

ASTR 250 : Observational Astronomy

An introduction to the tools and techniques of observational astronomy: astronomical time and coordinate systems, photometric systems and magnitudes, principles of telescopes and their operation, introduction to modern astronomical instruments, analysis of astronomical data. Includes planetary, solar and stellar observations.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Student should have operational familiarity with high school algebra and basic trigonometry.

Prerequisites

Credit for ASTR 110; or ASTR 180 and ASTR 181

Course Outcomes

- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.
- Describe the primary functions of an astronomical telescope and major detectors, such as spectrometers and photometers.
- Apply basic principals in planetary remote sensing and image processing.
- Outline astronomical techniques involved in observing planetary and stellar objects, such as variable stars, asteroids and the Sun and Moon.
- Compare and contrast the research involved in optical, radio, infrared and cosmic ray astronomy.
- Use appropriate techniques to analyze astronomical data.