

Number	Program Learning Outcomes (Biological Sciences)	Depth	Specific outcome objectives for Bio 200	Assessment instrument
1	Provide breadth of knowledge of basic principles and concepts	2	Defines evolution, relates basic principles of cell biology and genetics to evolutionary phenomena, understands speciation as an evolutionary process	Exam 1, 3
			Describes the diversity of life with respect to evolution of lineages and characters, understands that diversity is the outcome of evolution, understands the organization of the diversity of life	Exam 2, 3
			Understands abiotic and biotic ecological factors and has a basic understanding of population and community ecology	Exam 3, Quizzes 7-10, Lab final
2	Provide depth within specialized areas	0	N/A	N/A
3	Provide an understanding of experimental design and methodology	2	Understands and can apply the scientific method to biological questions	Quiz 1 & 10, Lab final
			Understands and employs components of good experimental design	Quiz 1, 3, 7, 8, 9; Lab final
			Develops basic lab skills and techniques (dissection, data collection, randomization, etc)	Notebook checks, Lab final
			Analyzes data mathematically (basic statistics and graphing techniques)	Notebook checks, Lab final
4	Develop approaches for integration of information	0	N/A	N/A
5	Encourage critical thinking and hypothesis building	2	Demonstrates the ability to formulate and test hypotheses in a lab setting	Notebook checks, Lab final
			Analyze data to evaluate a test of hypotheses and propose next experimental steps and conclusions	Notebook checks, Lab final
6	Provide skills in scientific communication	2	Contribute to primary literature research for a group oral presentation	Oral presentation
			Effectively communicate scientific concepts to peers in a group oral presentation	Oral presentation
7	Provide contemporary information	1	Discusses current issues in evolutionary biology and how they relate to pure research and applied problems	Exam 3, Lab final
8	Encourage appreciation of scientific values	1	Perceives the broad diversity of organisms	Exam 2
			Describes the history of evolutionary thought and how changes in perceptions of evolution have been affected by other fields	Exam 1, 3