

PROGRAM CODE <b>ULASMARBI</b> EFFECTIVE DATE SPRING 2020 VERSION NUMBER 2202	<b>COLLEGE OF LIBERAL ARTS AND SCIENCES</b>
<h1 style="margin: 0;">MARINE SCIENCE</h1> <hr style="width: 50%; margin: 0 auto;"/> <p style="margin: 0;">BACHELOR OF SCIENCE</p>	
<b>BIOLOGY TRACK</b>	
STUDENT NAME:	: ID NUMBER

*MAJOR PROGRAM*

Marine Science Core		
REQUIRED COURSES (Note 1)	CR	GRADE
MAR 110 Intro. To Oceanography	3	
MAR 226 Marine Biology	3	
MAR Method-Intense Field Course (Note 1)	3	
MAR 210 Sophomore Seminar	1	
MAR 364 Physical Oceanography	3	
MAR 366 Marine Geology	3	
MAR 380 Senior Seminar	2	
<b>TOTAL CREDITS</b>	<b>18</b>	
ELECTIVE COURSES (Note 2)		
MAR 370 Research in Mar. Sci <b>OR</b> MAR 390 Internship in Mar. Sci.	3	
MAR Elective (Note 2)	3	
MAR Elective (Note 2)	3	
<b>TOTAL CREDITS</b>	<b>9</b>	

Biology Track		
	CR	GRADE
BIO 104 Principles of Biology	4	
BIO 106 Intro. to Zoology	4	
BIO 224 Applied Environ. Micro.	3	
BIO 216 Genetics	3	
<b>TOTAL CREDITS</b>	<b>14</b>	

NOTES:

1. Methods courses are offered at the Chincoteague Bay Field Station, Wallops Island, VA and must be approved by the MAR Program Coordinator.
2. Courses in this category may be used to satisfy the minimum of 9 SH that must be taken at the Chincoteague Bay Field Station, Wallops Island, VA.
3. Students may use a combination of 1, 3, and 4 credit courses to complete 16 credits of Free Electives.

▲ INDICATES COURSE REQUIRED FOR THE MAJOR, BUT MAY BE USED TO SATISFY REQUIREMENTS OF GENERAL EDUCATION. THESE UNITS ARE ONLY COUNTED UNDER GENERAL EDUCATION.

*CONCOMITANT COURSES*

COURSE	CR	GRADE
<b>Chemistry</b>		
CHM 100 General Chemistry I (4 cr) (GE C1)	▲	
CHM 102 General Chemistry II	4	
CHM 214 Organic Chemistry I OR CHM 204 Fund of Organic Chemistry	4	
<b>Geography</b>		
GEG 274 Geo. Info. Sys. I	3	
<b>Geology</b>		
GEL 100 Physical Geology (4 cr) (GE C2)	▲	
<b>Mathematics</b>		
MAT 106 Trigonometry or MAT 115 Precalculus or MAT 181 Calculus I	3	
<b>Physics</b>		
PHY 40 or 100 Physics I (GE C3)	▲	
PHY 42 or 102 Physics II	4	
<b>TOTAL CREDITS</b>	<b>18</b>	

*FREE ELECTIVES<sup>3</sup>*

COURSE	CR	GRADE
<b>TOTAL CREDITS</b>	<b>16</b>	

Check Sheet Last Revised: 9/5/2019

GRADUATION REQUIREMENTS							
		REQUIRED	✓		REQUIRED	✓	
	GENERAL EDUCATION CREDITS	45			COMPREHENSIVE EXAM	<b>PASS</b>	
	PROGRAM CREDITS (MINIMUM)	59			MINIMUM QPA OVERALL	<b>2.0</b>	
	FREE ELECTIVES	16			MINIMUM QPA IN MAJOR	<b>2.0</b>	
	TOTAL CREDITS (120 MIN NEEDED TO GRADUATE)	<b>120</b>					

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.

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**TOTAL GENERAL EDUCATION CREDITS 42-45**

FIND A FULL EXPLANATION OF THE GENERAL EDUCATION PROGRAM AT [WWW.KUTZTOWN.EDU](http://WWW.KUTZTOWN.EDU)

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

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:

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

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>	COMPOSITION 100 LEVEL CMP 1__		
<b>2</b>	COMPOSITION 200 LEVEL CMP 2__		
<b>3</b>	SPEAKING		
<b>4</b>	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>B</b>	<b>Understanding Self &amp; Others</b>	<b>CREDITS REQUIRED</b>	<b>9</b>
THESE COURSES MEET SLO <b>3</b> & <b>6</b>		<b>CREDITS EARNED:</b>	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>			
<b>2</b>			
<b>3</b>			

<b>C</b>	<b>Understanding Science &amp; Technology</b>	<b>CREDITS REQUIRED</b>	<b>9-12</b>
THESE COURSES MEET SLO <b>2</b> & <b>3</b>		<b>CREDITS EARNED:</b>	

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

<b>D</b>	<b>Understanding &amp; Creating Ideas</b>	<b>CREDITS REQUIRED</b>	<b>9</b>
THESE COURSES MEET SLO <b>4</b> & <b>6</b>		<b>CREDITS EARNED:</b>	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>			
<b>2</b>			
<b>3</b>			

## B.S. Marine Science/Biology Suggested 4-Year Schedule

### Freshman Year<sup>1</sup>

Fall Semester	Cr
MAR 110 Intro. to Oceanography	3
BIO 104 – Principles of Biology	4
FYS 100	3
Gen Ed Course	3
<b>Total</b>	<b>13</b>

Spring Semester	Cr
GEL 100 Physical Geology	4
BIO 106 – Intro to Zoology	4
MAT 106 or 115 or 181	3
Gen Ed Course	3
<b>Total</b>	<b>14</b>

### Sophomore Year<sup>1</sup>

Fall Semester	Cr
CHM 100 General Chemistry I	4
MAR 210 Sophomore Seminar	1
PHY 40 or 100	4
Gen Ed Course	3
Free Elective <sup>2</sup>	3
<b>Total</b>	<b>15</b>

Spring Semester	Cr
CHM 102 General Chemistry II	4
PHY 42 or 102	4
BIO 226 Marine Biology	3
Gen Ed Course	3
<b>Total</b>	<b>14</b>

### Junior Year<sup>1</sup>

Fall Semester	Cr
CHM 214 or 204	4
BIO 224 – Appl. Env. Micro.	3
Gen Ed Course	3
Gen Ed Course	3
<b>Total</b>	<b>13</b>

Spring Semester	Cr
BIO 216 - Genetics	3
MAR 364 or 366 <sup>3</sup>	3
Free Elective <sup>2</sup>	4
Gen Ed Course	3
<b>Total</b>	<b>13</b>

### Senior Year<sup>1</sup>

Fall Semester	Cr
MAR 370 or 390	3
GEG 274 -Intro to GIS	3
Free Elective <sup>2</sup>	3
Free Elective <sup>2</sup>	3
Gen Ed Course	3
<b>Total</b>	<b>15</b>

Spring Semester	Cr
MAR 380 - Senior Seminar	2
MAR 364 or 366 <sup>3</sup>	3
Free Elective <sup>2</sup>	3
Gen Ed Course	3
Gen Ed Course	3
<b>Total</b>	<b>14</b>

<sup>1</sup>Three summer field courses at the Chincoteague Bay Field Station are required for graduation and can be used to fulfill the Methods-Intensive course, as well as the MAR Electives within the Core. These can be scheduled any summer following freshman year with 1, 2 or all 3 in any given summer.

<sup>2</sup>Students must complete 16 credits of Free Electives in any combination of 1, 3, and 4 credit courses.

<sup>3</sup> Offered alternate spring semesters MAR 364 Physical Oceanography (odd)/MAR 366 Marine Geology (even).