AST 111: Introduction to Astronomy: The Solar System

This course is a descriptive and conceptual Introduction to Astronomy with a focus on our Solar System. The course is divided into two parts. In the first part, topics such as the History of Astronomy; Patterns in the Night Sky; Gravity and Orbits, and Tools of the Astronomer are covered. In the second part of the course, topics include: Solar System Formation; Terrestrial Planets (Atmospheres, Geology, and possibilities for Life); The Gas Giants; Moons and Rings; Asteroids (including Kuiper Belt and Oort Cloud); Meteors and Comets; and Dwarf Planets. Current events topics will also be interwoven into the course. The laboratory portion of this course consists of computer-based exercises, home-based Astronomical observations, and, when possible, campus-based sky-gazing and Planetarium use. Pre-requisite: High School Science and Introductory Algebra Competency or the equivalent recommended. Three class hours and two laboratory hours per week. Instructional Support Fee applies. Gen Ed. Competencies met: Scientific Reasoning and Discovery.

Course Student Learning Outcomes

1. Students will demonstrate their knowledge of basic facts, principles, theories, and methods of a modern science, astronomy, as well as its relevance to modern culture and society. 2. Students will recognize the physical processes and dynamics that shape the solar system and its contents. 3. Students will be able to describe the characteristics of objects within the solar system including the Sun, planets, moons, asteroids, and comets. 4. Students will learn key events in the history of science; with particular emphasis on astronomy, as well as some of the latest results in the field.
Credits: 4
Program: Astronomy