

## Biology, B.S.

### 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 with emphasis on biology and biomedical programs.

### Student Learning Outcomes

Graduates from the Biology program should be able to do the following:

#### Content

- Identify and use the concepts, principles, and theories that constitute the core of the biological sciences.

#### Critical Thinking

- Apply the scientific method to solve problems in the biological sciences.

#### Communication

- Use language in oral and written form effectively and professionally.

#### Integrity/Values

- Describe ethical challenges involved in conducting scientific research with animals

### Assessment of Student Learning Outcomes

Students in the General Biology degree program will be assessed for Content by gathering exam data in courses that introduce biology knowledge based on the curriculum map through exams, quizzes, or other assignments. The baseline data will be used to improve instruction at the introductory level of courses. Critical Thinking will be assessed by using laboratory courses to determine gains in student's ability to use the scientific method to perform experimental analysis. Students will be assessed in communication by identifying major courses that incorporate paper or oral reports. Using the instructor provided rubric we will gather baseline data then implement an improvement plan on scientific communication to assess any gains. Integrity/Values will be assessed by assessment of a case study or other activity involving scientific integrity with respect to biomedical questions. Biology faculty will review the outcome of all

assessment procedures to evaluate the current status of the program, and make suggestions for further improvement in programmatic effectiveness.

### **Job Prospects for Biology Graduates**

- Biotechnology Industry
- Scientific Research
- Medical Research
- Government Biological Research
- Education, Bioremediation
- Microbiology
- Health Professions
- Pharmaceuticals
- Public Health
- Food production
- Pollution Control
- Environmental work
- Forestry Agriculture

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<https://uwf.edu/programs/hmcse/biology-bs/>