

## Biology, AS

### School of Math, Science and Engineering

The Biology AS is designed to prepare students for a rigorous four-year Biology program. This program focuses on the study of principles of biology, problem solving, critical thinking, laboratory skills, and technical communication. It is designed primarily for transfer to a Pennsylvania Transfer and Articulation Oversight Committee (TAOC) four-year institution.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of fundamental biology concepts and principles.
- Apply problem solving, critical thinking and analysis skills to biology problems.
- Work effectively with units and significant digits.
- Carry out biology experiments as well as accurately record and analyze results of such experiments in writing.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Term Offered	Prereq(s)	Options Available
1st Fall	1	PDV 171	Career Pathway Exploration	3	F		
	2	ENG 161	College Writing	3	F, Sp, Su	ENG 085 or Placement	
	3	MTH 158	Precalculus Mathematics	3	F, Sp, Su	MTH 157 or Placement	
	4	BIO 155	General Biology I	4	F, Sp, Su		
	5	CHM 155	General Chemistry I	4	F, Sp, Su	CHM 107 or HS Chemistry & MTH 052 or 052A, or Placement	
1st Spring	6	MTH 172	Analytical Geometry and Calculus I	4	F, Sp, Su	MTH 109, 158 or Placement	
	7	BIO 156	General Biology II	4	F, Sp, Su	BIO 155	
	8	CHM 156	General Chemistry II	4	F, Sp, Su	CHM 155	
	9	Elective	Humanities Elective	3	F, Sp, Su		Page 31 Column II
2nd Fall	10	CHM 250	Organic Chemistry I	4	F, Su	CHM 156	
	11	Elective	BIO Elective	3-4	F, Sp, Su		BIO 120,145,255, 265,285
	12	SPC 155	Effective Speech	3	F, Sp, Su		
	13	Elective	Social Science Elective	3	F, Sp, Su		Page 31 Column III
2nd Spring	14	CHM 251	Organic Chemistry II	4	Sp, Su	CHM 250	
	15	Elective	BIO Elective	4	F, Sp, Su		BIO 120,145,255, 265,285
	16	STM 296	STEM Seminar	1	Sp	9 credits of Natural Science and/or Math with at least one of these courses at the 200-level	
	17	Elective	Humanities Elective	3	F, Sp, Su		Page 31 Column II
	18	Elective	Social Science Elective	3	F, Sp, Su		Page 31 Column III

Total Program Credits

60-61