**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.

**ART 091  DIRECTED STUDIES  1.0 UNITS**
Total Lab: 54 hours
Students may apply for Directed Studies in any art or art history course currently offered, provided they have successfully completed the first year of the course applied for and obtain consent of the instructor. Directed Studies course unit credit to be determined by the instructor based on the student’s objectives. This course is approved for credit by exam. 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 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. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.

**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.

**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 as well as outside of the solar system. Pass/No Pass Option.

## 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 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.