

# ASTRONOMY (ASTR)

## ASTR 102 3.0 UNITS

### Introductory Astronomy: Stars and the Universe

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course is a non-technical introduction to astronomy, with emphasis on stars, galaxies, and the origin and evolution of the universe. Topics include the nature of light, the atom, and telescopes; the birth, evolution, and death of stars; the Milky Way Galaxy; normal, active, and cannibal galaxies; and the Big Bang model.

Transfer Credit: CSU; UC\*

\*UC: credit limits may apply. ASTR 102 and ASTR 103 combined: maximum credit, one course.

## ASTR 103 3.0 UNITS

### Introductory Astronomy: The Solar System

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course is a non-technical introduction to astronomy, with emphasis on the sun, planets, moons, and smaller bodies which make up the solar system. Topics include the nature of light, the atom, telescopes, an examination of the planets and their moons and rings, the origin of the solar system, comets, asteroids, and meteors, catastrophic events, and the search for planets around other stars.

Transfer Credit: CSU; UC\*

\*UC: credit limits may apply. ASTR 102 and ASTR 103 combined: maximum credit, one course.

## ASTR 104 3.0 UNITS

### Life in the Universe

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course is a non-technical introduction to the theory of the origin of life in the universe with emphasis on the origin of terrestrial life in the solar system. Topics include the laws of nature, the double helix of life, the origin of the DNA (Deoxyribonucleic Acid) strand, the proliferation of carbon based life forms, speculation on the nature of non-carbon based life, the evolution of intelligence, and the search for extraterrestrial life.

Transfer Credit: CSU; UC

## ASTR 105L 1.0 UNITS

### Observational Astronomy

Class Hours: 3.0 Laboratory

Total Contact Hours: 54 Laboratory

Prerequisite: ASTR 101 or ASTR 102 or ASTR 103 or ASTR 104 or ASTR 106 or equivalent with a grade of "C" or higher or "Pass" or concurrent enrollment.

This is a laboratory course in practical astronomical observations and studies designed for the student with an interest in the use of telescopes and instruments. An opportunity will be provided for additional study as a supplement to the lecture course. Occasional evening observing sessions are required.

Transfer Credit: CSU; UC

## ASTR 106 3.0 UNITS

### History of Astronomy

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course explores humanity's changing view of the cosmos and its place in that cosmos from the earliest times to the present. Topics include comparative cosmologies of ancient culture, the Copernican revolution, the Enlightenment, and the modern view of the universe developed over the last two centuries. Course work includes readings about figures and projects using models of historic instruments.

Transfer Credit: CSU; UC

## ASTR 298 1.0 UNITS

### Directed Studies

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.

Transfer Credit: CSU

## ASTR 299 2.0 UNITS

### Directed Studies

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (2 units for 108 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.

Transfer Credit: CSU