Annual Report on Program Student Learning Outcomes Assessment

Program: BA in Biology with Specialization in Quantitative Biology
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1. List the learning outcomes for the program

Students graduating with a major in Biology with Specialization in Quantitative Biology should be able to:

1. Demonstrate knowledge of fundamental principles in each of three major disciplines in biology (cell and molecular biology; neurobiology; ecology, behavior and evolution), as well as foundational knowledge in related sciences (chemistry, physics, and mathematics).

2. Apply advanced mathematical and computational methods for the analysis of contemporary biological data.

3. Search the scientific literature effectively for research relevant to a given topic, and critically assess the validity and significance of primary research articles.

4. Understand the scientific method, including the logic of experimental design and hypothesis testing.

5. Apply the scientific method in laboratory and/or field-based research, preferably in the context of faculty-mentored, original research.

6. Demonstrate an understanding of principles for the ethical conduct of research, including best practices for the collection, analysis, and interpretation of data.