

# ASTR& 100 : Survey of Astronomy

**Credits** 5

**Quarter Offered** Winter, Spring, Summer

Introduction to the universe, with emphasis on conceptual, as contrasted with mathematical, comprehension. Modern theories and observations; ideas concerning nature and evolution of galaxies; quasars, stars, black holes, planets, and solar system. This class may include students from multiple sections. (Natural Sciences, Elective)

## **Course Outcomes**

Describe and explain why we have seasons, tides, see phases of the Moon, and how our geocentric model of the universe came to be.

Describe and explain Newton's laws (motion and gravity), and how we can understand the universe using light.

Describe and explain the formation of the solar system and planets, the characteristics of the terrestrial and Jovian planets, and the methods of discovery and classification of extra-solar planets.

Describe and explain the birth, life, and death processes of stars, and their remains.

Describe and explain the birth and evolution of galaxies, and the birth of the universe, including dark matter and the effects of dark energy we see today.

Identify the constellations visible from the northern hemisphere and relate some of the mythology of them.