

ASTRONOMY (ASTR)

ASTR 803 Galactic and Extragalactic Astronomy

Crosslisted with: ASTR 403

Prerequisites: ASTR 204 and PHYS 213, and permission.

Description: Introduction to the techniques for determining constituents and dynamics of our galaxy, including interstellar matter and theories of spiral arm formation. Extragalactic topics include basic characteristics of galaxies, active galaxies, quasars, evolution, and the cosmological distance scale.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Format: LEC

ASTR 804 Stellar Astrophysics

Crosslisted with: ASTR 404

Prerequisites: ASTR 204; PHYS 213; and permission.

Description: Stellar atmospheres, interiors, and evolution. Theoretical and observational aspects of stellar astronomy. The relation between observed parameters and theoretical parameters, star formation, stellar energy generation, and degenerate stars.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Format: LEC

ASTR 805 Physics of the Solar System

Crosslisted with: ASTR 405

Prerequisites: ASTR 204; MATH 107/107H; PHYS 142/142H or PHYS 212/212H.

Description: Celestial mechanics; tidal effects; planetary interiors; atmospheres and surfaces; comets; asteroids; and the origin of the solar system. Applying physics to the solution of solar system problems.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Format: LEC

ASTR 807 Physics of the Interstellar Medium

Crosslisted with: ASTR 407

Prerequisites: ASTR 204 and PHYS 213.

Description: Gaseous nebulae, interstellar dust, interstellar clouds and star forming regions. Theoretical and observational aspects of the various components of the interstellar medium. Includes the physics of emission nebulae, the properties of the interstellar dust, interstellar molecules and the properties of clouds in which star formation occurs.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Format: LEC

ASTR 898 Special Topics

Crosslisted with: ASTR 498

Prerequisites: ASTR 204 and permission.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 9

Format: LEC

ASTR 997 Special Topics in Astronomy

Prerequisites: Permission

Description: Offered as the need arises to treat special topics in astronomy not covered in other 900-level courses.

Credit Hours: 1-3

Min credits per semester: 1

Max credits per semester: 3

Max credits per degree: 3

Format: IND