OCEANOGRAPHY MINOR

A minor in Oceanography examines the physical aspects of ocean currents, tides and the intimate relationship between the ocean and atmosphere, with significant emphasis on the ocean's role in climate change. Offering a comprehensive classroom instruction and field training in the physical, chemical, geological and biological aspects of oceanography, students acquire a rigorous education in the fundamental theories, but also experience practical field and laboratory applications currently used by working oceanographers.

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Oceanography

Code	Title	Hours
Credits Required for Minor		
	true	
Minimum Residency 50% of minor credits		
	true	
Minimum GPA 2.0 for Minor		
	true	
2 Courses Must be Upper-Division		
	true	
ESCI 261	Introduction to Oceanography	4
Required Core Courses - Choose 2 of the following:		6
ESCI 362	Marine Geology	
ESCI 363	Chemical Oceanography	
ESCI 369	Physical Oceanography and Climate	
ESCI 465	Biological Oceanography	
Required Methods Courses - Choose 2 of the following:		6
ESCI 267	Field Methods in Oceanography	
ESCI 282	FORTRAN Programming for Earth Sciences Applications	
ESCI 380	Remote Sensing & Image Interpretation	
ESCI 386	Sci Prg Lang:	
Earth Science Elective - Choose 1 of the following:		3
ESCI 366	Marine Resources and Policy	
ESCI 385	Global Climate Change: Sci & Policy	
ESCI 445	Num Modeling of Atmos and Ocns	
ESCI 464	Ocean Ecosystems	
ESCI 468	Ocean Data Analysis and Presentation	
Total Hours		**19**