

Astronomy

ASTRONOMY

Joseph Gorga, Dean
Physical Sciences and Engineering Division
Physical Sciences Building, Room 263

Possible career opportunities

Considered a branch of physics, astronomy is really a marriage of the physical sciences from planetary science and atmospheric science, to physics and chemistry. Study in astronomy prepares students for careers in scientific research, systems analysis and engineering, as well as software engineering and development. More than two years of college study is usually required.

ASTRO-110 The Visible Universe

3 units LR

- 54 hours lecture per term
- Recommended: MATH-090 and eligibility for ENGL-122 or equivalents

This course covers fundamental concepts in astronomy and observational techniques including selected mathematical concepts used in developing an understanding of celestial motions and coordinate systems and their importance to humanity. The planetarium sky provides students with the opportunity to observe concepts presented in class. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-120 Elementary Astronomy

3 units LR

- 54 hours lecture per term
- Recommended: MATH-090 or MATH-090SP or MATH-090E or one year of high school algebra or equivalent and MATH-114 and eligibility for ENGL-122 or equivalents

This course presents an introduction to an elementary mathematical approach to the solving of problems relating to solar and stellar systems. Properties and evolution of stars and galaxies as well as their role in the evolution of the universe will be the major emphasis. Instrumentation used for and the analysis of electromagnetic radiation will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-128 The Universe for Beginners

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Recommended: MATH-090, and eligibility for ENGL-122 or equivalents

This course provides an overview of our current state of knowledge concerning the universe and the methods astronomers use to arrive at their conclusions. Students will observe the sky and physical phenomena and will solve astronomical problems to solidify their knowledge and skills. The internet will be used extensively. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-130 Astronomy Laboratory

1 unit LR

- 54 hours laboratory per term
- Prerequisite: ASTRO-110 or 120 or equivalent (may be taken concurrently)

The laboratory course presents the study of the fundamentals of astronomy and includes investigations of the sun, moon, planets, stars and galaxies. Telescopes and other instruments are used by students to gather data. Students analyze data they have collected as well as that collected by others. CSU, UC

ASTRO-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ASTRO-299 Student Instructional Assistant

.5-3 units SC

- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU