

AST 103: Introduction to Astronomical Observing

This course is an introduction to astronomical observing, focusing on the study of the night sky with telescopes and other astronomical equipment. Topics covered include the use and application of small aperture telescopes and binoculars, star charts, constellation identification, celestial coordinate systems, solar and sidereal time systems, astronomical software, naked-eye observing, and deep-sky observational techniques. The college planetarium, computer labs, and observing decks are used extensively. Several evening meetings are scheduled for observational work. Two lecture hours per week.

Course Student Learning Outcomes

- 1. Define terms used in observational astronomy.
- 2. Find and identify bright stars and constellations.
- 3. Explain the motions of the sky and its celestial contents.
- 4. Use binoculars and small telescopes to find objects in the night sky.
- 5. Use star charts and planispheres to locate celestial objects.
- 6. Describe the properties of telescopes and basic optical systems.
- 7. Sketch and otherwise record astronomical phenomena in detail.
- 8. Find, identify, and observe non-stellar objects such as planets and their moons.
- 9. Describe astronomical time systems and their use.

1

1. Distinguish between different types of astronomical objects such as planets, stars, nebulae, clusters, and galaxies.

Credits: 2 Program: Astronomy