

Learning Goals for Environmental Science Program

Students will

1. demonstrate a broad knowledge of environmental science and develop competency in biology, chemistry, and Earth science;
 - A. Understand the basic chemical principles, cell structure and organization, and metabolism of living organisms.
 - B. Understand plant and animal anatomy and physiology, with an emphasis on form and function.
 - C. Understand the diversity of organisms, systematic biology and phylogeny, and biological interactions over geological time.
 - D. Understand the role of evolution in generating the diversity of form and function seen in life on Earth.
 - E. Understanding the role of the environment in determining the outcome of biological interactions.
 - F. Identifying the consequences of environmental changes arising from human activities.
2. use critical thinking to evaluate and interpret biological and environmental phenomena;
 - A. Critically assess and accurately interpret scientific data presented in visual or tabular form.
 - B. Identify the scientific underpinnings of current environmentally-themed news. And
3. collect and analyze scientific data and communicate its importance through effective oral and written presentation.
 - A. Demonstrate competence in conducting original research.
 - B. Present research results orally and in writing.

Alignment with Academic Learning Goals

Graduates will	1	2	3
Demonstrate an integrative knowledge of the human and natural worlds;	X		
Develop habits of critical analysis and aesthetic appreciation;		X	X
Apply creative and innovative thinking;			
Communicate skillfully in multiple forms of expression;			X
Act competently in a global and diverse world;			
Understand and promote social justice;			
Apply a framework for examining ethical dilemmas;			
Employ leadership and collaborative skills;			
Understand the religious dimensions of human experience.			

Alignment with Assessment Measures

Measure	1A	1B	1C	1D	1E	1F	2A	2B	3A	3B
Performance on Specified Exam Questions from Courses	Direct	Direct	Direct	Direct	Direct					
Signature Assessment (BL 417): Lab Report on Environmental Change						Direct				
Signature Assessments (BL 331): Evaluate Climate Change Evidence and Graphs AND Analyze Primary Literature							Direct			
Current News Critiques (PH 206 and BL 331)								Direct		
Group Research Projects (multiple courses)									Direct	Direct
Course Evaluations	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect