B.S. Biology: Allied Health Requirements

The Allied Health Track at Kutztown University is designed to help students prepare for further education in a variety of health-related fields including, but not limited to, the following: physical therapy, physician assistant, pharmacy, laboratory technology, occupational therapy, optometry, and chiropractic.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Allied Health is 2.0. At least three courses in the major program must be at the 300- or 400-level, and students must earn a C or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (4 credits)

BIOL 106 Introduction to Zoology (4 credits)

BIOL 108 Introduction to Botany (4 credits)

BIOL 216 Genetics (3 credits)

BIOL 224 Applied Environmental Microbiology (3 credits)

BIOL 270 Research Methods (3 credits)

BIOL 380 Senior Seminar (2 credits)

Required Allied Health Core Courses - 8 credits

BIOL 120 Anatomy & Physiology I (4 credits)

BIOL 122 Anatomy & Physiology II (4 credits)

Biology: Allied Health Electives – 18 to 20 credits

Select five elective courses and one Biology Field Elective:

BIOL 252 Cellular Physiology & Metabolism (3 credits)

BIOL 264 Comparative Anatomy (4 credits)

BIOL 306 Food Microbiology (3 credits)

BIOL 330 Histology (3 credits)

BIOL 334 Medical Parasitology (3 credits)

BIOL 336 Medical Microbiology (3 credits)

BIOL 354 Developmental Biology (3 credits)

BIOL 356 Immunology (3 credits)

BIOL 357 Virology (3 credits)

BIOL 370 Research (3 credits) or BIOL 390 Internship (3 credits)

CHEM 216 Organic Chemistry II (4 credits)

BIOL 460 Cancer Biology (3 credits)

Biology Field Elective

Select one course:

BIOL 218 Vertebrate Biology (3 credits)

BIOL/EVSC 222 Environmental Biology (3 credits)

BIOL/MRSC 226 Marine Biology (3 credits)

BIOL 230 Taxonomy of Vascular Plants (3 credits)

BIOL 244 Ecology (4 credits)

BIOL 302 Entomology (3 credits)

BIOL 308 Ornithology (3 credits)

BIOL 314 Animal Behavior (3 credits)

BIOL 322 Population and Community Ecology (3 credits)

BIOL 324 Plant Ecology (3 credits)

BIOL 342 Herpetology (3 credits)

BIOL 332 Aquatic Ecology (3 credits)

BIOL 358 Conservation Biology (3 credits)

Biology courses offered at Chincoteague Field Station (200-level or above)

Other Required Courses – 10 to 11 credits

Note that CHEM 100 General Chemistry I and CHEM 102 General Chemistry II are included as part of Directed General Education requirements listed below.

CHEM 204 Fundamentals of Organic Chemistry (4 credits) *or* CHEM 214 Organic Chemistry (4 credits)

PSYC 100-, 200-, or 300-level course, excluding PSYC 200 (3 credits)

MATH 106 Trigonometry (3 credits) or MATH 115 Precalculus (3 credits) or MATH 181 Calculus (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

CHEM 100 General Chemistry I – Category C1 (4 credits)

CHEM 102 General Chemistry II – Category C2 (4 credits)

PHYS 40 General Physics I (4 credits) or PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 12 to 16 credits

Program Plan Code: BS BIOL HEAL

Effective Date: Fall 2018

Student Name:

Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Allied Health is 2.0. Students must earn a C or better in BIOL 104. At least three courses in the major program must be at the 300- or 400-level, and students must earn a c or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (must earn a C or better)	4 credits	Grade:
BIOL 106 Introduction to Zoology	4 credits	Grade:
BIOL 108 Introduction to Botany	4 credits	Grade:
BIOL 216 Genetics	3 credits	Grade:
BIOL 224 Applied Environmental Microbiology	3 credits	Grade:
BIOL 270 Research Methods	3 credits	Grade:
BIOL 380 Senior Seminar	2 credits	Grade:
Total Credits	23 total credits	

Required Allied Health Core Courses – 8 credits

BIOL 120 Anatomy & Physiology I	4 credits	Grade:
BIOL 122 Anatomy & Physiology II	4 credits	Grade:
Total Credits	8 total credits	

Biology: Allied Health Major Electives – 18 to 20 credits

Course 1:	credits	Grade:
Course 2:	credits	Grade:
Course 3:	credits	Grade:
Course 4:	credits	Grade:
Course 5:	credits	Grade:
Biology Field Elective:	Credits	Grade:
Total Credits	18-20 total credits	_

Other Required Courses – 10 to 11 credits

CHEM 100, CHEM 102, and PHYS are required and are included as part of Directed General Education.

CHEM 204 Fund. of Organic Chemistry or	4 credits	Grade:
CHEM 214 Organic Chemistry I		
MATH 106 Trigonometry or MATH 115 Precalculus or	3-4 credits	Grade:
MATH 181 Calculus		
PSYC 100, 200, or 300 level (excluding PSYC 200)	3 credits	Grade:
Total Credits	10-11 total credits	

Directed General Education Courses

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

CHEM 100 General Chemistry I	4 credits	Grade:
CHEM 102 General Chemistry II	4 credits	Grade:
PHYS 40 General Physics I or PHYS 100 Physics I	4 credits	Grade:

University Elective Courses – 12 to 16 credits

Course 1:	credits	Grade:
Course 2:	credits	Grade:
Course 3:	credits	Grade:
Course 4:	credits	Grade:
Course 5:	credits	Grade:
Total Credits	12-16 total credits	

Summary of Graduation Requirements

Total credits from major courses	60
Total credits from general education program	44
Total credits from university electives	16
Minimum total credits to graduate	120
Minimum overall GPA	2.0
Minimum GPA in major program	2.0

Program Plan Code: BS_BIOL_HEAL Effective Date: Fall 2018

Student Name:

Student ID Number:

Each semester listed below provides information including course categories, typical credit hours (CH.), and space to add specific course selections. This planner is a suggested path. Consult with your advisor regarding your unique plans and interests as you make choices about your schedule.

First Semester Plan

Gen Ed	CHEM 100 (C2)	4 CH.	Selection:
Gen Ed	MATH 106, 115, or 181 (C3)	3-4 CH.	Selection:
Gen Ed	FYSM 100	3 CH.	Selection: FYSM100 -
Major	BIOL 104	4 CH.	Selection:
Total		14-15 CH.	

Second Semester Plan

Gen Ed	Category A1	3 CH.	Selection:
Gen Ed	Category A3, Speaking	3 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Major	CHEM 102	4 CH.	Selection:
Major	BIOL 106	4 CH.	Selection:
Total		17 CH.	

Third Semester Plan

Gen Ed	Category A2	3 CH.	Selection:
Major	BIOL 108	4 CH.	Selection:
Major	BIOL 224	3 CH.	Selection:
Major	CHEM 204 or 214	4 CH.	Selection:
Total		14 CH.	

Fourth Semester Plan

Gen Ed	Category A4	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
	(Statistics class recommended)		
Major	BIOL 216	3 CH.	Selection:
Major	BIOL 270	3 CH.	Selection:
Major	PSYC course at the 100-, 200- or	3 CH.	Selection:
	300-level		
	(PSYC 125 recommended)		
Total		15 CH.	

Fifth Semester Plan

Gen Ed	Category B	3 CH.	Selection:
Gen Ed	PHYS 40 or CHEM 100 or 102 (C1)	4 CH.	Selection:
Major	BIOL 120	4 CH.	Selection:
Major	Biology Elective	3-4 CH.	Selection:
Total		14-15 CH.	

Sixth Semester Plan

Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	4 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	BIOL 122	4 CH.	Selection:
Major	Biology Elective	3-4 CH.	Selection:
Total		17-18 CH.	

Seventh Semester Plan

Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	Biology Elective	3-4 CH.	Selection:
Major	Biology Elective	3-4 CH.	Selection:
Total		15-17 CH.	

Eighth Semester Plan

Gen Ed	Category B	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	BIOL 380	2 CH.	Selection:
Major	Biology Field Elective	3 CH.	Selection:
Total		14 CH.	

Additional Notes:

- MATH 105 or ALEKS Math placement score greater than 60 is a prerequisite for MATH 106 or MATH 115. ALEKS Math placement score greater than 75 is needed for MATH 181 (4 credits). Calculus is attractive to many graduate programs in health, as is a statistics class (which would include PSYC/SOCI 200, MATH 140, or MATH 150).
- 2. Elective Courses (University Electives) should be chosen in consultation with the student's academic advisor.
- 3. PHYS 42 or 102 (Physics II) is required for application to many graduate programs in health.
- 4. No single course can count toward more than one category. At least three BIOL courses must be at 300-400 level.

Program Plan Code: BS BIOL HEAL

Effective Date: Fall 2018