

Course Descriptions

General Information

BASIC SKILLS ADVISORY SYSTEM

A Basic Skill Advisory refers to the recommended skill level in reading, writing, and/or mathematics which is needed before enrolling in a course. In order to succeed in most courses, students need to demonstrate at specific levels reading and writing skills and, for some courses, perform mathematical operations before enrolling. Designating these basic skill levels informs students at which minimum levels they need to perform before enrolling in the target courses.

Basic skill levels are recommended rather than mandatory, but students are strongly encouraged to adhere to them and follow the advice of their counselor. Counselors use placement test results and other information to determine whether a student needs to raise his/her skill levels before enrolling in a target course.

Open Curriculum

Some courses are designated as OPEN CURRICULUM (OC) courses. This designation means that specific levels of reading, writing and/or math are not required for successful course completion. Most OC designated courses are activity courses which do not require students to use reading, writing, and/or math skills. Some OC designated courses are entry level reading, writing, and/or math courses. Specific levels of proficiency for enrollment in these courses are not designated because students may begin at their current instructional levels and proceed to higher levels of performance until they reach exit levels for course completion. Some of these courses, however, such as READ 826, ENGL 826, and MATH 811 may require that placement test results and other information be on file prior to the first day of class.

Recommended Basic Skill Level Summary:

Level 1 Students must be eligible for READ 836 and ENGL 836

Level 2 Students must be eligible for READ 420 and ENGL 100

Level 3 Students must be eligible for ENGL 110

Math 2/3 Students must be eligible for MATH 110 or 111

Math 4 Students must be eligible for MATH 120 or MATH 122

Level 1

If a course has the designation Level: 1, students need to demonstrate ability to read and write at the 9th grade level.

In order to demonstrate proficiency at this level, students may attain appropriate Reading and English Placement Test scores or they may complete successfully the following combinations of reading and writing courses to reach this level:

ENGL 826 (3 units) and READ 826 (3 units) or

ENGL 804 (4 units) or

ESL 844 (4 units) and ESL 864 (4 units)

Level 2

If a course is designated LEVEL: 2, students need to demonstrate ability to read and write at the 11th grade level.

In order to demonstrate proficiency at this level, students may attain appropriate Reading and English Placement Test scores or they may complete successfully the following combinations of reading and writing courses to read at this level:

READ 836 (3 units) and ENGL 836 (3 units)

Level 3

If a course is designated LEVEL: 3, students need to demonstrate ability to read and write at the college level.

In order to demonstrate proficiency at this level, students may attain appropriate Reading and English Placement Test scores or they may complete successfully the following combination of reading and writing courses to read at this level:

READ 420 (3 units) and ENGL 100*

*If ENGL 100 is a COURSE PREREQUISITE for a particular course, students must take the course. An appropriate English Placement Test score does not apply in this case.

Math 2/3 (M2) (M3)

If a course is designated as MATH 2 or M2, students must be eligible for MATH 111. This means that students need to demonstrate the ability to perform basic arithmetic operations successfully. MATH 111 and 112 cover elementary algebra offered in two semesters.

In order to demonstrate proficiency at the M2 level, students may attain an appropriate Placement Test score in math or they may complete successfully MATH 811 (Pre-algebra).

If a course is designated as MATH 3 or M3, students must be eligible for MATH 110 which covers elementary algebra in one semester. This means that students need to demonstrate the ability to perform basic arithmetic operations successfully.

In order to demonstrate proficiency at the M3 level, students may attain an appropriate Placement Test score in math or they may complete successfully MATH 811 (Pre-algebra).

Math 4 (M4)

If a course is designated as MATH 4 or M4, students must be eligible for MATH 121 or 122. This means that students need to demonstrate ability to perform basic algebraic operations successfully.

In order to demonstrate proficiency at the M4 level, students may attain an appropriate Placement Test score in math or they may take MATH 110 or MATH 111 and 112.

Note: If any of the math courses specified above are designated as PRE-REQUISITES for a particular course(s), students must take the courses specified. Appropriate Placement Test scores in Math do not apply in this case.

CREDIT VALUE

The credit value of each course in semester units is indicated just under the title. A semester unit of credit is equivalent to one hour of the student's time per week in lecture for semester length courses with two hours per

week in study and preparation, or three hours per week in laboratory or activity courses.

CALIFORNIA ARTICULATION NUMBER (CAN)

The California Articulation Number (CAN) identifies some of the transferable lower division, introductory courses commonly taught within each academic discipline on college campuses. The system assures students that CAN courses on one participating campus will be accepted in lieu of the comparable CAN course on another participating campus. Counselors will provide interested students with a list of participating institutions.

The CAN system is new and growing and designed to facilitate student transfer between and among public institutions of higher education in the State of California. CAN numbers are listed parenthetically after the course descriptions in the listing of courses.

DESCRIPTIONS

All courses and curricula listed in this catalog will not necessarily be offered during 2006-2007. Courses are offered at the College's discretion in accordance with its determination of educational needs and available resources. Courses may be added, canceled, or combined when circumstances warrant. Note: Courses listed as transferable may or may not be acceptable to a specific transfer institution to meet the requirements of a major. Consult with a counselor before planning your program.

The following courses have been approved for all instructional departments:

670 COOPERATIVE EDUCATION/WORK EXPERIENCE

(See course description under Cooperative Education section)

672 COOPERATIVE EDUCATION: INTERNSHIP

(See course description under Cooperative Education section)

680-689 SELECTED TOPICS (DEGREE/CERTIFICATE APPLICABLE, TRANSFERABLE)

(Grade Option) Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.

Description: These courses focus on selected topics not covered by regular catalog offerings. Course content and unit credit are determined by the appropriate division in relation to community/student need and available staff. These innovative, experimental courses may be offered as lecture or lab classes. See semester class schedule for particular offerings. Transfer: CSU.

690 RESEARCH PROJECTS

Units 1-3; Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Two previous courses in the discipline, or concurrent enrollment in the second course, and an overall 3.0 GPA in the department; Prerequisite(s): None. **Description:** Research projects in a particular discipline. Content to be arranged with individual faculty member and approved by appropriate Division Dean. No student may enroll in more than two research courses per semester. Transfer: CSU.

695 INDEPENDENT STUDY

Units (Grade Option) 0.5-6 (No more than 3 units per semester); Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** Self-paced, individualized instruction is provided in selected areas to be arranged with an instructor and student and approved by the dean. Varying modes of instruction can be used – lecture, laboratory, research, skill development, etc. May be repeated for credit up to 6 units. Transfer: CSU.

879 SELECTED TOPICS (DEGREE/CERTIFICATE APPLICABLE, NON-TRANSFERABLE)

(Grade Option); Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.

Description: These courses focus on selected topics not covered by regular catalog offerings. Course content and unit credit are determined by the appropriate division in relation to community/ student need and available staff. These innovative, experimental courses may be offered as lecture or lab classes. See semester class schedule for particular offerings. Not designed for transfer credit. Units apply toward AA/AS degree or certificate. May be repeated for credit up to 3 units.

880 OTHER SELECTED TOPICS (NON-DEGREE/NON-CERTIFICATE APPLICABLE, NON-TRANSFERABLE)

(Grade Option); Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None.

Description: Any division may offer 880 courses focusing on selected topics not covered by regular catalog offerings and treating the development of reading and writing skills. Appropriate divisions may also offer non-degree credit experimental courses in reading, writing and/or math skills. Course content and unit credit to be determined by the appropriate division in relation to community/ student need and available staff. These innovative, experimental courses may be offered as lecture or lab classes. See semester schedule for particular offerings. Not designed for transfer credit. Units do not apply toward AA/AS degree nor certificate. May be repeated for credit up to 3 units.

ACCOUNTING

ACTG 100 ACCOUNTING PROCEDURES

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 or 115. Description: An introduction to basic accounting principles and procedures. The double-entry bookkeeping system is presented also. Transfer: CSU.

ACTG 121 FINANCIAL ACCOUNTING (CAN BUS 2) (CAN BUS SEQ A = ACTG 121 + 131)

Units 4-5; Class Hours: Minimum of 64-80 lecture hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): None. Description: An introduction to the fundamentals of a basic accounting system including how to record business transactions, prepare financial statements, and use accounting information in accordance with generally accepted accounting standards. The course includes both theoretical and practical problem-solving learning experiences to help the student develop analytical abilities in using financial data. Recommended for all business major transfer students. Transfer: CSU, UC.

ACTG 131 MANAGERIAL ACCOUNTING (CAN BUS 4) (CAN BUS SEQ A = ACTG 121 + 131)

Units 4-5; Class Hours: Minimum of 64-80 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): ACTG 121 (4 units) or equivalent. Description: In this course students prepare financial information used in the planning, organizing, directing, controlling, and decision-making process. Includes managerial accounting concepts, systems for manufacturing business, cost behavior and cost estimating, budgeting, break-even analysis, financial statement analysis, and accounting for not-for-profit organizations. Recommended for all business major transfer students. Transfer: CSU, UC.

ACTG 133 INTRODUCTION TO SPREADSHEETS FOR MANAGERIAL ACCOUNTING

Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/16 lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 120 or 122; Prerequisite(s): None. Description: The use of spreadsheets to solve complex managerial accounting problems. Problems include job and process cost accounting, contribution margin analysis as applied to product marketing decisions, cash budgets, capital investment decisions, and alternative choice decisions. Transfer: CSU.

ACTG 171 INDIVIDUAL INCOME TAX PROCEDURES

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 use of the internal revenue code including evaluating tax regulations and using other reference materials for preparing individual tax returns. Transfer: CSU.

ACTG 180 PAYROLL AND BUSINESS TAXES

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): ACTG 100 or 121 (4 units) or equivalent.

Description: Overview of payroll accounting procedures including state and federal laws and regulations. Also included is an evaluation of California sales tax regulations and requirements for declarations of real and personal property valuation.

ACTG 190 QUICKBOOKS® AND QUICKBOOKS PRO® FOR THE PARAPROFESSIONAL I

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): ACTG 100 or 121 (4 units) or equivalent and CBOT 430 or equivalent. Description: Development and operation of a computerized accounting system using QuickBooks or QuickBooks Pro including the basic features for a service company. Transfer: CSU.

ACTG 192 QUICKBOOKS® AND QUICKBOOKS PRO® FOR THE PARAPROFESSIONAL II

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): ACTG 190. Description: Intermediate accounting procedures for the paraprofessionals using QuickBooks and QuickBooks Pro on the computer. Students develop skills in accounts receivable, payroll, accounts payable, and inventory control for a merchandising company. Transfer: CSU.

ACTG 194 QUICKBOOKS® AND QUICKBOOKS PRO® FOR THE SMALL BUSINESS PERSON I

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): None. Description: Introduction to the financial accounting features of QuickBooks® and QuickBooks Pro®. Students learn how to develop an accounting system and gain experience processing information for businesses. Transfer: CSU.

ACTG 196 QUICKBOOKS® AND QUICKBOOKS PRO® FOR THE SMALL BUSINESS PERSON II

Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, ENGL 836 or ESL 400, and MATH 110 or 111; Prerequisite(s): ACTG 194. Description: Introduces students to the complex issues encountered when setting up a company and maintaining the system once the company is set up. More complex financial data input and report generation aspects of QuickBooks Pro® are introduced to enhance students' overall knowledge of many problems encountered with the program. Transfer: CSU.

ANTHROPOLOGY

ANTH 105 PEOPLES AND CULTURES OF THE WORLD

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: Comparative study of Eskimos, !Kung, the Mbuti, Efe, Akka, and Tswa peoples of Central Africa (formerly known as pygmy), the Yanomamo of the Amazon, the people of Micronesia, and Asmat and Dani of the New Guinea Highlands. Transfer: CSU: DSI, UC. (IGETC: 4)

ANTH 110 CULTURAL ANTHROPOLOGY (CAN ANTH 4)

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: Comparison of human behavior expressed in different cultures, religions, economies, personalities, kinship and families throughout the world. Also included is the analysis of methods and theories of anthropology. Transfer: CSU: DSI, UC. (IGETC: 4)

ANTH 125 PHYSICAL ANTHROPOLOGY (CAN ANTH 2)

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: Explores the field of Biological Anthropology emphasizing the evolution of the human species. Topics include: human heredity, mechanisms of evolutionary change, human variation, and the reconstruction of the fossil record and comparative studies of our closest biological relatives, the living monkeys and apes. Transfer: CSU: B2, UC. (IGETC: 5B)

ANTH 180 MAGIC, SCIENCE AND RELIGION

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: A cross-cultural study of preliterate societies' beliefs about the nature of reality, and their religious, scientific, and magical practices as a consequence of these beliefs. Primitive techniques for controlling both the natural and the supernatural. Transfer: CSU: DSI, UC. (IGETC: 4)

ANTH 350 INTRODUCTION TO ARCHAEOLOGY

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: An introductory course on the anthropological study of four million years of human biological evolution and the archaeological study of sociocultural adaptation. ANTH 110 is recommended. Transfer: CSU: DSI.

ANTH 360 INDIANS OF NORTH AMERICA

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 life-ways of North American Indian cultures in different geographical areas of North America. Emphasis is placed on cross-cultural comparisons of cultural and social phenomena including religious and world view systems, subsistence systems, and political systems. (Fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: DSI, UC. (IGETC: 4)

ANTH 370 OLMEC, MAYA, AZTEC PEOPLE AND CULTURES OF MEXICO AND CENTRAL AMERICA

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: Comparison of middle American civilization as developed through cultures such as Olmec, Zapotec, Mixtec, Maya, Toltec, and Aztec. Emphasis is placed on the analysis and evaluation of the developing Middle America, the impact of the Spanish conquest, the emergence of the mestizo, and the cultural influences still present. (Fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: DSI, UC. (IGETC: 4)

ARCHITECTURE

ARCH 110 BASIC ARCHITECTURAL DRAWING

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: Beginning program of planning and design for the family dwelling. Emphasis on architectural blueprint reading, floor plan design, home orientation, construction, local building codes, sketching and instrument drawing. Transfer: CSU.

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 HISTORY OF ART I (CAN ART 2)

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: Survey of the historical development of the visual arts from prehistory to the end of the middle ages, with an emphasis on architecture and sculpture. Themes to be developed include the discovery of materials and techniques, the evolution of architectural principles, conceptualism, idealism versus realism, how religious values are reflected in art, and the political uses of art. Transfer: CSU: C1, UC. (IGETC: 3A)

ART 102 HISTORY OF ART II

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: Survey of the historical development of the visual arts from the Proto-Renaissance to the end of the 17th century, with an emphasis on painting. Themes to be developed include classical revival, a comparison of Renaissance style north and south of the Alps, a comparison of Renaissance style among the important art centers of Italy, humanism, the influence of the Reformation, the evolution of perspective, the evolution of the nude figure, and lives of the artists. Transfer: CSU: C1, UC. (IGETC: 3A)

ART 103 HISTORY OF ART III

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: Survey of the historical development of the visual arts from the 18th century to the present, with an emphasis on painting. Themes to be developed include: art and revolution, historicism, the impact of industrialization and urbanism on the arts, the democratization of art, a comparison of official and avant-garde art, art criticism, the influence of photography, the relationships between American and European art, new materials and techniques, lives of the artists. 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 125 ASIAN ART FOR INTERIORS: CHINA AND KOREA (Also INTD 320)

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: Broad survey of historic and contemporary Asian art from China and Korea, including the influence of art design from China and Korea, the transfer to the United States and the contribution to interior design from these countries to the United States. (Partially fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: C1.

ART 126 ASIAN ART FOR INTERIORS: JAPAN AND SOUTHEAST ASIA (Also ART 321)

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: Broad survey of historic and contemporary Asian art from Japan and Southeast Asia, including the influence of the artists from Japan and Southeast Asia, their migration to the United States, and their contributions to interior design in their countries and the United States. (Partially fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: C1.

ART 127 ASIAN ART FOR INTERIORS: JAPAN, INDIA, AND THE PHILIPPINES (Also INTD 322)

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: Broad survey of historic and contemporary Asian art from Japan continued, India, the Philippines, and Persia, including the influence of the artists from Japan, India, the Philippines, and Persia, their migration to the United States, and their contributions to interior design in their countries and the United States. (Partially fulfills Associate degree Ethnic Studies requirement.) Transfer: CSU: C1.

ART 201 FORM AND COMPOSITION I

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 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)

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 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) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): ART 201 or 204. Description: This drawing class is a study of the human figure in which emphasis is placed on the underlying structure of the figure. Portraiture is covered as it relates to the representation of the head and body to reveal characterization. Transfer: CSU, UC.

ART 207 LIFE DRAWING

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 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)

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 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) 3; Class Hours: Minimum of 48 lecture/48 lab hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. **Description:** This course presents the fundamentals of non-objective two-dimensional organization through the use of concept (idea) as the point of departure. The separate and combined use of line, shape, color, texture, and space organization are exploited in the course projects. 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 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.

ART 356 INTRODUCTION TO 35mm PHOTOGRAPHY

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:** An introductory course in the use and handling of 35mm cameras and their related accessories. The course presents a thorough analysis of the operation of 35mm cameras, including f/stops, shutter speeds, interchangeable lenses, films available, and accessories for better photographs. Although no previous knowledge of cameras is necessary, students need to have access to a 35mm adjustable camera to complete the required assignments. Transfer: CSU.

ART 357 INTRODUCTION TO COLOR PHOTOGRAPHY

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): ART 356. **Description:** The course investigates the ingredient COLOR in its relationship to both photographic visualization and composition, exploring how color photographic materials "work" and how they translate reality into a final image. Students need to have access to a 35mm adjustable camera to complete the required assignments. Transfer: CSU.

ART 359 INTRODUCTION TO PHOTOGRAPHIC COMPOSITION

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): ART 356. Description: Photographic composition is studied to give photographers an understanding of the basic principles of design and visualization as they pertain to the field of photography. Both established masters in the medium and work submitted by students are analyzed. Students need to have access to a 35mm adjustable camera and possess understanding of camera operations to complete class assignments. Transfer: CSU.

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 representative organisms. Topics include development and behavioral biology, ecology, and population genetics. Transfer: CSU: B2, B3, UC. (IGETC: 5B*)

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; 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 including hardware, software, flow-charting, and programming in BASIC. Introductory units on the microcomputer and software packages (spreadsheets, word processing, database, and DOS commands) used in business are analyzed also. This course is designed to meet the requirements of the transfer business 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, and ENGL 836 or ESL 400; Prerequisite(s): MATH 110.

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)