

# MARINE BIOLOGY - BS

## Program Requirements

### First Year

| Fall                         |  | Semester<br>Credit<br>Hours |
|------------------------------|--|-----------------------------|
| CHEM 119                     | Fundamentals of Chemistry I  | 4                           |
| ENGL 104                     | Composition and Rhetoric   | 3                           |
| MATH 147<br>or MATH 151      | Calculus I for Biological Sciences<br>or Engineering Mathematics I | 4                           |
| MARB 101                     | Succeeding in Science <sup>1</sup>                                 | 3                           |
| <b>Semester Credit Hours</b> |  | <b>14</b>                   |

### Spring

|                              |  |           |
|------------------------------|--|-----------|
| BIOL 111                     | Introductory Biology I <sup>1,2</sup>      | 4         |
| CHEM 120                     | Fundamentals of Chemistry II               | 4         |
| MARS 102                     | Earth and Ocean Science <sup>1</sup>       | 4         |
| Select one of the following: |  | 4         |
| MATH 148                     | Calculus II for Biological Sciences        |           |
| MATH 150                     | Functions, Trigonometry and Linear Systems |           |
| MATH 152                     | Engineering Mathematics II                 |           |
| <b>Semester Credit Hours</b> |  | <b>16</b> |

### Second Year

| Fall                         |                              | Semester<br>Credit<br>Hours |
|------------------------------|------------------------------|-----------------------------|
| CHEM 227                     | Organic Chemistry I          | 3                           |
| CHEM 237                     | Organic Chemistry Laboratory | 1                           |
| MARB 215                     | Marine Zoology <sup>1</sup>  | 4                           |
| PHYS 201                     | College Physics              | 4                           |
| POLS 206                     | American National Government | 3                           |
| <b>Semester Credit Hours</b> |                              | <b>15</b>                   |

### Spring

|                              |   |           |
|------------------------------|---|-----------|
| CHEM 228                     | Organic Chemistry II                        | 3         |
| CHEM 238                     | Organic Chemistry Laboratory                | 1         |
| MARB 315                     | Natural History of Vertebrates <sup>1</sup> | 4         |
| PHYS 202                     | College Physics                             | 4         |
| POLS 207                     | State and Local Government                  | 3         |
| <b>Semester Credit Hours</b> |   | <b>15</b> |

### Third Year

| Fall  |                            | Semester<br>Credit<br>Hours |
|---|----------------------------|-----------------------------|
| MARB 301  | Genetics <sup>1</sup>      | 4                           |
| MARB 303  | Biostatistics <sup>1</sup> | 4                           |
| Communication ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communications">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communications</a> ) |                            | 3                           |
| Marine biology elective <sup>1,3</sup>  |                            | 4                           |
| <b>Semester Credit Hours</b>  |                            | <b>15</b>                   |

### Spring

|          |  |   |
|----------|--|---|
| MARB 310 | Introduction to Cell Biology <sup>1</sup>  | 4 |
| MARB 435 | Marine Invertebrate Zoology <sup>1,4</sup> | 4 |

|  |   |
|--|---|
| Social and behavioral sciences ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a> ) | 3 |
|--|---|

|  |   |
|--|---|
| Marine biology elective <sup>1,3</sup> | 4 |
|--|---|

**Semester Credit Hours** **15**

### Fourth Year

| Fall   |                                    | Semester<br>Credit<br>Hours |
|--|------------------------------------|-----------------------------|
| MARB 425   | Marine Ecology <sup>1</sup>        | 4                           |
| MARB 430   | Coastal Plant Ecology <sup>1</sup> | 4                           |
| American History ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) |                                    | 3                           |
| Marine biology elective <sup>1,3</sup>   |                                    | 3                           |

**Semester Credit Hours** **14**

### Spring

|  |  |   |
|--|--|---|
| MARB 420   | Comparative Animal Physiology <sup>1</sup> | 4 |
| American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )                                       |  | 3 |
| Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )  |  | 3 |
| Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> ) |  | 3 |
| Marine biology elective <sup>1,3</sup>   |  | 3 |

**Semester Credit Hours** **16**

**Total Semester Credit Hours** **120**

<sup>1</sup> Indicates required courses in the Marine Biology major. These courses will be used to compute the major GPR.

<sup>2</sup> A grade of C or better is required before advancing to upper level courses.

<sup>3</sup> 14 credit hours of marine biology electives selected from the following: BIOL 351; FSCI 360, MARB 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/marb/>); MARS 305, MARS 325. Students can only select 2 mammals courses (MARB 400, MARB 401, MARB 403, or MARB 407).

<sup>4</sup> Designated writing intensive course.

All electives must be chosen in consultation with, and approved by, the student's academic advisor. Unless courses are specifically listed, see University Core Curriculum for a listing of course options for Communication; Mathematics; Life and Physical Sciences; Language, Philosophy and Culture; Creative Arts; American History; Government and Political Sciences; and Social and Behavioral Sciences. The 3-hour University Core Curriculum requirement for International and Cultural Diversity may be met with courses used to satisfy other degree requirements. The 3-hour University Core Curriculum requirement for Cultural Discourse may be met with courses used to satisfy other degree requirements. Up to 4 hours of MARB 491 and/or MARB 484 may be used as marine biology elective courses in your curriculum. Please consult with your academic advisor.