LEARNING SKILLS ASSESSMENT**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 24 by arrangement lab hours per semester; Prerequisite(s): None. Description:* An assessment battery is used to determine specific learning styles as well as academic skill levels in reading, writing, math, and spelling. Based upon assessment, the student with the assistance of the

instructor, designs and uses individual learning strategies. Units do not apply toward AA/AS degree.

### **DSKL 813 DEVELOPMENTAL READING AND THINKING**

*Units (Credit/No Credit) 0.5-2; Class Hours: Minimum of 24 lecture/24 by arrangement lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Small group classroom instruction designed to assist learners with identified learning disabilities in the development/improvement of receptive written language and independent thinking skills. Verifiable learning disability is recommended. Units do not apply toward AA/AS degree.

### **DSKL 814 DEVELOPMENTAL WRITING**

*Units (Credit/No Credit) 0.5-2; Class Hours: Minimum of 24 lecture/24 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): Verifiable learning disability. Description:* Small group and classroom activities designed to assist students in writing skills. Units do not apply toward AA/AS degree.

### **DSKL 816 TUTORING**

*Units (Credit/No Credit) 0.5-2; Class Hours: Minimum of 24-96 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Designed to assist students with identified learning disabilities to achieve success in mainstream classes through instructional techniques which are appropriate to the student's specific needs identified through assessment. Verifiable learning disability is recommended. Units do not apply toward AA/AS degree.

## **DRAMA**

(See Theatre Arts)

## **EARLY CHILDHOOD EDUCATION/ CHILD DEVELOPMENT**

### **ECE. 191 CHILDREN'S LITERATURE I (Previously LIT. 191)**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* A survey of children's literature including the following genres: Traditional (folklore, myths, fables, epics, legends, fairytales), picture books, modern fantasy and science fiction. Emphasis is placed on understanding how quality children's literature experiences contribute to children's literacy skills. Included are guides for selecting and evaluating children's literature and related literacy experiences from infancy to adolescence. Transfer: CSU.

### **ECE. 192 CHILDREN'S LITERATURE II (Previously LIT. 192)**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* A survey of children's literature including the following genres: poetry, multicultural books, informational books and biography, realistic fiction, and historical fiction. Emphasis is placed on understanding how quality children's literature experiences contribute to children's literacy skills. The course intro-

duces controversies, trends and issues related to children's literature and developmentally appropriate strategies for encouraging children's response to literature (infancy to adolescence). Transfer: CSU: C2.

### **ECE. 201 CHILD DEVELOPMENT**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of the development in children from birth to adolescence with emphasis on the first ten years. The growth areas to be covered include physical, cognitive, language, emotional, and social. A practical application of theory integrates these developmental concepts in a "whole child" approach. Transfer: CSU: DSI, UC. (IGETC: 4)

### **ECE. 210 EARLY CHILDHOOD EDUCATION PRINCIPLES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The historical perspective, nature, and goals of early childhood education are covered in this course. Other topics include qualifications and training needed by teachers who work with children, descriptions of program models, current issues in ECE, future trends, and their social, political, and economic implications. Transfer: CSU.

### **ECE. 211 EARLY CHILDHOOD EDUCATION CURRICULUM**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Development of goals and objectives to manage learning environments and their social implications for children are covered. Students identify quality learning experiences, select valuable play activities for children, and evaluate appropriate curriculum methods for optimum learning. Transfer: CSU.

### **ECE. 212 CHILD, FAMILY, AND COMMUNITY**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* An overview of contemporary family and community issues influencing childhood. Interactions among the child, family, school, peers, media and the community are explored. The course focuses on the socialization process including cultural, and ethnic diversity, parenting styles, gender roles and the role of the community. Community resources available to children and families are also covered. Transfer: CSU: DSI, UC. (IGETC: 4)

### **ECE. 213 THE SCHOOL AGE CHILD**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The focus of this course is relevant and responsible program planning for before and after school childcare. Also presented are the developmental needs of the child 6-12 years (middle childhood) and family involvement in childcare and the social and economic implications, and available community resources for childcare. Transfer: CSU.

**ECE. 223 INFANT DEVELOPMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** In this course major emphasis is placed on the developmental trends, abilities, and influences of behavior during the first three years of life and their social implications. Also presented is the establishment of environments which respond to infant needs. Transfer: CSU.

**ECE. 225 INFANT/TODDLER ENVIRONMENTS**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Covers the design, maintenance and evaluation of quality environments for children during the first three years of life. The course should be of interest to caregivers, teachers, ECE/CD students and parents. Accreditation guidelines established by the National Association for the Education of Young Children for infant/toddler programs are included. Transfer: CSU.

**ECE. 230 CREATIVE ACTIVITIES FOR THE YOUNG CHILD**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** This course is designed to provide practical skills in presenting activities to young children. Other topics include the role of creativity and creative expression through art media, music, dramatic activities, science, and games—both indoors and outdoors. Transfer: CSU.

**ECE. 240 EARLY CHILDHOOD EDUCATION ADMINISTRATION: BUSINESS/LEGAL**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** This course is an overview of the business aspects of caring for children and its social, political, and economic implications. Also included are the legal requirements for childcare settings, laws relating to childcare, and facets of business and fiscal management. 12 units of ECE recommended prior to taking this course. Transfer: CSU.

**ECE. 241 EARLY CHILDHOOD EDUCATION ADMINISTRATION: HUMAN RELATIONS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** This course focuses on the human relations aspects of early childhood education as a business and the social, political, and economic implications for care providers and parents. Other topics include staffing and supervision, licenses and/or credentials for staff, assessment and evaluation, issues in ECE, and parent involvement. 12 units of ECE recommended prior to taking this course. Transfer: CSU.

**ECE. 242 ADULT SUPERVISION IN ECE/CD CLASSROOMS**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** A study of the methods and principles of supervising student teachers, assistant teachers,

parents, and volunteers in early childhood education/child development classrooms. Emphasis is on the role of classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff. This course is recommended for master teachers, site supervisors, and program directors of Child Development programs. Transfer: CSU.

**ECE. 244 PREKINDERGARTEN LEARNING AND DEVELOPMENT GUIDELINES**

*Units 2; Class Hours: Minimum of 32 lecture/8 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Reviews criteria for the provision of high quality prekindergarten/preschool experiences for young children. Early child development foundation skills and the design of appropriate learning environments are key topics. Issues examined are developmental, political and economic including school readiness/school success and universal preschool. Transfer: CSU.

**ECE. 250 VIOLENCE AND ITS IMPACT ON CHILDREN AND THEIR FAMILIES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Exploration of violence in America and its impact on adults and children who experience it. The focus of the course is to give the student a perspective on violence and what may cause it, as well as possible intervention strategies. Community resources for prevention and intervention are incorporated also. Transfer: CSU.

**ECE. 252 TEACHING VIOLENCE INTERVENTION STRATEGIES TO CHILDREN AND FAMILIES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Provides an overview of various approaches to violence intervention. The focus of the course is to provide paraprofessionals appropriate curriculum, theory and practice related to working with children and families who have experienced stress and chronic violence. Transfer: CSU.

**ECE. 254 ANTI-BIAS CURRICULUM**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Designed to sensitize early childhood teachers and providers to the importance of anti-bias curriculum. Early childhood diversity issues related to culture, race, religion, gender, and special needs are examined in the context of curriculum development. Transfer: CSU.

**ECE. 260 CHILDREN WITH SPECIAL NEEDS**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.* **Description:** Overview of the issues related to children with special needs: physical, sensory, communicative, and behavioral disabilities. Additional topics include a historical perspective, current laws and legislation, inclusion practices in ECE/CD settings, and appropriate community resources. Transfer: CSU.

**ECE. 262 INTRODUCTION TO FAMILY SUPPORT: BUILDING RESPECTFUL PARTNERSHIPS (Also HMSV 262)**

*Units 3; Class Hours: Minimum of 48 lecture/8 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of Family Support programs within Early Childhood Education. Included is a historical perspective, Family Support principles, and effective communication guides between families, childcare providers, teachers, and community agencies. This course is one of two (ECE. 264, other course) for a specialization for Master Teacher on the Child Development Permit matrix. Transfer: CSU.

**ECE. 264 THE LIFE CYCLE OF THE FAMILY (Also HMSV 264)**

*Units 3; Class Hours: Minimum of 48 lecture/8 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The life cycle of the family bridging individual and family development with cultural and social perspectives. The emphasis is on the diversity within contemporary families and the establishment of family support programs. This course is one of two (ECE. 262, other course) for a specialization for Master Teacher on the Child Development Permit Matrix. Transfer: CSU: DSI.

**ECE. 313 HEALTH AND SAFETY FOR YOUNG CHILDREN**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Health practices and safety regulations for licensed childcare settings. Major topics include infectious disease prevention, establishing safe environments for young children, emergency and disaster preparedness, and community resources. Transfer: CSU.

**ECE. 316 FIRST AID FOR CHILDREN**

*Units (Grade Option) 0.5; Class Hours: Minimum of 8 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course focuses on the techniques required for First Aid and emergency care practices for young children. First Aid certification is available upon completion.

**ECE. 317 PEDIATRIC CPR**

*Units (Grade Option) 0.5; Class Hours: Minimum of 8 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course focuses on the techniques required for pediatric Cardiopulmonary Resuscitation. CPR certification is available upon completion.

**ECE. 331 THE TEACHING EXPERIENCE**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of the teaching profession and its implications for educating young children. Other topics include the developmental stages of the teacher, developmentally appropriate practice, professional obligations and affiliations, and career opportunities.

**ECE. 333 OBSERVATIONAL SKILLS**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of methods and in-depth practice of observational skills in ECE/CD settings. Students experience the observation of children, teachers, and programs using the following tools: Desired Results and Environmental Rating Scale, CA Dept. of Education, and NAEYC Accreditation Self Study. Transfer: CSU.

**ECE. 335 HANDLING BEHAVIOR**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Child guidance and discipline are covered in this course. The primary goal is to give teachers, caregivers, and parents an understanding of the complexity of children's behavior. Theories and trends concerning child guidance are covered to assist adults in developing appropriate strategies related to interacting with children and fostering pro-social behavior.

**ECE. 337 CHILD-PARENT RELATIONSHIPS**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Issues related to contemporary parenting including the stages of parenting, the diversity of the parenting experience, communication guides for more effective parenting, and community resources for family support.

**ECE. 350 ISSUES IN EARLY CHILDHOOD EDUCATION**

*Units (Grade Option) 1-12 (No more than 6 units per semester); Class Hours: Minimum of 16 lecture hour/semester per unit; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This modular approach to issues in Early Childhood Education covers diverse content that is of particular relevance to ECE practitioners. Each module is self-contained. Specific modules are offered each semester and are announced in the current schedule of classes. A limit of six of these one-unit modules applies toward the ECE Certificate and AS Degree. Transfer: CSU.

**ECE. 351 LANGUAGE ARTS IN EARLY CHILDHOOD**

*Units 1; Class Hours: Minimum of 16 lecture/3 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* How to develop and present an appropriate language arts program for young children. Current research is combined with the practical application of curriculum principles to foster children's emerging language and literacy skills.

**ECE. 353 LITERACY IN EARLY CHILDHOOD**

*Units 1; Class Hours: Minimum of 16 lecture/3 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course describes the developmental approach to the growth of listening, speaking, reading and writing skills in early childhood. Included are current issues and resources for teachers and parents.

**ECE. 355 STORYTELLING IN EARLY CHILDHOOD**

*Units 1; Class Hours: Minimum of 16 lecture/3 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course provides an appreciation of storytelling especially as it relates to an appropriate literacy program for young children. Included are the history of storytelling, the effective elements for presentations, and creative resources for both parents and teachers.

**ECE. 366 PRACTICUM IN EARLY CHILDHOOD EDUCATION (Also HMSV 366)**

*Units 3; Class Hours: Minimum of 16 lecture/96 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): 12 units of ECE., approved sites only. Description:* A supervised field experience course that focuses on the methods and principles of teaching in early childhood classrooms. Emphasis is on the role of the teacher in a developmentally appropriate setting. This course gives students practical, verifiable experience working with children under the supervision of an experienced teacher. Transfer: CSU.

**ECE. 380 FAMILY DAY CARE TRAINING**

*Units (Grade Option) 1-4; Class Hours: Minimum of 16-64 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* The focus of this course is the operation of a family day care home as a business. Other topics included are planning activities in the home, designing a home environment, and communicating with parents. May be repeated for credit up to 4 units.

**ECE. 382 MALE INVOLVEMENT IN EARLY CHILDHOOD**

*Units 1; Class Hours: Minimum of 16 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Examines the importance of men in the lives of children. It reviews barriers and issues concerning male involvement in early childhood and how to positively encourage men to be involved with children. Transfer: CSU.

**ECE. 384 PRINCIPLES AND POLICIES FOR HOME-BASED CHILD CARE**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course focuses on the principles and policies related to child care in home-based settings; it examines child care in the home as a small business. The course is designed for those already caring for children in their homes and for those considering this as an option in the child care profession. Transfer: CSU.

**ECE. 386 ACTIVITY PLANNING AND CURRICULUM FOR HOME-BASED CHILD CARE**

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course focuses on planning activities and curriculum for home-based child care settings. It is designed for those already caring for children in their homes and

for those considering this as an option in the child care profession. Transfer: CSU.

## ECONOMICS

**ECON 100 PRINCIPLES OF MACRO ECONOMICS (CAN ECON 2)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* A broad overview of the American economy and its effect on social, political, and cultural environments. The concepts of the price system, the banking system, money and economic activity, policies for stabilization and growth, are presented. The classical, neo classical and Keynesian models of an economy are introduced. This course concludes with an introduction into the aggregate supply and aggregate demand model of an economy. Transfer: CSU: DSI, UC. (IGETC: 4)

**ECON 102 PRINCIPLES OF MICRO ECONOMICS (CAN ECON 4)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* Overview of the concepts of supply and demand. Pricing and output decisions under competitive, imperfectly competitive, and monopolistic markets are discussed. Profit maximization and cost minimization for the individual firm are analyzed. Allocation of resources, externalities and comparative economic systems are also examined. Transfer: CSU: DSI, UC. (IGETC: 4)

**ECON 230 ECONOMIC HISTORY OF THE UNITED STATES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* An introduction to the origin and development of the American economy from 1860 to the present time. Topics studied are industrial growth, land and resource use, role of immigration and various ethnic and cultural groups, the transportation revolution, development of money and banking, trade patterns, organized labor, agriculture, and America in the world economy. (Fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: DUS-1 & DSI, UC. (IGETC: 4)

## EDUCATION

**EDUC 100 INTRODUCTION TO EDUCATION**

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description:* This course integrates psychological, historical, sociological, and philosophical foundations of education including planning of effective teaching strategies and classroom environments, exploration of career opportunities and new directions in education. Transfer: CSU: DSI.