PLANETARY SCIENCES MINOR (ASTR)

Program Director: Melissa Hayes-Gehrke, Ph.D.

The minor in Planetary Sciences will provide students with a broad understanding of the application of the methods of astronomy and geology to the study of the Solar System, and develop the students' appreciation of how issues in the study of planets connect with larger issues in those sciences. It is intended for all students with an interest in the study of the Solar System, be it professional or avocational. In addition to Astronomy and Geology majors, it dovetails with the professional goals of Environmental Science and Policy, Environmental Science and Technology, Chemistry, Physics, Physical Sciences, and Secondary Education majors.

Building on a three-course base of fundamental knowledge of astronomy, geology and an introduction to the Solar System, the program is completed by three advanced courses addressing specific topics adding depth to the student's knowledge of planetary astronomy and to the geologic tools of the planetary scientist. Students are required to sample from optional courses from both departments. The Joint Minor in Planetary Sciences does not require significant prerequisite knowledge, however some optional courses may require prerequisites of 100-level courses in chemistry, mathematics, or geology.

An appointment must be made to register for the minor before final 30 credits are taken. Please visit http://astro.umd.edu/undergrad/minorPlanSci (http://astro.umd.edu/undergrad/minorPlanSci/) for complete rules and procedures and contact the department with any questions.

REQUIREMENTS

The minor will require 19-22 credits:

Course	Title	Credits
Required		
Select one of the following: [1]		3-4
ASTR100	Introduction to Astronomy	
ASTR101	General Astronomy	
ASTR120	Introductory Astrophysics - Solar System	
Select one of the following:		4
GEOL100 & GEOL110	Physical Geology and Physical Geology Laboratory	
GEOL120 & GEOL110	Environmental Geology and Physical Geology Laboratory	
Select one of the following:		3
ASTR330	Solar System Astronomy	
ASTR430	The Solar System	
GEOL212	Planetary Geology	
Select three from the following: [2]		9-11
ASTR220	Collisions in Space - The Threat of Asteroid Impacts	
ASTR230	The Science and Fiction of Planetary Systems	
ASTR380	Life in the Universe - Astrobiology	
ASTR498	Special Problems in Astronomy	
GEOL322	Mineralogy	
GEOL340	Geomorphology	
GEOL412	Geology of the Terrestrial Planets	
GEOL437	Global Climate Change: Past and Present	
GEOL499	Special Problems in Geology	
ASTR/GEOL	Another appropriate astronomy or geology course approved in advance by the Astronomy or Geology advisor	
Total Credits		**19-22**

1 Or equivalent transfer course(s).

2 At least one choice must be from Geology and one from Astronomy. At least six credits from this list and nine credits overall must be at the 300-400 level.