

ASTR – ASTRONOMY

ASTR 120

The Astronomy of the Solar System

3 Credits Weekly (3-0-0)

Students examine the origin, evolution and nature of our solar system. The methods of astronomy and space science are discussed in terms of basic physical and mathematical principles, including the laws of gravity and orbital motion. Students become acquainted with the search for extrasolar planets and extraterrestrial life. Telescopes and other tools of astronomy are described, and students are given the opportunity to gain observing experience through simple observing exercises using telescopes.

Prerequisites: Mathematics 30-1 or Mathematics 30-2.

ASTR 122

The Astronomy of Stars and Galaxies

3 Credits Weekly (3-0-0)

Students examine the origin, evolution and nature of stars, galaxies and the universe as a whole. The methods of astronomy are discussed based on simple physical and mathematical principles related to the nature of gravity and light, including parallax, the inverse square law, Stefan-Boltzmann law, Doppler shift, and the laws of Newton and Kepler. Students study the big bang theory and structure and formation of the universe. Students are given the opportunity to gain observing experience through simple observing exercises using telescopes.

Prerequisites: Mathematics 30-1 or Mathematics 30-2.