PROGRAM CODE
ULASBIOMH
EFFECTIVE DATE
FALL 2018
VERSION NUMBER

2188

COLLEGE OF LIBERAL ARTS AND SCIENCES

BIOLOGY

BACHELOR OF SCIENCE

PRE-MEDICAL / HEALTH CAREERS

STUDENT:

STUDENT ID NUMBER:

MAJOR PROGRAM- at least 5 courses must be 300 or 400 level

Required Biology		
COURSE	CR	GRADE
BIO 104 PRINCIPLES OF BIOLOGY (must earn a C or better)	4	
BIO 106 INTRODUCTION TO ZOOLOGY	4	
BIO 108 INTRODUCTION TO BOTANY	4	
BIO 216 GENETICS	3	
BIO 224 APPLIED ENVIRONMENTAL MICROBIOLOGY	3	
BIO 270 RESEARCH METHODS	3	
BIO 380 SENIOR SEMINAR	2	
TOTAL CREDITS 23		

PRE-MEDICAL TRACK		
COURSE	CR	GRADE
BIO 264 COMPARATIVE ANATOMY	4	
BIO 346 MOLECULAR BIOLOGY OR BIO 350 CELL BIOLOGY	3	
BIO 122 ANATOMY & PHYS II OR	3/4	
BIO 235: GENERAL PHYSIOLOGY		
TOTAL CREDITS 10/11		

Program Electives		
COURSE	CR	GRADE
SELECT THREE COURSES:	9	
BIO 252 CELLULAR PHYS. & METAB. OR CHM 312 BIOCHEM II		
BIO 306 FOOD MICROBIOLOGY		
BIO 330 HISTOLOGY BIO 334 MEDICAL PARASITOLOGY		
BIO 334 MEDICAL PARASTI OLOGY		
BIO 354 DEVELOPMENTAL BIOLOGY		
BIO 356 IMMUNOLOGY		
BIO 370 RESEARCH IN BIOLOGY OR BIO 390 INTERNSHIP		
CHM 310 BIOCHEM I		
BIO 460 CANCER BIOLOGY		
BIOLOGY FIELD ELECTIVE - SELECT ONE COURSE:	3	
BIO 218 VERTEBRATE BIOLOGY		
BIO/ENV222 ENIVRONMENTAL BIOLOGY		
BIO/MAR 226 MARINE BIOLOGY BIO 230 TAXONOMY OF VASCULAR PLANTS		
BIO/ENV 244 ECOLOGY / BIO 302 ENTOMOLOGY		
BIO 308 ORNITHOLOGY / BIO 314 ANIMAL BEHAVIOR		
BIO 322 POPULATION AND COMMUNITY ECOLOGY		
BIO 324 PLANT ECOLOGY / BIO 342 HERPETOLOGY		
BIO 332 AQUATIC ECOLOGY		
BIO 358 CONSERVATION BIOLOGY BIOLOGY COURSES OFFERED AT CHINCOTEAGUE FIELD		
STATION (200 LEVEL OR ABOVE)		
BIO 200, 300 OR 400 LEVEL FREE ELECTIVE		
BIO	3	
TOTAL CREDITS 15		

NO SINGLE COURSE CAN COUNT TOWARD MORE THAN ONE CATEGORY

CONCOMITANT COURSES

Required Chemistry		
COURSE	CR	GRADE
CHM 100 GENERAL CHEMISTRY I	4 ♦	
CHM 102 GENERAL CHEMISTRY II	4	
CHM 214 ORGANIC CHEMISTRY I	4	
CHM 216 ORGANIC CHEMISTRY II	4	
TOTAL CREDITS 16		

Required Physics		
COURSE	CR	GRADE
PHY 40: GENERAL PHYSICS I AND	4 ♦	
PHY 42: GENERAL PHYSICS II OR	4	
PHY 100: PHYSICS I AND	4 ♦	
PHY 102: PHYSICS II	4	
TOTAL CREDITS 8		

Mathematics		
COURSE	CR	GRADE
SELECT ONE COURSE:	3/4♦	
MAT 106 TRIGONOMETRY		
MAT 115 PRECALCULUS		
MAT 181 CALCULUS I		
SELECT ONE COURSE:	3/4 ♦	
MAT 140 APPLIED STATISTICS		
PSY/SOC 200 STATISTICS (PSY 11 OR SOC 10 ARE PREREQ.)		
MAT 150 BIOSTATISTICS		
MAT181 CALCULUS I		
MAT 181 CALCULUS II		
TOTAL CREDITS 6/8		

Elective Courses elective courses may be selected from any department or program (including bio)			
COURSE	CR	GRADE	
TOTAL ELECTIVE CREDITS 7/9			

UP TO THREE (3) CONCOMITANT COURSES MARKED WITH ◆ CAN BE COUNTED TO FULFILL GEN ED GOAL: UNDERSTANDING SCIENCE AND TECHNOLOGY



GRADUATION REQUIREMENTS					
	REQUIRED	✓		REQUIRED	✓
GENERAL EDUCATION CREDITS	42-45		COMPREHENSIVE EXAM	PASS	
PROGRAM CREDITS (MINIMUM)	78-81		MINIMUM QPA OVERALL	2.0	
TOTAL CREDITS	120		MINIMUM QPA IN MAJOR	2.0	
			MAJOR PROGRAM COURSES 300 OR 400 LEVEL	5	

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DEGREE REQUIREMENTS

GENERAL EDUCATION

Student Learning Outcomes (SLO)

Upon completion of the requirements for the General Education Program, students will be able to:

- communicate clearly and effectively orally and in writing.
- 2 apply scientific and quantitative reasoning to solve problems and increase knowledge.
- **3** apply skills in critical analysis and reasoning for the interpretation of data.
- 4 engage critically with creative or artistic works.
- **5** demonstrate the ability to retrieve, interpret, evaluate, and use information.
- analyze the role of values, ethics, diversity, and multiple perspectives in local and global society.
- demonstrate an understanding of various models for the development of the whole person.
- **8** explore concepts, ideas, and methods from a variety of disciplines.

Use this checksheet to plan your degree program. Meet every semester with your academic advisor to be sure that you are taking courses that are required to attain the degree you are seeking. Discuss your goals and choose courses that will help you to attain them. Get the most out of your education by taking advantage of everything that Kutztown University has to offer.

TOTAL GENERAL EDUCATION CREDITS 42-45

FIND A FULL EXPLANATION
OF THE GENERAL EDUCATION
PROGRAM AT WWW.KUTZTOWN.EDU

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First Year Seminar: Discovering College		CREDITS REQUIRED		
		CREDITS EARNED:		
COURSE NUMBER COURSE NAME		GR		
FYS 100 First Year Seminar				
TRANSFER STUDENTS TRANSFERRING 30 CREDITS OR MORE AND NOT TRANSFERRING MAY SELECT ANY APPROVED GENERAL EDUCATION COURSE TO MEET THEIR FYS REQUIRED TO THE RESERVE OF THE PROPERTY.			RSE	
Communicating With		REDITS EQUIRED	12	
And About the World		CREDITS		
THESE COURSES MEET SLO (1) & (5) COURSE NUMBER COURSE NAME	LA	GR GR		
COMPOSITION 100 LEVEL CMP 1 COMPOSITION 200 LEVEL CMP 2				
SPEAKING				
ANY WRITING (A2) OR SPEAKING COURSE (A3) OR FROM THE APPROVED LIST				
COURSES IN CATEGORIES B, C & D MUST BE TAKEN OUTSIDE THE STUDENT'S MAJOR. THE MAJOR IS DEFINED AS THE PREFIX THAT IDENTIFIES THE MAJOR. CONCOMITANT REQUIREMENTS MAY BE TAKEN TO MEET GENERAL EDUCATION REQU	JIREMEN	ГЅ.		
Understanding	CF	REDITS		

D	Understanding Self & Others		CREDITS REQUIRED		
THESE COURSES MEET SLO 3 & 6		CREL EARN			
COL	RSE NUMBER COURSE NAME		GR	CR	
1					
2					
3	•				
	Understanding	CDED	ATC A	40	

	Understanding Science & Technology		CRED REQU)-12	
Science & Technology THESE COURSES MEET SLO 2 & 3		CREL EARN			
	COURS	E NUMBER COURSE NAME	GR (CR
1	SCIENTI	FIC INQUIRY			
2	QUANTI	TATIVE REASONING			
3	ANY CO	URSE APPROVED FOR C1 OR C2			

	Understanding & Creating Ideas	CRED REQU		9
	THESE COURSES MEET SLO 4 & 6	CRED EARN		
COURSI	E NUMBER COURSE NAME		GR	CR
1				

B.S. Biology/Pre-Medical and Other Health Careers Suggested 4-Year Schedule

8/2018

Freshman Year

Fall Semester	Cr
CHM 100 – General Chemistry I	4
BIO 104 – Principles of Biology	4
First Year Seminar	3
Gen Ed A1 (CMP 100)	3
Total	14

Spring Semester	Cr
CHM 102 – General Chemistry II	4
BIO 106 – Intro to Zoology	4
Gen Ed B1 (Psy 11 recommended)	3
Gen Ed B2 (SOC 10 recommended)	3
Required Math ^{1,2}	3
Total	17

Sophomore Year

Fall Semester	Cr
CHM 214VL - Org Chemistry I	4
BIO 108 – Intro to Botany	4
BIO 224 – Applied Env. Microbiology	3
Gen Ed Course B3 (Psy 125 recommended)	3
Total	14

Spring Semester	Cr
CHM 216WI - Org Chemistry II	4
BIO 270CT WI – Research Methods	3
BIO 216QL - Genetics	3
Required Math ¹	3
Gen Ed Course A2 (CMP 200)	3
Total	16

Junior Year

Fall Semester	Cr
PHY 40 or 100	4
BIO 346 Molecular Bio or BIO Elective	3
BIO 264 – Comparative Anatomy	4
BIO Elective (CHM 310 recommended)	4
Gen Ed Course D1	3
Total	18

Spring Semester	Cr
PHY 42 or 102	4
BIO 235 – Gen Phys	3
BIO Elective ³ or Cell Bio	3
Gen Ed Course D2	3
Free Elective (MAT 181 recommended)	3
Total	16

Senior Year

Fall Semester	Cr
Gen Ed A4	3
BIO Elective ³	3
BIO Elective (200, 300 or 400 level)	3
Gen Ed Course A3	3
Total	12

Spring Semester	Cr
BIO 380 - Senior Seminar in Biology	2
BIO Field Elective	3
Gen Ed A4	3
Gen Ed D3	3
Free Elective	3
Total	14

Note: No single course can count toward more than one category. At least five BIO courses must be at 300-400 level.

¹ See required courses on track sheet. Note: MAT 105 is a prerequisite for MAT 106, MAT 140, and MAT 150.

² Prerequisites of MAT 017 or higher **and** PSY 11 Intro to Psychology are required for PSY 200 (Statistics for the Social and Behavioral Sciences).

³See Biology electives on track sheet.