UNIVERSITY of WEST FLORIDA

ACADEMIC LEARNING COMPACT

Interdisciplinary Sciences, B.S.

Mission Statement

The BS in Interdisciplinary Sciences is a multidisciplinary program that provides a strong foundation in one area of the sciences and flexibility to add content and skills from other HMCSE STEM programs. The academic goal of this program is to afford students the opportunity to make connections between ideas and concepts across disciplinary boundaries and to be capable of defining and examining scientific problems from an interdisciplinary perspective. The BS in Interdisciplinary Sciences is built upon a foundation within the UWF HMCSE STEM disciplines (Biology, Earth & Environmental Sciences, and Computer Science) and allows for additional coursework from Chemistry, Electrical & Computer Engineering, Information Technology, Mathematics, Mechanical Engineering, and Physics.

Student Learning Outcomes

Students graduating with a degree in Interdisciplinary Sciences should be able to:

Content

- Identify and apply key scientific concepts to address real-world questions and challenges.

Critical Thinking

- Solve problems using scientific methods and inquiry.

Communication

- Communicate effectively in either verbal or written media appropriate for academic and professional environments.

Integrity/Values

- Describe ethical challenges involved in conducting scientific research.

Assessment of Student Learning Outcomes

Students in the Interdisciplinary Sciences degree program will be assessed for Content by gathering data in courses that introduce knowledge 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 either laboratory courses to determine gains in student's ability to use the scientific method to perform experimental analysis or through course projects. Students will be assessed in Communication and Integrity/Values through identifying courses that incorporate paper or oral reports.

A group of 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 Interdisciplinary Sciences Graduates

The Occupational Outlook Handbook, published by the US Department of Labor's Bureau of Labor Statistics (BLS), provides information about specific jobs including median annual pay, working conditions, and job outlook, among other things. For those who have chosen the interdisciplinary science career path, jobs might include:

- Medical Scientist: The demand for medical scientists is projected by the BLS to grow by an astounding 36% from 2010 to 2020. These scientists conduct research designed to improve human health.
- Biochemist and Biophysicist: The BLS reports that employment for these professions is projected to increase by 31% by 2020. Work in this science career involves the study of the chemical and physical principles of living things as well as biological processes, including cell development, growth, and heredity.
- Postsecondary Teacher: Projected by the BLS to experience a growth of 17% by 2020, instructing students at public and private colleges and universities, professional schools, junior/community colleges, and career and vocational schools are a popular choice among graduates.

Other job prospects are:

- Agricultural and Food Scientist
- Biological and Chemical Technicians
- Biomedical Engineering Technician
- Materials Scientist
- Medical and Clinical Laboratory Technologist

Find out more about Interdisciplinary Sciences at UWF:

https://onlinedegrees.uwf.edu/online-degrees/ms-masters-information-technology/