

ASTRONOMY (AST) - ROCK COUNTY

Courses

AST 100 Survey of Astronomy 3-4 Units

Descriptive Surv. of astronomy for students with minimal background in mathematics & Sci.. Topics include the solar system, stars, nebulae, galaxies, cosmology, & astronomical methods. May be offered for 3 credits without Lab work, or for 4 credits with Lab work consisting of telescopic observation, Lab demonstration, & astronomy exercises. Students may not earn credit for both AST 100 & 105. Prereq: High school algebra & geometry or cons. instr.

AST 101 Observational Astronomy 1 Units

Observation of solar system, galactic & extra-galactic objects, & Intro to basic observational techniques in astronomy. Includes telescopic & unaided eye observation, positional astronomy, astro-photography, optic spectroscopy, interpretation of astronomical data, & astronomy Lab exercises.

AST 105 The Solar System 3 Units

Contemporary understanding of the Solar System; the sky and celestial motions; ancient astronomy; the Copernican revolution; light, gravity, orbits, and astronomical instruments; formation of the solar system; sun, planets and moons; asteroids, comets, meteors and meteorites; and the origin of life. May be offered for three credits without laboratory work or for four credits with laboratory work consisting of telescopic observation, laboratory demonstration and/or astronomy exercises.

AST 106 Stars, Galaxies and the Universe 3 Units

Contemporary understanding of stellar systems: historical development; light, gravity, atoms & nuclei; astronomical instruments; properties & life cycles of the Sun & stars; black holes; the Milky Way & other galaxies; cosmology. May be offered for three credits without Lab work or for four credits with Lab work consisting of telescopic observation, Lab demonstration &/or astronomy exercises.

AST 150 Planetary Geology 3 Units

This is an Introductory course covering various subjects related to geology of planets, moons, & other small bodies in our solar system. In this course, students will learn formation, evolution & present nature of these planetary bodies using a geologic & astrophysical approach. To understand other planetary bodies, or our solar system as a whole, it is essential to examine geological processes occurring in Earth, then generalize how such processes can be applied to other planets. Therefore, a brief overview on these processes will be given during the beginning stage of the course. The course will also cover smaller planetary bodies such as asteroids, comets & meteorites, which are very important in understanding geological process in our solar system. It meets the Natural Sci. requirement for a liberal arts degree at the University of Wisconsin Colleges. Prereq: High School Algebra.
PREREQ:HIGH SCHOOL ALGEBRA

AST 200 General Astronomy 4 Units

Surv. of astronomy for students who have some background in mathematics & physics; the solar system, stars, nebulae, galaxies, cosmology, astronomical methods. Telescopic observation, Lab demonstration, & astronomy exercises; three hours lecture, two hours lab-discussion per week. PHY 141, PHY 201, or equivalent.

AST 291 Topics in Astronomy 1-5 Units

An extended coverage of one or more topics in astronomy such as extra-terrestrial life, archaeoastronomy, cosmology, astrophysics, radio astronomy, stellar structure, dynamical astronomy, galactic structure & observational astronomy.

AST 299 Independent Study-Astronomy 1-3 Units

Indp. study under the supervision of an instructor. The work may, for example, consist of advanced Lab investigation into a particular topic or library research & writing of a paper on some subject of interest.

PREREQ: CONSENT OF INSTRUCTOR