

## MAJOR PROGRAM

| Marine SCience Core | cr | GRADE |
| :--- | :---: | :---: |
| REQuIred courses (Note 1) | 3 |  |
| MAR 110 Intro. To Oceanography | 3 |  |
| MAR 226 Marine Biology | 3 |  |
| MAR Method-Intense Field Course (Note 1) | 1 |  |
| MAR 210 Sophomore Seminar | 3 |  |
| MAR 364 Physical Oceanography | $\mathbf{3}$ |  |
| MAR 366 Marine Geology | 2 |  |
| MAR 380 Senior Seminar |  |  |
| TOTAL CREDITS |  |  |
| elective courses (Note 2) | 3 |  |
| MAR 370 Research in Mar. Sci OR <br> MAR 390 Internship in Mar. Sci. |  | 3 |
| MAR Elective (Note 2) | 3 |  |
| MAR Elective (Note 2) | $\mathbf{9}$ |  |
| TOTAL CREDITS |  |  |


| Oceanography Track |  |  |
| :--- | :---: | :---: |
| Physical sciences (Note 3) | CR | GRADE |
| GEL 100 Physical Geology | 4 |  |
| Physical science course 100 level or higher | 3 |  |
| Physical science 200 level or higher | 3 |  |
| Physical science 200 level or higher | 3 |  |
| TOTAL CREDITS |  |  |

## 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. Physical Science Courses include prefixes: MAR/GEL/PHY/CHM/AST
4. 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

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| BIO 104 Principles of Biology (4 cr) | (GE C1) | - |  |
| BIO 106 Intro. To Zoology OR BIO 108 Intro. To Botany |  | 4 |  |
| Chemistry |  |  |  |
| CHM 100 General Chemistry I (4 cr) | (GE C3) | - |  |
| CHM 102 General Chemistry II |  | 4 |  |
| Heography |  |  |  |
| GEG 274 Geo. Info. Sys. I |  | 3 |  |
| Mathematics |  |  |  |
| MAT 181 Calculus I or Higher |  | 4 |  |
| Physics |  |  |  |
| PHY 40 or 100 Physics I | (GE C2) | $\triangle$ |  |
| PHY 42 or 102 Physics II |  | 4 |  |
| TOTAL CREDITS | 19 |  |  |

FREE ELECTIVES ${ }^{4}$

| COURSE | CR | GRADE |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | 16 |  |
| TOTAL CREDITS |  |  |

Check Sheet Last Revised: 9/5/2019

| GRADUATIONREQUIREMENTS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | GENERAL EDUCATION CREDITS | 45 | COMPREHENSIVE EXAM | PASS |  |
|  | PROGRAM CREDITS (MINIMUM) | 59 | MINIMUM QPA OVERALL | 2.0 |  |
|  | FREE ELECTIVES | 16 | MINIMUM QPA IN MAJOR | 2.0 |  |
|  | TOTAL CREDITS (120 min needed to graduate) | 120 |  |  |  |


| NAME | EFFECTIVEDATE <br> AUGUST 27, 2018 |
| :--- | :---: |
| ID NUMBER | VERSION |
| 2188 |  |

D E GREE 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.


| Understanding |
| :--- |
| Science \& Technology |
| THESE CoURSES MEET SLO $2<3$ |



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.S. Marine Science/Oceanography Suggested 4-Year Schedule

Freshman Year ${ }^{1}$

| Fall Semester | Cr |
| :--- | :---: |
| MAR 110 Intro. to Oceanography | $\mathbf{3}$ |
| BIO 104 - Principles of Biology | $\mathbf{4}$ |
| FYS 100 | $\mathbf{3}$ |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{1 3}$ |


| Spring Semester | Cr |
| :--- | :---: |
| GEL 100 Physical Geology | $\mathbf{4}$ |
| BIO 106 - Intro to Zoology | $\mathbf{4}$ |
| MAT 181 or higher | $\mathbf{4}$ |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{1 5}$ |

Sophomore Year ${ }^{1}$

| Fall Semester | $\mathbf{C r}$ |
| :--- | :---: |
| CHM 100 General Chemistry I | $\mathbf{4}$ |
| MAR 210 Sophomore Seminar $^{\text {F }}$ | $\mathbf{1}$ |
| Free Elective $^{2}$ | $\mathbf{3}$ |
| Phys Sci course 100-level or higher |  |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{3}$ |
|  | $\mathbf{1 4}$ |


| Spring Semester | $\mathbf{C r}$ |
| :--- | :---: |
| CHM 102 General Chemistry II | $\mathbf{4}$ |
| BIO 226 Marine Biology | $\mathbf{3}$ |
| Free Elective $^{2}$ | $\mathbf{4}$ |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{1 4}$ |

## Junior Year ${ }^{1}$

| Fall Semester | Cr |
| :--- | :---: |
| PHY 40 or 100 | $\mathbf{4}$ |
| Phys Sci course 200-level or higher |  |
| Gen Ed Course | $\mathbf{3}$ |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{3}$ |

## Senior Year ${ }^{1}$

| Fall Semester | $\mathbf{C r}$ |
| :--- | :---: |
| MAR 370 or 390 | $\mathbf{3}$ |
| GEG 274 -Intro to GIS | $\mathbf{3}$ |
| Free Elective $^{2}$ | $\mathbf{3}$ |
| Free Elective |  |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{3}$ |


| Spring Semester | Cr |
| :--- | :---: |
| MAR 380 - Senior Seminar | $\mathbf{2}$ |
| MAR 364 or $366^{3}$ | $\mathbf{3}$ |
| Free Elective |  |
| Gen Ed Course | $\mathbf{3}$ |
| Gen Ed Course | $\mathbf{3}$ |
| Total | $\mathbf{3}$ |

${ }^{1}$ 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.
${ }^{2}$ Students must complete 16 credits of Free Electives in any combination of 1, 3, and 4 credit courses.
${ }^{3}$ Physical Science Courses include prefixes: MAR/GEL/PHY/CHM/AST.
${ }^{4}$ Offered alternate spring semesters MAR 364 Physical Oceanography (odd)/MAR 366 Marine Geology (even).

