

Astronomy (ASTR)

Courses

ASTR 50303. Astrophysics I: Stars and Planetary Systems. 3 Hours.

An introduction to astrophysics covering stellar structure and evolution, the properties of the solar system, and extrasolar planetary systems. (Typically offered: Fall Odd Years)

This course is cross-listed with SPAC 50303.

ASTR 50403. Astrophysics II: Galaxies and the Large-Scale Universe. 3 Hours.

An introduction to astrophysics covering the interstellar medium, the Milky Way galaxy, extragalactic astronomy, and introduction to cosmology. Prerequisite: ASTR 50303 or SPAC 50303. (Typically offered: Spring Even Years)

ASTR 50703. Cosmology. 3 Hours.

An introduction to modern physical cosmology covering the origin, evolution, and structure of the Universe, based on the Theory of Relativity. (Typically offered: Spring Odd Years)

ASTR 50803. Data Analysis and Computing in Astronomy. 3 Hours.

Study of the statistical analysis of large data sets that are prevalent in the physical sciences with an emphasis on astronomical data and problems. Includes computational lab 1 hour per week. (Typically offered: Fall Even Years)

ASTR 55203. Theory of Relativity. 3 Hours.

Conceptual and mathematical structure of the special and general theories of relativity with selected applications. Critical analysis of Newtonian mechanics; relativistic mechanics and electrodynamics; tensor analysis; continuous media; and gravitational theory. (Typically offered: Fall Even Years)