

# COURSES

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## 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 801, ENGL 801, 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 802 and ENGL 800
- Level 2 Students must be eligible for READ 420 and ENGL 100
- Level 3 Students must be eligible for ENGL 110
- Math 2 Students must be eligible for MATH 111
- Math 3 Students must be eligible for MATH 110
- 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 801 (3 units) and READ 801 (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 802 (3 units) and ENGL 800 (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 (M2)

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).

#### Math 3 (M3)

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 PREREQUISITES 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 2003-2004. 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 SELECTED TOPICS (DEGREE/CERTIFICATE APPLICABLE, TRANSFERABLE)

*Units (Grade Option) 0.5-3; Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or 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 400; Prerequisite(s): Two previous courses in the discipline, or concurrent enrollment in the second course, and an overall 3.0 GPA in the department. 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 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.

### 699 INDEPENDENT SUPERVISED LEARNING LABORATORY

*Units 0; Class Hours: By Arrangement; Basic Skills Level: Same as concurrent course; Prerequisite(s): Student must remain concurrently enrolled in course in which projects are assigned. Description:* This course provides supplemental practice and/or instruction in a specific course for all students enrolled. Projects are assigned in the target course in which students are concurrently enrolled. General consultation and supervision are provided by the faculty member in charge.

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

*Units (Grade Option) 0.5-3; Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or 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)

*Units (Grade Option) 0.5-3; Class Hours: By Arrangement; Recommended: Eligibility for READ 836, and ENGL 836 or 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 400, and MATH 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 400, and MATH 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 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 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 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 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 400; Prerequisite(s): ACTG 100 or 121 (4 units) or equivalent and BUS. 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 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 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 400, and MATH 110; 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 400; Prerequisite(s): None. Description:* Comparative study of the Eskimo, Bushman of Africa, Mountain People of New Guinea, Pygmy, Yanomamo of Brazil, Peoples of Micronesia and other cultures of the non-industrialized world. Transfer: CSU, UC.

**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 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, UC.

**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 400; Prerequisite(s): None. Description:* Overview of the history of life on earth and the evolution of different life forms. Also addressed are the differences and similarities between humans and apes, fossils of and the behavior of human ancestors, the biological similarities and differences between men and women, and sociobiology. Transfer: CSU, UC.

**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 400; Prerequisite(s): None. Description:* A cross-cultural study of pre-literate 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, UC.

**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 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.

**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 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, UC.

**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*

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, UC.

## ARCHITECTURE

### ARCH 110 BASIC ARCHITECTURAL DRAWING

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or 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.

## 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 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.

### 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 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, UC.

### 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 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, UC.

### 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 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, UC.

### 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 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.

### 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 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.

### 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 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.

### 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 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.

### ART 148 COLOR FOR INTERIORS (Also INTD 148) (Banked effective Spring 2005)

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or 400; Prerequisite(s): None; Corequisite(s): Concurrent enrollment in INTD 699, two hours per week minimum. Description:* Basic color theories are applied to the visual control of interior space. Relationship and the effect of color as light and color as pigment on textiles, surface, and structural materials are examined. Students apply design attributes which affect the use of interior color composition to effect design solutions. Transfer: CSU.

**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, 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, 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 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, 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, 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 314 INTRODUCTION TO COMPUTER GRAPHICS**

*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 400; Prerequisite(s): None.* **Description:** This course provides an introduction to typography and graphic layout/design fundamentals, as well as digital desktop publishing skills and other computer graphic uses. As this is a fine arts course, students are encour-

aged to generate their own creative content for publication, as well as to design it. Participation in collaborative design processes with writers and organizations on or off-campus, as well as with classmates, is encouraged. Transfer: CSU.

#### **ART 325 DIGITAL PAINTING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or 400; Prerequisite(s): None. Description:* Using Procreate's Painter software and digital painting tablets, students use digital tools for the artistic expression of the concepts and techniques of traditional painting. Some painting and computer knowledge desirable. May be repeated twice for credit. 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 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 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 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.

#### **ART 361 DIGITAL VIDEO**

*Units (Grade Option) 3; Class Hours: Minimum of 32 lecture/16 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or 400; Prerequisite(s): None. Description:* This course covers the creation of short videos utilizing desktop video software. Techniques for the effective use of transitions, titles, story line, and artistic creativity are covered. Also covered are video file formats, digital video cameras, and digitizing analog video. The student is expected to produce a short video piece as a final project for transferring to VHS tape, compact disk, or publishing on the WEB. Transfer: CSU.

#### **ART 362 DIGITAL PHOTOGRAPHY**

*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 400; Prerequisite(s): None. Description:* An introduction to the theory and technology of digital photography. Exploration of the digital camera in both professional and consumer use. Techniques of taking a photograph, types of storage, transferring of images, image editing, and optimizing final output are evaluated. May be repeated once for credit. Transfer: CSU, UC\*.

#### **ART 368 WEB DESIGN 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 400; Prerequisite(s): None. Description:* This course teaches the fundamentals of creating a website through a mixture of hands-on exercises, lecture, and demonstration. Topics include site layout principles, a discussion of HTML, color and image preparation, for the web, browser compatibility, graphic user interface design, usability and internet ethics and copyright issues. Students build a basic website following accepted design layout standards. The class focuses on Dreamweaver®, but also uses Adobe Photoshop®, ImageReady® and a basic demonstration of Flash®. Transfer: CSU.

#### **ART 369 WEB DESIGN 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 400; Prerequisite(s): ART 368. Description:* Students learn advanced concepts and techniques to create elaborate and visually appealing websites. User centered design, graphic user interface customization, Internet ethics, and copyright issues are taught as well as a review of basic color, layout and typography theory and practice. Some HTML, JavaScript, and CGI concepts are demonstrated to incorporate some basic interactivity. This course is taught using Macromedia Dreamweaver®, Adobe Photoshop® and ImageReady®. Other software may be utilized. Transfer: CSU.

#### **ART 370 MULTIMEDIA FUNDAMENTALS**

*Units (Grade Option) 3; Class Hours: Minimum of 32 lecture/16 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or 400; Prerequisite(s): None. Description:* This course covers the history and development of multimedia. Students learn about new technologies, digital copyright issues, industry trends, job niches, content creation, and the creative process. The importance of graphic design in the creation of multimedia and the development of a creative and successful portfolio that takes advantage of different tools and media. Transfer: CSU.

**ART 372 DIGITAL ILLUSTRATION**

*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 400; Prerequisite(s): None. Description:* This course teaches the fundamentals of digital illustration with Adobe Illustrator, through a mixture of hands on exercises, lecture, and demonstration. Topics include design, layout, typography, and color principles, vector graphics versus raster graphics and project preparation for print. By the end of the class the student finishes at least five different kinds of projects ranging from promotional posters and business cards, to bottle labels and restaurant menus. Transfer: CSU.

**ART 373 DIGITAL AUDIO 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 400; Prerequisite(s): None. Description:* Introduction to digital audio production utilizing Digidesign's Pro Tools to familiarize students with diverse production techniques, most common file formats, and compression methods used in multimedia applications. The course focuses on digital audio for the web, CD-ROM based productions, and digital video projects. The fundamentals of digital audio theory, digital sound recording, editing, mixing, and encoding sound files are also covered. May be repeated once for credit. Transfer: CSU.

**ART 376 DIGITAL IMAGING 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 400; Prerequisite(s): None. Description:* An introduction to the theory and technology of digital imaging. Students work with digital images using Adobe Photoshop®. Students work with image correction tools and learn the toolset necessary to create and manipulate digital photographs, scanned images, and those files created directly in the computer. Students' images become part of a basic portfolio. Transfer: CSU, UC\*.

**ART 377 DIGITAL IMAGING 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 400; Prerequisite(s): ART 376. Description:* Using Adobe Photoshop® and other digital design software, students develop strategies for content development, visual cohesiveness and graphic production techniques. Topics include design, layout, typography, and color principles, vector graphics versus raster graphics and project preparation for print. The student creates projects ranging from promotional posters and business cards, to bottle labels and restaurant menus. Transfer: CSU, UC\*.

**ART 378 DIGITAL PAGE LAYOUT**

*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 400; Prerequisite(s): None. Description:* This is an introductory course in page layout for graphic design, using computers to design and layout text and graphics for publication. Through projects and assignments, students integrate sound design principles and desktop publishing skills. Both Macintosh and Windows environments are supported. Transfer: CSU.

**ART 379 DIGITAL ANIMATION I: FLASH®**

*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 400; Prerequisite(s): None. Description:* A project-based

course in which both traditional and digital animation techniques such as storyboarding and frame-by-frame animation are explored through the use of Macromedia Flash® as a medium for the development of creative computer-based animations. Other topics included in this course deal with the implementation of successful graphic user interface solutions for web design and stand-alone applications using the scripting capabilities of the software. May be repeated once for credit. Transfer: CSU.

**ART 389 MULTIMEDIA CAREERS**

*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): None. Description:* Introduction to the multimedia job market and employment niches. The class describes multimedia and the varied work environments including full time and contract opportunities, as well as job search techniques, resume and cover letter writing skills. Transfer: CSU.

**ART 390 PORTFOLIO CREATION**

*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 400; Prerequisite(s): None. Description:* Portfolio creation is the culminating course for those students interested in the various Certificates of Completion, Certificates of Proficiency, and Associate of Arts Degree in Multimedia. Students develop a portfolio consisting of work accomplished to date. The portfolio may be print based, web based or on CD following a format appropriate with the student's career/academic goals. The students also include a résumé that is appropriate for their field of interest and learn the skills necessary to conduct a successful job interview. May be repeated once for credit. 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, and ENGL 836 or 400, and MATH 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, UC.

**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 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, UC.

**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, and ENGL 836 or 400, and MATH 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, UC.

## 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 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, UC\*.

### 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 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.

### 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 400; Prerequisite(s): None. Description:* An introductory lecture/lab course designed for the non-biological sciences major and recommended for the lab science transfer requirement. This course stresses biological perspective and thought, classification of organisms and their evolution, ecology, energy exchange and life processes, reproduction, heredity and diversification. Transfer: CSU, UC.

### 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 400; Prerequisite(s): None. Description:* Study of biological principles using the human body as a model. The structure and function of the major organ systems are covered as well as some of their common diseases and the medical responses. Heredity and human development are also included. Transfer: CSU, UC.

### 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): None. Description:* This course is designed for biology majors and emphasizes the evolution, classification, biodiversity, ecology, population genetics, and structure and function of representatives of the various kingdoms of organisms. Population ecology, community ecology and behavioral biology are included topics and are examined from today's perspective. Transfer: CSU, 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, UC.

### 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 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, UC.

### 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 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, UC.

### 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 or 225 or 250 or 230 or 240; CHEM 192 or 210 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, UC.

### 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, and ENGL 836 or 400, and MATH 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, UC.