



Undergraduate Minor Program Approval

Undergraduate students may obtain a minor in Planetary Sciences. The PTYS minor consists of 18 units:

- **PTYS 403, 407, 411 (Required)**
- **3 other upper-division units in Planetary Science**
- **6 units chosen by the student and minor advisor subject to final approval by the PTYS Curriculum Committee.**

Date	SID
Student Name	Email Address
Major Dept.	Other minor

Course Number	Course Title	Units	Grade	Completed
PTYS 206	The Golden Age of Planetary Exploration	3		
PTYS 212/212H	The Science and Politics of Global Warming	3		
PTYS 214	Astrobiology: A Planetary Perspective	3		
PTYS 395B	Special Topics in Planetary Science	1		
PTYS 403	Physics of the Solar System	3		
PTYS 407	Chemistry of the Solar System	3		
PTYS 411	Geology and Geophysics of the Solar System	3		
PTYS 416	Asteroids, Comets and Kuiper Belt Objects	3		
ASTR 418	Modern Astronomical Instrumentation and Techniques	3		
ASTR 455	Teaching College-Level Astronomy & Planetary Science	3		
ASTR 475	Planetary Astrobiology	3		
GEOS 419	Physics of the Earth	3		
GEOS 430	The Chemical Evolution of Earth	3		
ATMO 441A	Dynamic Meteorology	3		
ATMO 441B	Dynamic Meteorology	3		
PTYS 442	Mars	3		
PTYS 450	Origin of the Solar System	3		
PTYS 495B	Special Topics in Planetary Science	3		
	Independent study courses/directed research courses available for enrollment as needed if proposal is completed by instructor and student.			

Minor Completed		
	PTYS advisor signature	Date

When courses have been completed, return form to Kuiper Space Sciences 317.