

ASTRONOMY (AST)

AST 201 General Astronomy (3 Credits)

General overview of the astronomical sciences at the college physics level. The night sky, the Earth-Moon system, the solar system, the Milky Way galaxy, the system of galaxies and Cosmology. Instructional methods include lectures, multimedia presentations and exercises.

AST 301 Methods in Observational Astronomy (3 Credits)

This course teaches observational techniques of optical astronomy at an intermediate level. The celestial sphere, naked-eyed observation, and celestial system of coordinates. The use of the telescope and its auxiliary equipment. Observation of the Sun, Moon, and planets. Astrography, photometry, and spectrography using CCD cameras.

AST 303 Introduction to Astrophysics (3 Credits)

Overview of physical fundamentals of astrophysics. Introduction to modern physics: special relativity, quantum mechanics, nuclear physics and statistical mechanics. Covers the content of practical application into introductory astrophysics topics. Instructional methods will include lectures, multimedia presentations and exercises.

AST 401 Stellar Astrophysics (3 Credits)

Intermediate level study of the physics of stars, the sun, stellar models, origin and evolution, nucleosynthesis, and last stages in stellar evolution. Formulates a simplified computer model of a star.