

BIOLOGY, ASSOCIATE OF SCIENCE (403)

About Our Program

This program is intended to provide the first two years of a four-year baccalaureate program. Students who major in biology investigate the science of life including cell biology, molecular biology, evolution, ecology, and genetics. Study organisms include viruses, bacteria, plants, animals, and fungi.

Nature of Work and Employment

The four most common jobs people have one year after completion of their Bachelor's degree in this major are biological technician, biological scientist, health technician, and secondary teacher.

Special Considerations

Students considering this major should have a strong interest in nature, science, animals, plants, cells, environment, and people. This career area requires the ability to collect and analyze data. The listed coursework is a recommendation only. Students should check with a student advisor for HCC graduation requirements, and specific university requirements in this major. Students must meet with an advisor to ensure that the special requirements of the department and institution to which they plan to transfer are met.

Requirements

Associate of Science Requirements

Students must meet all requirements for the Associate of Science degree (<https://catalog.highland.edu/programs-available/as-requirements/>) in order to graduate from Highland Community College. For more information, please see your advisor.

Recommended Courses

Biology is a major that involves many specialties and students should adapt these recommendations to their goals with the assistance of faculty and advisors.

Biology

Code	Title	Hours
BIOL 208	Biology I: Cell & Molecular ¹	4
BIOL 209	Biology II: Biodiversity/Evolu ¹	4
BIOL 119	Field Ornithology (elective)	2

Chemistry

Code	Title	Hours
CHEM 123	General College Chemistry I ¹	5
CHEM 124	General College Chemistry II ¹	5

CHEM 221	Organic Chemistry I ¹	5
CHEM 222	Organic Chemistry II ¹	5

Mathematics

Code	Title	Hours
MATH 134	Statistics ¹	4
MATH 250	Analytic Geometry/Calculus I ¹	5
MATH 255	Analytic Geometry/Calculus II ¹	5

Physics

Code	Title	Hours
Select one of the following:		8
PHYS 141 & PHYS 142	Introductory Physics I and Introductory Physics II ¹	
PHYS 143 & PHYS 144	General Physics I and General Physics II ¹	

¹ Course has a prerequisite. See course description.

Program Outcomes

- Students should be able to understand and employ aspects of scientific methodologies.
- Students should practice proper lab technique in compliance with relevant safety standards.
- Students should understand the fundamental uncertainties in experimental measurements inherent in different laboratory techniques and instrumentation.
- Students should be able to analyze data sets and communicate information in a clear and organized manner with presentations and properly cited written reports.
- Students should utilize peer-reviewed scientific literature effectively.
- Students should be able to work with peers in a team setting.
- Students should be able to relate contemporary societal and global issues to the physical and life sciences.

Program Contacts

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Brendan Dutmer, Dean, Natural Science and Mathematics
- Kasey Brockelsby, Biology Faculty
- Karla Giuffre, Biology Faculty
- Juliet Moderow, Biology Faculty
- Alan Nowicki, Biology Faculty
- Beth Groshans, Student Advisor