

BIOLOGY – Master’s Program/Thesis Track

Mission Statement

In keeping with the University mission, the Department of Biology is dedicated to creation, transmission, application and preservation of knowledge. Within this framework, the primary mission of the Department of Biology is to develop, support and conduct high quality educational and research programs in the life sciences.

Student Learning Outcomes

UWF Biology MS graduates should be able to do the following:

Content

- Identify and use advanced concepts, principles, and theories that form the foundation of research in the biological sciences
- Employed advanced biological techniques central to analysis of biological materials and able to defend the use of these techniques based on the current scientific literature
- Describe discipline-related career paths for which recipients of the MS in Biology are qualified

Critical Thinking

- Employ and defend the scientific method in solving defined problems in the biological sciences
- Employ statistical methods appropriate to analysis of data generated in the thesis

Communication

- Employ biological terminology accurately in the thesis and oral defense
- Use language in written form effectively and professionally in developing the thesis
- Communicate biological information in oral form during the thesis defense

Integrity/Values

- Apply ethical considerations in the conduct of scientific research with humans and animals
- Adherence to appropriate ethical practices in the thesis research

Project Management

- Design and execute a thesis project within a reasonable timeframe
- Draw and defend conclusions related to the results of the thesis study
- Collaborate effectively with your thesis committee in completing the thesis and respond effectively to constructive feedback

Evaluation of Student Learning Outcomes

Biology graduate students will acquire advanced skills and knowledge that enable them to join the scientific profession or pursue additional graduate studies at the doctoral level. Direct assessment in this program is conducted on the thesis, which is the required capstone experience at the end of a student's program of study. The capstone requirement allows students to conduct and defend a research project under a faculty's direction and with the help of a thesis committee. The student will be assessed on abilities to collaborate and communicate effectively with faculty, abide by ethical standards in the conduct of scientific research with humans and animals, make a creative contribution to the field, and work independently on thesis research within reasonable timeframes. Indirect assessment practices in this program include an exit survey and student evaluations of courses.

Job Prospects for Biology Graduates

MS in Biology

Bioremediation

Biotechnology

Medical Research

Industry

Government

Education

Microbiology

Health Professions

Research Laboratories

Teaching

Pharmaceuticals

Public Health

Food Production

Pollution Control

Environmental Diagnostics

Forestry

Agriculture

Find Out More about Biology at UWF:

www.uwf.edu/biology/degree/