PLANETARY SCIENCE AND ASTRONOMY, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

Planetary Science and Astronomy minors will study the Solar System, stars, galaxies and the universe as a whole. Students will survey a wide variety of topics in astronomy and will learn to solve problems to see how this general knowledge has been obtained. Students will use telescopes to obtain astronomical data, and will learn to analyze these data to constain astronomical theories. Communication of these topics, both oral and written, to the public and to their peers will be emphasized, as will logic and general problem-solving skills. It will serve students who want to acquire a significant knowledge of the universe as they pursue majors in unrelated fields of study. For example, this minor will serve students who are seeking careers in science education at the 6-12 level, in elementary education, in science journalism, and in geoscience.

What is Planetary Science and Astronomy?

Planetary Science and Astronomy is the study of the Earth system in the context of the Solar System and the universe as a whole. The Planetary Science and Astronomy minor provides an introduction to the fundamentals of this field of study. It focuses on astronomy of objects and phenomena in the Solar System, Milky Way Galaxy, and in the Universe. The focus is on conceptual study, and includes some quantitative astrophysics and in quantitative analysis of astronomical data.

You Might Like This Program If...

- You want to go deeper into questions about black holes, life in the Universe, and the origin of the Universe.
- You want to learn how to use small telescopes and to conduct astronomical observations.
- You have an interest in science communication or science education.
- You are interested in planetary science and want to complement your major.

Program Requirements

Requirement	Credits
Requirements for the Minor	19

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
ASTRO 401	Fundamentals of Planetary Science and Astronomy	4
ASTRO 402W	Astronomical Telescopes, Techniques, and Data Analysis	3
Additional Courses		
Additional Courses: Require a grade of C or better		
Select one of the following:		3
ASTRO 1	Astronomical Universe	
ASTRO 5	The Sky and Planets	
ASTRO 6	Stars, Galaxies, and the Universe	
ASTRO 10	Elementary Astronomy	
ASTRO 11	Elementary Astronomy Laboratory	
ASTRO 291	Astronomical Methods and the Solar System	
Select three of the following:		9
ASTRO 120	The Big Bang Universe	
ASTRO 130	Black Holes in the Universe	
ASTRO 140	Life in the Universe	
ASTRO 292	Astronomy of the Distant Universe	

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

University Park

Robert Morehead
Assistant Teaching Professor and Associate Head, Undergraduate Programs
507 Davey Lab
University Park, PA 16802
814-863-9684
rcm242@psu.edu

Contact

University Park

DEPARTMENT OF ASTRONOMY AND ASTROPHYSICS
525 Davey Lab
University Park, PA 16802
814-865-0418
rcm242@psu.edu

https://science.psu.edu/astro (https://science.psu.edu/astro/)