

NAME	EFFECTIVE DATE AUGUST 27, 2018
ID NUMBER	VERSION 2188

KUTZTOWN

UNIVERSITY

DEGREE REQUIREMENTS

GENERAL EDUCATION

Student Learning Outcomes (SLO)

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

- 1 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.
- 6 analyze the role of values, ethics, diversity, and multiple perspectives in local and global society.
- 7 demonstrate an understanding of various models for the development of the whole person.

Completion of the KU General Education program will give students opportunities to:

- 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 obtain 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

First Year Seminar: Discovering College	CREDITS REQUIRED	3
THIS COURSE MEETS SLO 5 & 7		CREDITS EARNED:

COURSE NUMBER	COURSE NAME	CR	GR
FYS 100	First Year Seminar		

TRANSFER STUDENTS TRANSFERRING 15 CREDITS OR MORE AND NOT TRANSFERRING AN FYS OR FYE COURSE MAY SELECT ANY ADDITIONAL COURSE FROM SECTIONS A, B, C, OR D TO MEET THEIR FYS REQUIREMENT

TRANSFER ELECTIVE:

A	Communicating With And About the World	CREDITS REQUIRED	12
THESE COURSES MEET SLO 1 & 5		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1	COMPOSITION 100 LEVEL CMP 1__		
2	COMPOSITION 200 LEVEL CMP 2__		
3	SPEAKING		
4	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 REQUIREMENTS.

B	Understanding Self & Others	CREDITS REQUIRED	9
THESE COURSES MEET SLO 3 & 6		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1			
2			
3			

C	Understanding Science & Technology	CREDITS REQUIRED	9-12
THESE COURSES MEET SLO 2 & 3		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1	SCIENTIFIC INQUIRY		
2	QUANTITATIVE REASONING		
3	ANY COURSE APPROVED FOR C1 OR C2		

D	Understanding & Creating Ideas	CREDITS REQUIRED	9
THESE COURSES MEET SLO 4 & 6		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1			
2			
3			

PROGRAM CODE ULASBIOMM	COLLEGE OF LIBERAL ARTS AND SCIENCES
EFFECTIVE DATE SPRING 2020	
VERSION NUMBER 2202	
BIOLOGY	
<i>BACHELOR OF SCIENCE</i>	
MOLECULAR / MICRO / CELL	
STUDENT:	STUDENT ID NUMBER:

MAJOR PROGRAM- at least 4 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	

Molecular Biology/Microbiology/Cellular Biology Track		
COURSE	CR	GRADE
BIO 252 CELL PHYS & METAB. OR CHM 312 BIOCHEMISTRY II	3/4	
BIO 346 MOLECULAR BIOLOGY	3	
BIO 350 CELL BIOLOGY	3	
TOTAL CREDITS	9/10	

Program Electives		
COURSE	CR	GRADE
SELECT THREE COURSES: BIO 122 ANATOMY & PHYS. II OR BIO 235 GEN PHYSIOLOGY (4 cr.) BIO 232 PLANT PHYSIOLOGY BIO 236 INTRODUCTION TO PLANT PATHOLOGY BIO 306 FOOD MICROBIOLOGY BIO 330 HISTOLOGY BIO 334 MEDICAL PARASITOLOGY BIO 336 MEDICAL MICROBIOLOGY BIO 354 DEVELOPMENTAL BIOLOGY BIO 356 IMMUNOLOGY BIO 357 VIROLOGY BIO 370 RESEARCH (3 cr.) OR BIO 390 INTERNSHIP (3 cr.) BIO 460 CANCER BIOLOGY	9/10	
BIOLOGY FIELD ELECTIVE - SELECT ONE COURSE: BIO 218 VERTEBRATE BIOLOGY BIO/ENV222 ENVIRONMENTAL BIOLOGY BIO/MAR 226 MARINE BIOLOGY BIO 230 TAXONOMY OF VASCULAR PLANTS BIO 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)	3	
TOTAL CREDITS	12/13	

CONCOMITANT COURSES


Required Chemistry		
COURSE	CR	GRADE
CHM 100 GENERAL CHEMISTRY I	♦	
CHM 102 GENERAL CHEMISTRY II	4	
CHM 214 ORGANIC CHEMISTRY I	4	
CHM 216 ORGANIC CHEMISTRY II	4	
CHM 310 BIOCHEMISTRY I	4	
TOTAL CREDITS	16	

Required Physics		
COURSE	CR	GRADE
PHY 40 GENERAL PHYSICS I OR PHY 100 PHYSICS I	♦	
TOTAL CREDITS	0	

Mathematics		
COURSE	CR	GRADE
SELECT ONE COURSE: MAT 106 TRIGONOMETRY MAT 115 PRECALCULUS MAT 181 CALCULUS I (4 cr.)	♦	
TOTAL CREDITS	0	

Elective Courses <small>ELECTIVE COURSES MAY BE SELECTED FROM ANY DEPARTMENT OR PROGRAM (INCLUDING BIO)</small>		
COURSE	CR	GRADE
TOTAL ELECTIVE CREDITS	13/16	

UP TO THREE (3) CONCOMITANT COURSES MARKED WITH ♦ CAN BE COUNTED TO FULFILL GEN ED GOAL: UNDERSTANDING SCIENCE AND TECHNOLOGY
NO SINGLE COURSE CAN COUNT TOWARD MORE THAN ONE CATEGORY

GRADUATION REQUIREMENTS						
		REQUIRED	✓		REQUIRED	✓
	GENERAL EDUCATION CREDITS	44		COMPREHENSIVE EXAM	PASS	
	PROGRAM CREDITS (MINIMUM)	60		MINIMUM QPA OVERALL	2.0	
	ELECTIVE COURSES	16		MINIMUM QPA IN MAJOR	2.0	
	TOTAL CREDITS (120 MIN NEEDED TO GRADUATE)	120		MAJOR PROGRAM COURSES 300 OR 400 LEVEL	4	

B.S. Biology/Molecular/Micro/Cell Biology

4-Year Schedule (2-2020)

Program Code: ULASBIOMM

Version: 2202

BS Biology/Molecular/Micro/Cell Biology First Semester Suggested Advising for Connections
BIO 104 – Principles of Biology
CHM 100 – General Chemistry I (C2)
First Year Seminar (FYS)
MAT 105, 106, 115, or 181 ^{1,2} depending on ALEKS placement score (C3)

Freshman Year

Fall Semester	Cr	Spring Semester	Cr
BIO 104 – Principles of Biology	4	BIO 106 - Intro to Zoology	4
CHM 100 – General Chemistry I (C2)	4	CHM 102 – General Chemistry II	4
First Year Seminar (FYS)	3	Gen Ed Course – (B1)	3
*Required Math ^{1,2} (C3)	3	Gen Ed Course – CMP 100 (A1)	3
Total	14	Total	14

*Students may be at a different level of math depending on ALEKS placement score.

Sophomore Year

Fall Semester	Cr	Spring Semester	Cr
BIO 108 - Intro to Botany	4	BIO 270 – Research Methods	3
CHM 214 Organic Chem I	4	CHM 216 – Organic Chem II	4
BIO 224 – Applied Env. Microbiology	3	BIO 216 – Genetics	3
Gen Ed Course – COM 10 (A3)	3	Gen Ed Course (B2)	3
Elective Course ^{1,2}	3	Elective Course (MAT 140 recommended) ^{1,2}	3
Total	17	Total	16

Junior Year

Fall Semester	Cr	Spring Semester	Cr
PHY 40 or 100 (C1)	4	Bio 350 Cell Biology	3
BIO 346 Molecular Biology	3	BIO Elective ³	3
BIO Elective ³	3	Elective Course (PHY 42 or 102 recommended) ²	3/4
Gen Ed Course – CMP 2XX (A2)	3	Gen Ed Course (A4)	3
Gen Ed Course (C1)	3	Gen Ed Course (D1)	3
Total	16	Total	15/16

Senior Year

Fall Semester	Cr	Spring Semester	Cr
CHM 310 Biochemistry I	4	BIO 252 Cell Phys or CHM 312 Biochem II	3/4
BIO Elective ³	3	BIO 380 – Senior Seminar in Biology	2
Elective Course ^{1,2}	3	BIO Field Elective ³	3
Gen Ed Course (B3)	3	Elective Course ^{1,2}	3
Gen Ed Course (D2)	3	Gen Ed Course (D3)	3
Total	16	Total	14/15

¹ See required courses on track sheet. Note: **MAT 105 or Math placement score greater than 60** is a prerequisite for **MAT 106, MAT 140, and MAT 150.**

² Elective Courses should be chosen in consultation with the student's academic advisor.

³ See Biology electives on track sheet.

Students must complete all credits required in the major along with a total of 120 credits are needed to graduate.

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

12/2019