AHL 020F  HOME HEALTH AIDE FUNDAMENTALS  1.5 UNITS
Total Lecture: 27 hours
Prerequisite: Current CNA or eligibility for CNA examination
Corequisite: AHL 020G
Acceptable for credit: California State University
This course introduces the Certified Nurse Assistant (CNA) to the basic concepts of home care nursing. Students learn entry-level skills for employment as a home health aide. Successful completion of this course along with AHL 020G provides eligibility for a California Home Health Aide (HHA) certificate. Grade only.

AHL 914  MATH FOR HEALTH OCCUPATIONS  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903
This course is an introduction to math calculations for health occupations students. It provides the learner with the opportunity to explore the math functions within the health field. Students become competent with performing accurate calculations for the delivery of medications. Pass/No Pass Option.

ANTHROPOLOGY (ANT)

ANT 001  PHYSICAL ANTHROPOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
The course introduces the concepts, methods of inquiry, and scientific explanation for biological evolution and its application to humans. It examines the evolution of human biology and behavior, theories of human origins, principle of evolution, genetics, human variation, bio-cultural adaptations, prehistoric humans, and primate behavior. The scientific method serves as the foundation for this course. This course may be offered via distance learning. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

ANT 003  INTRODUCTION TO CULTURAL ANTHROPOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is the study of cultural and social behavior as developed through the anthropological study of contemporary peoples. It includes a comparative study of the range of cultures of the world with emphasis on social organization, economics, religion, kinship systems, cultural patterns, values and ethics, and ecology. This course may be offered via distance learning. Pass/No Pass Option. CSUGE: D; IGETC: 4.

ANT 055  MAGIC, WITCHCRAFT, AND RELIGION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
A cross-cultural study of beliefs and practices dealing with the supernatural. Using the major theoretical approaches of anthropology, the student will study the cultural context in which each belief and practice is found, including ritual, symbolism, totems, magic, myth, witchcraft, and pantheism. The cultural function of individual experiences, such as altered states of consciousness, development of a “belief” system, and revitalization are explored. This course may also be offered via distance learning. Pass/No Pass Option. CSUGE: D; IGETC: 4.

ART (ART)

ART 001A  SURVEY OF WESTERN ART I  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a chronological survey of painting, sculpture and architecture in Western civilization from Prehistoric through Medieval times. Works of art are viewed within their historical, religious, political, and social context. A museum field trip is required. Pass/No Pass Option. C-ID # ARTH 110. CSUGE: C1; IGETC: 3A.

ART 001B  SURVEY OF WESTERN ART II  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a chronological survey of western painting, sculpture and architecture from the Renaissance to Modern times. Works of art are viewed within their historical, religious, political, and social context. The course consists of illustrated lectures and discussion. A museum field trip is required. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

ART 001D  ART OF THE 20TH CENTURY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a general survey of painting, sculpture, and architecture in the Western World, from the Impressionists to the present day, emphasizing the evolution of style and content. The course consists of illustrated lectures and discussion. A museum field trip is required. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

APPRENTICESHIPS

PLEASE REFER TO COURSES IN THE FOLLOWING APPRENTICESHIPS FOUND ALPHABETICALLY IN THE CATALOG.

HVAC (HVC)
PLUMBING (PLM)
TRANSPORTATION (TRN)

ARABIC (ARB)

ARB 001  FIRST SEMESTER ARABIC  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
Arabic 001 is a first-semester introductory course that introduces fundamental concepts of standard Arabic. Comprehension of both written and spoken Arabic is covered, as well as related cultural topics. This course is designed for the beginner. All four language skills (listening, speaking, reading, and writing) are introduced in a cultural context. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

ARB 002  SECOND SEMESTER ARABIC  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
Arabic 002 is the 2nd-semester course which continues to develop the fundamental concepts of Arabic 001, while emphasizing listening and reading comprehension, grammar and oral production and writing skills in standard Arabic. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

TEXT END
ART 004  ART APPRECIATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course offers a study of the themes and purposes, elements of style and principles of design, techniques and media, and terminology of the visual arts as a form of communication. Works of art from many different time periods and cultures are discussed and analyzed. The course consists of illustrated lectures and discussions. A museum field trip is required. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

ART 007  SURVEY OF ASIAN ART  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a general survey of the painting, sculpture, architecture and minor arts from prehistoric times to the present day in India, China, Korea, Japan, and Southeast Asia, emphasizing aesthetic, cultural and historical values. Pass/No Pass Option. C-ID # ARTS 100. CSUGE: C1; IGETC: 3A.

ART 011  THE HISTORY OF MODERN DESIGN  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This introductory survey course focuses on the history, perception and development of design as an art form during the Twentieth Century. The students develop an understanding of the evolution and role of the Modern Movement in society. The students also learn about the evaluation criteria of two-dimensional and three-dimensional design objects while examining examples of architecture, industrial design, graphic design and interior design. The students are introduced to outstanding Twentieth Century design figures and their work. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

ART 031A  BEGINNING DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This is a beginning drawing course for students with no previous drawing experience. Students work from observation, directed toward realistic rendering of objects through line, shading, pictorial composition and perspective. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 110. CSUGE: C1.

ART 031B  INTERMEDIATE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A
Acceptable for credit: University of California, California State University
This is an intermediate course for students with previous college-level drawing experience. This course emphasizes refinement of drawing skills and in-depth concentration on composition and color. Pass/No Pass Option. C-ID # ARTS 205.

ART 033A  BASIC DESIGN: TWO-DIMENSIONAL  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the principles and elements of two-dimensional design and composition. Materials Fee. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 100. CSUGE: C1.

ART 033B  BASIC DESIGN: THREE-DIMENSIONAL  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 033A
Acceptable for credit: University of California, California State University
This course introduces students to the elements and principles of design as they apply to three-dimensional forms. Emphasis is on structure and materials appropriate to three-dimensional problems, and contemporary attitudes in design. Materials Fee. Pass/No Pass Option. C-ID # ARTS 105.

ART 033C  BASIC DESIGN: COLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 033A
Acceptable for credit: University of California, California State University
This course is an introduction to the principles and elements of color. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 270.

ART 034A  INTRODUCTION TO DIGITAL ART  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: ART 031A
Acceptable for credit: University of California, California State University
This course is an introductory computer art course. The course introduces students to microcomputers and visual design software. Applications that manipulate flat images and 3D space are explored. This course introduces the student to basic design elements and principles. Linear perspective is covered, and projects that focus on line, shape, form, the illusion of deep space, and color are pursued. Students learn the basic procedures needed to use computers and related peripheral devices. Pass/No Pass Option. CSUGE: C1.

ART 034B  ADVANCED DIGITAL ART  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 034A
Acceptable for credit: University of California, California State University
This is an advanced course combining computer graphics and fine arts image processing. The course utilizes micro-computers to create and manipulate images. It introduces the student to advanced concepts and principles. Specific projects are executed related to unity, variety, rhythm/pattern, color, movement, balance, computer particle animation and 3D modeling techniques. Students learn techniques for file management and data backup and recovery, and peripheral devices as creative tools for the artist. This course is approved for credit by exam. Pass/No Pass Option.

ART 035A  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A
Acceptable for credit: University of California, California State University
This course is a fundamental study of the human figure as the main subject matter of drawings and its use as a means of artistic expression. Pass/No Pass Option. C-ID # ARTS 200. CSUGE: C1.

ART 035B  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035A
Acceptable for credit: University of California, California State University
This course is a low intermediate study of the human form and structure. It emphasizes creative interpretation and use of the human form for artistic expression. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.

ART 035C  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035B
Acceptable for credit: University of California, California State University
This course is a high intermediate study of the human form and structure. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.

ART 035D  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035C
Acceptable for credit: University of California, California State University
This course is an advanced study of the human form and structure. It emphasizes creative interpretation and use of the human form for artistic expression. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.
ART 039A  SURVEY OF PRINTMAKING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
Course covers various techniques and media used in fine art printmaking. It explores the use of the etching press as well as other transfer tools used in making the printed image. In addition, the course explores the development of printing plates, i.e., intaglio, monotype, collograph and others. Media includes both water-based inks as well as the more traditional oil based inks and paints. This course is approved for credit by exam. Pass/No Pass Option.

ART 047A  WATERCOLOR  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
This course is an introduction to painting using various waterbase media, with a focus on color mixing, composition, and content. This course is approved for credit by exam. Pass/No Pass Option.

ART 047B  WATERCOLOR  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 047A  
Acceptable for credit: University of California, California State University  
This course provides continuing instruction in watercolor techniques, exploration of watercolor styles, and personal development of the student's artistic direction. This course is approved for credit by exam. Pass/No Pass Option.

ART 047C  WATERCOLOR  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 047B  
Acceptable for credit: University of California, California State University  
This course is high intermediate level painting with various water base media. This course is approved for credit by exam. Pass/No Pass Option.

ART 047D  WATERCOLOR  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 047C  
Acceptable for credit: University of California, California State University  
This course is an introduction to the watercolor medium. Students explore water-based media, principles of color, transparency, masking techniques, and composition. This course is approved for credit by exam. Pass/No Pass Option.

ART 048A  AIRBRUSH Painting  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 031A or ART 033C  
Acceptable for credit: University of California, California State University  
This course is an introduction to the airbrush as a painting tool. Students learn the physical properties of clay and other ceramics materials, ceramic decorative techniques, 2-dimensional and 3-dimensional design, and use this knowledge to express themselves creatively. Materials Fee. Pass/No Pass Option.

ART 048B  AIRBRUSH Painting  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 048A  
Acceptable for credit: University of California, California State University  
This course is low intermediate studio practice which focuses on strengthening the basic skills learned in ART 048A. Emphasis is placed upon self-expression, composition, and color theory. This course is approved for credit by exam. Pass/No Pass Option.

ART 048D  AIRBRUSH Painting  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 048C  
Acceptable for credit: University of California, California State University  
This course is advanced studio practice which focuses on advanced techniques and portfolio development. This course is approved for credit by exam. Pass/No Pass Option.

ART 049A  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 049A  
Acceptable for credit: University of California, California State University  
This course is a low intermediate level painting with various water base media. This course is approved for credit by exam. Pass/No Pass Option.

ART 049B  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 049B  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 049C  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 049C  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 049D  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 049D  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 050A  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 050A  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 050B  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 050B  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 050C  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 050C  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 050D  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 050D  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 051A  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 051A  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 051B  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 051B  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 051C  PAINTING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 051C  
Acceptable for credit: University of California, California State University  
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.
ART 065D  CERAMICS - HANDBUILDING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 065C  
Acceptable for credit: University of California, California State University  
This course introduces students to those basic skills and techniques of the potter's wheel needed to create a variety of ceramic forms. Instruction includes clay and glaze formulation, construction, and stacking and firing of ceramic kilns. Students develop aesthetic awareness of three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 067A  CERAMICS-POTTER'S WHEEL  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 067A  
Acceptable for credit: University of California, California State University  
This course introduces students to those basic skills and techniques of the potter's wheel needed to create a variety of ceramic forms. Instruction includes clay and glaze formulation, construction, and stacking and firing of ceramic kilns. Students develop aesthetic awareness of three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 067B  CERAMICS-POTTER'S WHEEL  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 067B  
Acceptable for credit: University of California, California State University  
ART 067B focuses on building high-intermediate technical skills in working with the potter's wheel. Pass/No Pass Option.

ART 067C  CERAMICS-POTTER'S WHEEL  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 067C  
Acceptable for credit: University of California, California State University  
ART 067C focuses on building high-intermediate technical skills in working with the potter's wheel. Pass/No Pass Option.

ART 067D  CERAMICS-POTTER'S WHEEL  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 067D  
Acceptable for credit: University of California, California State University  
This course introduces students to those basic skills and techniques of the potter's wheel needed to create a variety of ceramic forms. Instruction includes clay and glaze formulation, construction, and stacking and firing of ceramic kilns. Students develop aesthetic awareness of three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 075A  METALSMITHING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Advisory: ART 033A, ART 033B or demonstrated subject/skills proficiency  
Acceptable for credit: California State University  
This course is a studio course which introduces students to the elements of design and metalsmithing techniques used in the creation of metal objects. Problems involve those concepts specific to the potential of metal, i.e., structure, surface, color, function, etc. Materials Fee. Pass/No Pass Option.

ART 075B  METALSMITHING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART075A  
Acceptable for credit: California State University  
This course is a studio course in which students continue to apply the elements of design and metal-smithing techniques to the creation of metal objects. Problems involve those concepts specific to the potential of metal, i.e., structure, surface, color, function, etc. Materials Fee. Pass/No Pass Option.

ART 075C  METALSMITHING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 075B  
Acceptable for credit: California State University  
ART 075C is an advanced course in metalsmithing that provides students with an opportunity to build on skills learned in previous course levels and explore new techniques. Topics may include advanced techniques in jewelry casting, metal sculpture construction, and color on metal. Pass/No Pass Option.

ART 075D  METALSMITHING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 075C  
Acceptable for credit: California State University  
This course is an advanced course in metalsmithing which focuses on different aspects of course content from previous levels. Students are provided with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

ART 078A  FURNITURE DESIGN AND WOODWORKING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Advisory: ART 033A or ART 033B  
Acceptable for credit: California State University  
This course develops basic technical skills in furniture design, construction and finishing. The emphasis is on individual design and innovative use of materials in the construction. Materials Fee. Pass/No Pass Option.

ART 078B  FURNITURE DESIGN AND WOODWORKING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 078A  
Acceptable for credit: California State University  
This course introduces more advanced techniques and design skills in furniture construction. The students develop individual and/or group projects under the direction of the instructor, focusing on special aspects of furniture and woodworking. Materials Fee. Pass/No Pass Option.

ART 078C  FURNITURE DESIGN AND WOODWORKING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 078B  
Acceptable for credit: California State University  
ART 078C is an advanced woodworking class which involves furniture construction techniques and equipment not covered in previous levels. Topics include advanced cabinetry techniques and complex joinery. Pass/No Pass Option.

ART 078D  FURNITURE DESIGN AND WOODWORKING  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Prerequisite: ART 078C  
Acceptable for credit: California State University  
ART 078D is an advanced course in woodworking and furniture design. Fourth in the series, this course allows students to work independently to continue to refine previously mastered design and technical skills, and to prepare for careers in the industry. Pass/No Pass Option.

ART 085A  SCULPTURE  3.0 UNITS  
Total Lecture: 36 hours, Total Lab: 54 hours  
Advisory: ART 031A or ART 033A  
Acceptable for credit: University of California, California State University  
This course is an introductory course in sculpture emphasizing individual expression. Subtractive, additive and fabrication techniques including modeling, casting and carving are covered. Utilizing clay, wood, plaster and metal are covered as well. Materials Fee. Pass/No Pass Option.
ART 085B SCULPTURE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 085A
Acceptable for credit: University of California, California State University
This course builds on skills and concepts learned in ART 085A, and introduces new techniques. Students explore the development of a personal style of sculpture design. Materials Fee. Pass/No Pass Option.

ART 085C SCULPTURE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 085B
Acceptable for credit: University of California, California State University
This course focuses on different aspects of sculpture providing students with an opportunity to build on previous experience and explore new techniques. ART 085C focuses on different aspects of course content with supervised participatory experience. Materials Fee. Pass/No Pass Option.

ART 085D SCULPTURE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 085C
Acceptable for credit: University of California, California State University
This course focuses on different aspects of sculpture providing students with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

ART 088A METAL SCULPTURE CASTING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: ART 085A or ART 033B
Acceptable for credit: California State University
This course is a basic course in metal sculpture casting. Students develop skills in lost wax and lost styrofoam techniques with an emphasis on three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 088B METAL SCULPTURE CASTING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 088A
Acceptable for credit: California State University
This course is a study of the metal casting process which introduces new techniques and skill-building assignments, as well as development of a personal form. Materials Fee. Pass/No Pass Option.

ART 088C METAL SCULPTURE CASTING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 088B
Acceptable for credit: California State University
This course focuses on different aspects of metal sculpture casting. It provides students with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

BIO 001A GENERAL BIOLOGY: CELLS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001A and BIO 010 or BIO 111, and MAT 000C, MAT 000CM, high school algebra 2 with a C or better, or equivalent.
Acceptable for credit: University of California, California State University
This course is a comprehensive introduction to cell and molecular biology, and is designed for students pursuing degrees in biology or professional programs such as medicine or pharmacy. Topics addressed in lecture and lab include biochemistry, the structure and function of prokaryotic and eukaryotic cells, cellular metabolism, and prokaryotic and eukaryotic gene expression and regulation. This course may be offered via distance learning. Grade only. C-ID # BIOL 130S, BIOL 130S. CSUGE: B2, B3; IGETC: 5B, 5C.

AST 003 ASTRONOMY WITH LAB 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: MAT 903
Acceptable for credit: University of California, California State University
This course covers the entire panorama of the universe from the observations of the night sky to the origin and structure of the planets, stars, galaxies and the universe. The laboratory portion of the course includes practical experience with the methods of astronomy using computers and other equipment. Students cannot get credit for both AST 003 and AST 003H. Enrollment in the Honors Transfer Project is required. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.

AST 004 · ASTROBIOLOGY - LIFE IN THE UNIVERSE 3.0 UNITS
Total Lecture: 54 hours
Acceptable for Credit: California State University, University of California
This course applies the disciplines of astrophysics, biology, chemistry, geology, and planetary science to the possibility of life in the Universe outside of the Earth. Students study the astronomical, geological and physical environmental factors that determine habitability. Students further consider the chemical basis for life, the origin and evolution of life on Earth, the constraints of life on Earth, and the markers of life that may be seen in other places in the solar system. Pass/No Pass Option.

ASTRONOMY (AST)

AST 001 ASTRONOMY 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a descriptive astronomy lecture only course covering the entire panorama of the universe, including early human observations, the origin and structure of the solar system, and the properties, origin and evolution of stars, galaxies and cosmology. Grade only. CSUGE: B1; IGETC: 5A.

AST 003H ASTRONOMY WITH LAB – HONORS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course covers the entire panorama of the universe from the observations of the night sky to the origin and structure of the planets, stars, galaxies and the universe. The laboratory portion of the course includes practical experience with the methods of astronomy using computers and other equipment. Students cannot get credit for both AST 003 and AST 003H. Enrollment in the Honors Transfer Project is required. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.

BIOLOGICAL SCIENCES (BIO)

BIO 001A GENERAL BIOLOGY: CELLS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001A and BIO 010 or BIO 111, and MAT 000C, MAT 000CM, high school algebra 2 with a C or better, or equivalent.
Acceptable for credit: University of California, California State University
This course is a descriptive introduction to cell and molecular biology, and is designed for students pursuing degrees in biology or professional programs such as medicine or pharmacy. Topics addressed in lecture and lab include biochemistry, the structure and function of prokaryotic and eukaryotic cells, cellular metabolism, and prokaryotic and eukaryotic gene expression and regulation. This course may be offered via distance learning. Grade only. C-ID # BIOL 130S, BIOL 130S. CSUGE: B2, B3; IGETC: 5B, 5C.