

# ASTRONOMY (AST)

---

## AST 101 (3 credit hours)

### Frontiers of Astronomy

Covers the life histories of stars, the nature of black holes and quasars, the origin of the universe, planets of the solar system, and the possibilities for extraterrestrial life. Includes observation-based activities. A one-semester introductory course for non-science majors. Credit is not given to students who have received credit for AST 191 or AST 192. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** College Readiness in Writing and Reading.

**Attributes:** SN - Science

**Components:** LEC: Lecture

## AST 155 (3 credit hours)

### Astrobiology

Examines topics related to the origins of planets, the requirements for life, the search for life away from Earth, the societal implications of discovering other forms of life, and the future of life on Earth and in space from a multidisciplinary perspective. Credit not available for both BIO 155 and AST 155. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** MT65 and ENC91 or equivalent as determined by KCTCS placement examination.

**Attributes:** SN - Science

**Components:** LEC: Lecture

## AST 191 (3 credit hours)

### The Solar System

Emphasizes the nature, origin, and evolution of planets, satellites, and other objects in the Solar System. Includes historical astronomy, the naked eye phenomena of the sky, and modern solar system discoveries made by spacecraft. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** College Readiness in Math, Writing, and Reading.

**Attributes:** SN - Science

**Components:** LEC: Lecture

## AST 192 (3 credit hours)

### Stars, Galaxies and the Universe

Emphasizes the Sun and the universe outside the Solar System. Has a principal theme of the origin and evolution of stars, galaxies and the universe at large. Includes topics of black holes, quasars, and the big bang model of the universe. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** College Readiness in Math, Writing, and Reading.

**Attributes:** SN - Science

**Components:** LEC: Lecture

## AST 195 (1 credit hours)

### Introductory Astronomy Laboratory

Involves performance of exercises in both planetary and stellar astronomy, including Kepler's Laws of Planetary Motion and Newton's Laws of Motion. Examines the functions and limitations of different types of telescopes and mounts. Includes observation of the sun, moon, planets, binaries, galaxies, and nebulae. Lab: 1.0 (30 Contact Hours).

**Pre-requisite:** College readiness in math, writing, and reading.

**Pre- or co-requisite:** AST101 or AST191 or AST192.

**Attributes:** SL - Science Laboratory

**Components:** LAB: Laboratory