

## Courses in Astronomy

### ASTR 005 - Exploring the Cosmos

Survey of ancient astronomy, planets and moons, stars and their evolution, galaxies and quasars, and Big-Bang cosmology. Includes night sky observations.

Credits: 3

### ASTR 023 - Astr Lab I: Measuring the Sky

Measurements of the properties of the planets, stars, and galaxies using graphical analysis, computer simulations and photographs. Prerequisites: Concurrent enrollment or credit in ASTR 5.

Credits: 1

### ASTR 024 - Astronomy Lab II: Imaging Sky

Sky observations using binoculars, optical and radio telescopes. Observations are recorded with drawings, photographic film, and digital imaging devices. Some dark room work. Prerequisites: Concurrent enrollment or credit in ASTR 5.

Credits: 1

### ASTR 057 - Hist/Pract Ancient Astronomy

A cross-cultural survey of astronomical practices of ancient peoples. Sky watching, time reckoning and calendar making. Constellations, astrological practices, and planetary theories. Prerequisites: ASTR 5 or other introductory science course.

Credits: 3

### ASTR 095 - Special Topics

See Schedule of Courses for specific titles.

Credits: 1 to 18

### ASTR 096 - Special Topics

See Schedule of Courses for specific titles.

Credits: 1 to 18

### ASTR 153 - Moons & Planets

Celestial mechanics, formation of the stars, and planetary materials. Planets, satellites, asteroids, meteors, and comets. Planetary surfaces, interiors, and atmospheres. Origins of life. Prerequisites: ASTR 005; MATH 010 or equivalent.

Credits: 3

### ASTR 155 - The Big Bang

Ancient cosmologies, beginning of time, origin of matter, cosmic background radiation, antimatter and dark matter, the expanding universe and origin of structure. Prerequisites: ASTR 005; MATH 010 or equivalent.

Credits: 3

### ASTR 157 - Stars & Galaxies

Instruments and observations. Stars and their evolution. Black holes and compact objects. The interstellar medium. Relativity and galactic structure and galaxy formation. Prerequisites: ASTR 005; MATH 010 or equivalent.

Credits: 3

### ASTR 177 - Spacecraft Astronomy

Survey of recent astronomical satellites such as Hubble, Chandra and Fermi LAT; their design, orbital characteristics and findings. Prerequisites: ASTR 005; MATH 010 or equivalent.

Credits: 3

### ASTR 195 - Intermediate Special Topics

See Schedule of Courses for specific titles.

Credits: 1 to 18

### ASTR 196 - Intermediate Special Topics

See Schedule of Courses for specific titles.

Credits: 1 to 18

### ASTR 257 - Modern Astrophysics

(Same as Physics 257) Prerequisite: One 100-level course in physical science or engineering.

Credits: 3

### ASTR 295 - Advanced Special Topics

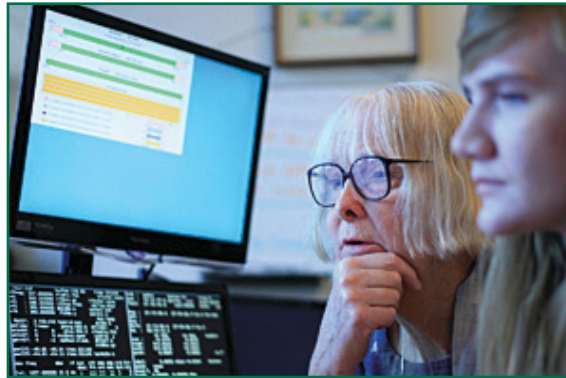
See Schedule of Courses for specific titles.

Credits: 1 to 18

### ASTR 296 - Advanced Special Topics

See Schedule of Courses for specific titles.

Credits: 1 to 18



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For More Information,  
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*Arecibo Radio Telescope.*

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