ADVANCED OUTCOMES IN THE MAJOR AREA

DISCIPLINE: ENVIRONMENTAL SCIENCE

Discipline Outcomes	Advanced Level Abilities	
	Primary Focus	**Related Focus**
DATA GATHERING/ANALYSIS		
1. Demonstrates proficiency in inquiry based search strategies in environmental data gathering.	Analysis, 5 Analysis, 6	
2. Uses appropriate data to evaluate risk assessment and propose reasonable action as an effective citizen.	Analysis, 5 Analysis, 6	Quant Lit, 5
3. Integrates frameworks drawn from multiple disciplines to analyze environmental issues and practices and accurately identifies the strengths and limitations of the analysis.	Analysis, 5 Analysis, 6 Developing a Global Perspective, 5 Valuing in Decision Making, 5	
EFFECTIVE COMMUNICATION/LISTENING AND PERSUASION		
1. Responds to ideas from various perspectives and formulates viable approaches to environmental issues that could be implemented.	Problem Solving, 5 Problem Solving, 6	
2. Communicates about environmental research based on credible laboratory and field data.	Problem Solving, 5 Problem Solving, 6	Quant Lit, 5 Quant Lit, 6
3. Communicates effectively to various audiences using language, concepts, models, and strategies of environmental sciences.	Communication, 5	
PROBLEM MANAGEMENT/ADAPTIVE STRATEGIES		
1. Designs and conducts environmental research based on appropriate technology, laboratory, and field data.	Problem Solving, 5 Problem Solving, 6	
2. Explores the complexity and interconnected nature of environmental issues and articulates a contextualized and pragmatic response.	Communication, 5 Developing a Global Perspective, 5 Developing a Global Perspective, 6	
3. Professionally applies her disciplined-based learning in an off-campus setting.	Problem Solving, 5 Problem Solving, 6 Valuing in Decision Making, 5	

Advanced Level Courses required for the Major (taken collectively this set of courses in various combinations contributes to the achievement of the outcomes of the major):

Required

BI	251	Microbiology
BI	341	Ecology
CH	213	Chemistry Survey, Biochemistry
CH	234	Analytical Chemistry
ENV	341	Geographic Information Systems
ENV	399	Advanced Level Event
ENV	383	Internship Seminar
ENV	374	External Assessment for Effective Citizenship
ENV	491	Senior Environmental Seminar
GE	220	Earth Science
GE	410	Environmental Geology
MGT	210	Economic Environment

Electives

Choose 1 of the following 4:

MT	148	Functions and Modeling
MT	256	Probability and Statistics
MT	152	Calculus 1
PH	231	General Physics 1

Choose 1 of the following 3:

GLS	370	World Geography
GLS	330	The United Nations and the World
GLS	396	International Economics

Choose 1 of the following 2:

BI	301	Advanced Microbiology: Microbial Ecology *or*
CH	337	Instrumental Methods of Analysis

Choose at least two elective courses from approved courses in the sciences, mathematics, management, community leadership, or professional communication.