

ASTRONOMY

Program Purpose: Students who complete Astronomy courses will be able to identify, compare and contrast physical properties of astronomical objects; visualize the general structure and scale of the universe and our place within it; locate, identify and contrast prominent astronomical objects in the night sky; identify, comprehend and interpret elementary equations used in astronomy; and understand basic astronomical tools.

Astronomers use the principles of physics and mathematics to answer questions about the fundamental nature of the universe and about celestial bodies such as the sun, moon, planets, and stars. They may apply their knowledge to problems in navigation and space flight.

AST M01 An Introduction to Astronomy 3 Units

In-Class Hours: 52.5 lecture

Surveys the origins, history, and accomplishments of the science of astronomy. Covers observational astronomy, light, telescopes, the solar system, stars, galaxies, and cosmology.

Advisories/Rec Prep: MATH M01 or equivalent

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: A2

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B1

IGETC: 5A

AST M01L An Introduction to Astronomy Laboratory 1 Unit

In-Class Hours: 52.5 laboratory

Prerequisites: AST M01 or concurrent enrollment

Reinforces principles and techniques of observational astronomy through the use of telescopes, star charts, and other common devices to observe and measure positions. Includes locating the moon, constellations, planets, stars, and other galactic and extragalactic sources.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: A2

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B3

IGETC: 5C

AST M80 Internship in Astronomy 1-4 Units

In-Class Hours: 75-300 paid cooperative

Prerequisites: Completion of or concurrent enrollment in one course in the discipline and instructor approval

Provides on-the-job learning to develop effective work habits, attitudes, and career awareness in paid or unpaid internships that are related to the discipline. Involves the development and documentation of learning objectives and the completion of an internship paper, presentation, or project. Includes both workplace supervisor and faculty adviser feedback and/or written evaluations. Course Credit Limitation To take this course, contact the Career Transfer Center. Requires orientation session. Students receive one unit of credit for each 60 hours unpaid or 75 hours paid work. May enroll in up to 4 units a semester with a maximum of 16 total units of any type of work experience.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Repeatable for Credit: Course may be taken up to 3 times for credit.

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AST M122 Independent Study - Astronomy 0.5-3 Units

In-Class Hours: 26.25-157.5 laboratory

Prerequisites: Completion of one course in Astronomy and instructor approval

Allows independent study for students who wish to extend their knowledge of a particular area of Astronomy through research and study. Utilizes an approved independent project. Includes one-on-one work with instructor. Interested students should contact an Astronomy instructor for assistance in developing a contract for learning about a specific topic.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

Dean

Robert Cabral, Phone (805) 378-1572

Faculty

Erik Reese, Charles (Rick) Edwards

Counselors

Daniel Aguilar, Chuck Brinkman, Trevor Hess, Samantha Zaldivar