Astronomy (AST)

AST 100 - SURVEY OF ASTRONOMY  
Semester Hours: 4

One semester survey of astronomy from visible phenomena in the sky to the latest astronomical discoveries. Topics include properties of solar system bodies, origin of the solar system, life cycles of stars and galaxies, exoplanets, cosmology, and life in the universe. Includes laboratory. May not be taken in combination with AST 106 or AST 107.

AST 100L - SURVEY OF ASTRONOMY LAB  
Semester Hours: 0

Laboratory instruction in support of material covered in AST 100.

AST 106 - EXPLORING THE COSMOS I  
Semester Hours: 4

Introduces astronomy emphasizing quantitative aspects of physical phenomena in the universe. Topics include motions of celestial bodies, development of astronomy, gravity and motion, light and telescopes, properties of gases and radiation, earth and moon, eclipses, and survey of the solar system. Laboratory included.

AST 106L - ASTRONOMY LABORATORY  
Semester Hours: 0

Laboratory instruction in support of material covered in AST 106.

AST 107 - EXPLORING THE COSMOS II  
Semester Hours: 4

Continuation of AST 106. The sun, stars and stellar evolution, white dwarfs, neutron stars, black holes, binary stars, the Milky Way galaxy, galaxies, quasars and other active galaxies, cosmology, life in the universe. Laboratory included. Offered Spring. Prerequisite: AST 106.

AST 107L - GEN ASTRONOMY II LAB  
Semester Hours: 0

Laboratory instruction in support of material covered in AST 107.

AST 210 - INTRO TO ASTROBIOLOGY  
Semester Hours: 3

Studies the origin and search for life in the universe, including topics in astronomy, physics, biology, chemistry, and atmospheric science. Introduces research in astrobiology; known requirements for life, the origin and evolution of life of Earth, and the search for extraterrestrial life. Prerequisites: MA 171 and either PH 111, CH 121, or BYS 119.

AST 371 - INTRO TO ASTROPHYSICS  
Semester Hours: 3


AST 471 - ASTROPHYSICS  
Semester Hours: 3

Structure and physical processes of stars from the interior to the atmosphere: energy production and transfer, atmospheric properties, and observed spectral features. Models for stellar structure. Star formation and evolution, including the effects of a companion. Offered Fall. Prerequisites: AST 371 and PH 351.