# **AST - ASTRONOMY**

### AST 1002 Introduction to Astronomy

Credit Hours: 3

General Education Category: Natural Science Core Course, Natural Science General Ed

This course provides a comprehensive look at modern astronomy, emphasizing the use of the scientific method and the application of physical laws to understand the Universe including Earth and its environment. Throughout this course, students will develop the ability to discern scientific knowledge from non-scientific claims by using critical thinking. This is a state-designated general education core course.

# AST 1002H Honors Introduction to Astronomy

Credit Hours: 3

**Prerequisites:** Admission to EFSC Honors program **General Education Category:** Natural Science Core Course, Natural Science General Ed

This course provides a comprehensive look at modern astronomy, emphasizing the use of the scientific method and the application of physical laws to understand the Universe including Earth and its environment. Throughout this course, students will develop the ability to discern scientific knowledge from non-scientific claims by using critical thinking. This is an honors course and a state-designated general education core course.

# AST 2005 Introduction to Astrobiology

## Credit Hours: 3

Introduction to the interdisciplinary principles of astrobiology, an inquirybased evaluation of potential alien ecosystems and extraterrestrial life within the context of their origins on Earth. Establishes the structure, interactions, and limits of biology in various Earth environments, proposing analogues of suitable conditions relative to past and contemporary discoveries involving the habitability of Mars, Venus, and Jovian planet satellites. Features a survey of remote sensing, biosignatures, and relative planetary, astronomical, and biological requites for the development and maintenance of a biosphere. This overview includes habitable zones, solar, physical, atmospheric, bio-geological, and chemical parameters employed in the search for life and hospitable worlds within and beyond the solar system.

### AST 2948 Service Learning Field Studies 1 Credit Hours: 1

This course gives the student the opportunity to understand the relationship of theory to practice through participation in a service-learning experience. Students are required to complete 20 hours of volunteer work, a service-learning contract, and an oral and written reflection of the experience.