

In accordance with [Board of Regents policy 3.20](#), the following required information is available below:

Fall 2026

I. Course title and number as designated in the institutional course catalog

EARTHSCI 1100 Astronomy, 02

II. A course description including learning objectives that students are expected to achieve by the end of the course

A. Course Description:

EARTHSCI 1100 (870:010). Astronomy – 3 hr.
Introduction to the Universe, solar system, stars, and galaxies, including apparent motions of bodies in the sky; development of astronomy and its impact on humankind. Student Learning Outcomes include Critical Thinking and Scientific Reasoning. Discussion, 3 periods.

B. Course Level Learning Objectives:

Upon completion of this course, students will be able to:

1. Explain how astronomical cycles and location affect our view of the sky.
2. Trace the development of astronomical and cosmological theories throughout history.
3. Describe the characteristics and evolution of objects in the universe.
4. Apply the appropriate astronomical and physical laws to provide quantitative information about objects in the universe.

III. A general outline of the topics to be covered throughout the course:

1. Math concepts needed in the course
2. Introduction to Astronomy and the Apparent Motions of Stars
3. Apparent motions of the Sun
4. Apparent motions and appearances of the Moon, and Eclipses
5. History of Astronomical Theories



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6. Properties of light and telescopes
7. Physical characteristics of the Sun and Stars
8. Star Formation and Evolution
9. Unusual stars, black holes, and relativity
10. The Milky Way and other galaxies
11. Distant and active galaxies
12. Properties of the Universe
13. Formation and evolution of the Universe
14. The Solar System and its formation
15. Properties of the planets and main moons in the Solar System
16. Properties of comets, asteroids, meteors, meteorites, and impacts

IV. List of required textbooks, readings, and other materials necessary for the course

The course book is available, at no cost, on the course website.

V. General description of the types of assessments used in the course (e.g., exams, papers, projects, experiential learning):

1. There are four 50-point tests made up of true-false, fill-in-the-blank, multiple choice, and short-answer/essay questions.
2. Seven homework assignments worth a total of 150 points will be required approximately every 2 weeks.
3. Two constellation quizzes worth a total of 30 points will be taken in class.
4. 120 points of short in-class quizzes will be given once or twice each week.

The entire course grade is made up of 500 total points.
Extra credit opportunities will be available for at most 20 points.