



SYLLABUS

CATALOG DESCRIPTION

This course covers observation, theories, and methods of modern astronomy. More specifically, this course presents basic movements of the sky and history of astronomy to start with, then introduces very basic physics concepts, like Newton’s and Kepler’s laws of motion and provides modern details and facts about celestial bodies in our solar system (i.e. – Sun, Moon, planets, etc.) and beyond, like stars, nebulas, black holes, and galaxies. General study for non-science majors.

Prerequisites: None

Semester Offered: Fall, Spring and Summer

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Be able to identify constellations, understand their historical significance and how to find astronomical examples in their boundaries that have helped form our understanding of the universe.
2. Explain the theories developed for solar system formation, star formation, evolution and death, general galaxy formation theories, and universe formation (cosmology).
3. Demonstrate an ability to understand how to use a telescope to find examples of astronomically significant objects.
4. Define major terms and relate them to astronomy. (Examples: Doppler shift, impact crater, spectroscope, etc.)

5. Demonstrate ability to locate specific objects / constellations through use of a star map and/or planisphere.