# **BIOLOGY, Associate in Science Degree - 3096**

Science Department CIP Code: 26.0101

The Biology AS degree prepares students who wish to transfer to a four-year institution that offers a bachelor's degree program in biology, pre-professional health careers, ecology, genetics, microbiology, or botany. Since the requirements of senior institutions vary widely, it is essential that students choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. This program can be completed at the Harrisburg, Lancaster and York campuses provided students take some of their required coursework through multiple modalities (e.g. Blended, Online and/or Remote Learning). Coursework in this program may be completed at the Gettysburg Campus. However, to fulfill the program requirements, students will need to take more than 51% of their required coursework through multiple modalities (e.g. Blended, Online and/or Remote Learning).

# Transfer Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

# Competency Profile

This curriculum is designed to prepare graduates of the program to:

- Acquire a broad-based fundamental knowledge of evolutionary theory and biological principles spanning the hierarchy and interrelatedness of biological systems--chemical, molecular, cellular, organismal, and population/community
- Demonstrate oral and written communication skills needed for success in the field of science
- Critically analyze peer-reviewed literature to address a biological question through the use of scientific databases
- Perform laboratory and field exercises and experiments safely through proper use of scientific equipment and techniques
- Effectively utilize the scientific method from hypothesis generation through the collection, analysis, and presentation of data

#### PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	BIOL 102 General Biology II	4	Transfer Electives****	6
ENGL 102 English Composition II	3	CHEM 102 Organic Chemistry & Qualitative Analysis	4	MATH 116** College Algebra for Calculus	<u>4</u>
COMM 101 Effective Speaking	3	CHEM 203 Organic Chemistry I	4		10
Humanities & Arts Elective*	3	CHEM 204 Organic Chemistry II	4		
Social & Behavioral Science Elective	3	Biology Electives***	8		
Mathematics Elective - MATH 104**	3		24		
Math or Science Elective - CHEM 101	4				
Science with a Lab Elective - BIOL 101	4				
First-Year Seminar Elective (Rec: SCI 100)	1				
Wellness	1				
	28				

<sup>\*</sup>Students are to select from the following courses: ART 181 or 182; ENGL 206; HUM 101, 115 or 201; MUS 104; PHIL 200; FMTH 101; or a foreign language course.

# RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
BIOL 101	4	BIOL 102	4	Biology Elective***	4	Biology Elective***	4
CHEM 101	4	CHEM 102	4	CHEM 203	4	CHEM 204	4
COMM 101	3	ENGL 102	3	MATH 116**	4	Humanities/Arts Elective*	3
ENGL 101	3	MATH 104**	3	Transfer Elective****	3	Social/Behavioral Science Elective	3
FYS Elective	1	Wellness	1			Transfer Elective****	3

<sup>\*\*</sup> May be replaced with a higher-level Math offering.

<sup>\*\*\*</sup>Students select two courses from the following: BIOL 206 or 250; BIOL 212, 215 or 221.

<sup>\*\*\*\*</sup>Students are to select courses that transfer to their intended four-year institution.