

ADVANCED OUTCOMES IN THE MAJOR AREA

DISCIPLINE: BROADFIELD SCIENCE

Discipline Outcomes	Advanced Level Abilities	
	Primary Focus	Related Focus
1. Communicates effectively, using the language, concepts, and models found in the natural sciences.	Communication, 5	Analysis, 5
2. Demonstrates proficient library and information technology in data gathering and analysis.	Analysis, 5 Problem Solving, 5	
3. Uses diverse strategies to assure inclusive and effective science teaching and assessment in various teaching situations.	Analysis, 5 Analysis, 6 Problem Solving, 5 Problem Solving, 6	Developing a Global Perspective, 5
4. Uses the methodology of biology, physical sciences, and earth sciences to define and solve problems individually and collaboratively.	Analysis, 5 Analysis, 6 Problem Solving, 5 Problem Solving, 6	
5. Uses laboratory techniques with accuracy, appropriateness and safety.	Analysis, 5 Analysis, 6 Problem Solving, 5 Problem Solving, 6	
6. Uses ethical frameworks and her understanding of the nature of science and technology to analyze and make value judgments about the conduct of science and the application of science in society.	Developing a Global Perspective, 5 Valuing, 5 Analysis, 6 Valuing, 6	Analysis, 6
7. Applies her learning in a professional educational setting.	Developing a Global Perspective, 5	

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

Required

Elective

BI 341 Ecology SC 492 Natural Science Seminar BI/CH 328 Biochemistry GE 410 Environmental Geology	BI 303 Examining Evolution BI 325 Cellular Biology BI 338 Physiology of Disease CH 441 Physical Chemistry
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Advanced Ability Units Required for the Major:

Choose 4 of the following: Analysis, 5 Analysis, 6 Communication, 5 Developing a Global Perspective, 5 Problem Solving, 5 Problem Solving, 6 Valuing, 5 Valuing, 6
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