

# ASTRONOMY (ASTR)

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## **ASTR 101 Astronomy I: Solar System Units: 3.00**

A non-mathematical introduction to the science of astronomy for non-specialist students. Topics to be covered include the fundamentals of astronomy; and introduction to the tools and techniques of modern observational astronomy; the historical development of our understanding of the Earth, Moon, and Solar System; space exploration of Mars, Jupiter, and other planets; the nature of the Sun; and the origin and uniqueness of our Solar System.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

**Learning Hours:** 120 (36 Lecture, 24 Online Activity, 60 Private Study)

**Requirements:** Prerequisite None.

**Offering Faculty:** Faculty of Arts and Science

## **ASTR 102 Astronomy II: Stars, Galaxies, and the Universe Units: 3.00**

This course, intended for non-specialist students, will provide an overview of astronomy beyond the Solar System. Topics will include: the formation, nature, and evolution of the stars; stellar deaths, including novae, supernovae, white dwarfs, neutron stars, pulsars, and black holes; the interstellar medium; the Milky Way Galaxy; normal and active galaxies and large scale structure in the universe; and modern ideas in cosmology and the early universe.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

**Learning Hours:** 120 (36 Lecture, 24 Online Activity, 60 Private Study)

**Requirements:** Prerequisite (ASTR 101/3.0 or PHYS 104/6.0 or PHYS 106/6.0 or PHYS 117/6.0 or PHYS 118/6.0 or [APSC 111/3.3 and APSC 112/3.3]) or permission of the Department.

**Offering Faculty:** Faculty of Arts and Science