

# ASTRONOMY (ASTR)

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## ASTR 001 ELEMENTARY ASTRONOMY

**4 unit**

*Transfer Credit: CSU; UC credit limitations. See counselor.*

**Prerequisite(s):** MATH 131

Methods of investigation used by astronomers. Positional and practical astronomy, dynamical astronomy and modern astrophysics. Use of instruments, techniques of observation. Night lab occasionally substitutes for a lecture period. Total of 54 hours lecture and 36 hours laboratory.

**Grade Mode:** Letter Grade, Pass/No-Pass

## ASTR 012 DESCRIPTIVE INTRODUCTION TO ASTRONOMY

**3 unit**

*Transfer Credit: CSU; UC credit limitations. See counselor.*

**Recommended Preparation:** MATH 125 or MATH 127B or MATH 128B

Origin, characteristics and evolution of the solar system, the stars, the galaxies and the universe. No credit if taken after GEOL 016 or ASTR 001. Total of 54 hours lecture.

**Grade Mode:** Audit, Letter Grade

## ASTR 020 INDEPENDENT STUDY

**1 unit**

*Transfer Credit: CSU*

**Recommended Preparation:** Enrollment in or completion of any college-level (1-99) course in the Natural Sciences

**Enrollment Limitation:** Permission of Dean

Faculty-guided independent study of a topic in Astronomy. Total of 54 hours laboratory.

**Grade Mode:** Letter Grade, Pass/No-Pass