Microbiology

Degree Designation: BS

Mission Statement

The mission of the Department of Biology is the effective transmission and expansion of biological knowledge, using modern interdisciplinary approaches to instruction, research, and service.

Student Learning Outcomes

Content / Discipline Skills

- Be familiar with the levels of biological organization and their interrelationships.
- Understand the theoretical bases for biological patterns and processes.
- Demonstrate knowledge of the basic laboratory and field methods used in biology.

Critical Thinking Skills

- Demonstrate critical thinking and analytical abilities, including the capacities to engage in inductive and deductive thinking and quantitative reasoning, and to construct sound arguments.
- Be familiar with the scientific method, including experimental design and hypothesis testing.

Communication Skills

- Develop effective analyses and presentations of laboratory and field data.

Assessment Strategies

- The Department of Biology will measure students' achievement of the identified core student learning outcomes, and use the results to improve student achievement and program effectiveness. Specifically, the Department will assess whether (1) graduates have broad, comprehensive, up-to-date knowledge and technical skills to serve as a foundation for further study, as indicated by the percentage qualified for postgraduate studies; (2) graduates have broad, comprehensive, up-to-date knowledge and technical skills to serve as a foundation for productive employment, as indicated by the percentage employed in a field related to biology; and (3) graduates have original research experience, as indicated by the percentage having participated in some form of undergraduate research.