

## Bachelor of Science, Biology – Marine Biology Concentration (BI-M): 2021-2022 Catalog

| Course No.                        | Description                    | Cr.       |
|-----------------------------------|--------------------------------|-----------|
| <b>First Year Fall</b>            |                                |           |
| <input type="checkbox"/> BIOL 110 | Evolution, Ecol, & Plant Biol. | 4         |
| <input type="checkbox"/> CHEM 121 | Chemistry Principles I         | 4         |
| <input type="checkbox"/> WRIT 102 | Research Writing               | 3         |
| <input type="checkbox"/> HIST xxx | History Elective 100-200 level | 3         |
| <input type="checkbox"/> PSYC 101 | Intro Psychology (Soc Sci I)   | 3         |
| <input type="checkbox"/> BIOL 131 | Biology Freshman Seminar       | 0         |
| <input type="checkbox"/> CORE 103 | Fall Comm. Enrich. Series      | 0         |
| <b>Total Credits</b>              |                                | <b>17</b> |

|                                             |                               |           |
|---------------------------------------------|-------------------------------|-----------|
| <b>Second Year Fall</b>                     |                               |           |
| <input type="checkbox"/> BIOL 218           | Marine Biology                | 4         |
| <input type="checkbox"/> CHEM 221           | Organic Chemistry I           | 4         |
| <input type="checkbox"/> LANG xxx           | Foreign Lang. (102 or higher) | 3         |
| <input type="checkbox"/> PHIL 205           | Discovering Philosophy        | 3         |
| <input type="checkbox"/> ECON/PLSC/PSYC/SOC | Social Science III            | 3         |
| <b>Total Credits</b>                        |                               | <b>17</b> |

|                                   |                         |           |
|-----------------------------------|-------------------------|-----------|
| <b>Third Year Fall</b>            |                         |           |
| <input type="checkbox"/> BIOL 302 | General Microbiology    | 4         |
| <input type="checkbox"/> PHYS 104 | Intro to Physics I      | 4         |
| <input type="checkbox"/> or 121   | Gen. Physics I          |           |
| <input type="checkbox"/> FNAR xxx | Fine Arts Elective      | 3         |
| <input type="checkbox"/> SOC SCI  | Social Science Elective | 3         |
| <input type="checkbox"/> BIOL 331 | Biology Junior Seminar  | 0         |
| <input type="checkbox"/> EXAM 301 | Writing Competency      | 0         |
| <input type="checkbox"/>          | Free Elective           | 3         |
| <b>Total Credits</b>              |                         | <b>17</b> |

|                                   |                          |              |
|-----------------------------------|--------------------------|--------------|
| <b>Fourth Year Fall</b>           |                          |              |
| <input type="checkbox"/> BIOL xxx | Biology Course Option II | 4            |
| <input type="checkbox"/> BIOL xxx | Marine Biology Elective  | 1-4          |
| <input type="checkbox"/>          | Free Elective            | 3            |
| <input type="checkbox"/> CORE 407 | Keystone Seminar         | 3            |
| <input type="checkbox"/>          | Free Elective            | 3            |
| <input type="checkbox"/>          | Free Elective            | 1            |
| <b>Total Credits</b>              |                          | <b>15-18</b> |

Total Required Credits: 128

| Course No.                           | Description                         | Cr.       |
|--------------------------------------|-------------------------------------|-----------|
| <b>First Year Spring</b>             |                                     |           |
| <input type="checkbox"/> BIOL 111    | Molecules, Cells, & Anim. Phys.     | 4         |
| <input type="checkbox"/> CHEM 122    | Chemistry Principles II             | 4         |
| <input type="checkbox"/> MATH 112    | Calculus                            | 3         |
| <input type="checkbox"/> or MATH 121 | Calculus/Geom I                     |           |
| <input type="checkbox"/> CORE 113    | Gen Ed 1 <sup>st</sup> Year Seminar | 3         |
| <input type="checkbox"/> RLST 105    | Franciscan Goals for Today          | 3         |
| <input type="checkbox"/> CORE 104    | Spring Comm. Enrich. Series         | 0         |
| <b>Total Credits</b>                 |                                     | <b>17</b> |

|                                                           |                           |           |
|-----------------------------------------------------------|---------------------------|-----------|
| <b>Second Year Spring</b>                                 |                           |           |
| <input type="checkbox"/> BIOL xxx                         | Biology Course Option I   | 4         |
| <input type="checkbox"/> CHEM 222                         | Organic Chemistry II      | 4         |
| <input type="checkbox"/> BIOL 315                         | Biostatistics             | 4         |
| <input type="checkbox"/> LIT 104, 201, 202, 204, 207, 270 | Literature                | 3         |
| <input type="checkbox"/> BIOL 231                         | Biology Sophomore Seminar | 0         |
| <input type="checkbox"/>                                  | Diversity Elective        | 3         |
| <b>Total Credits</b>                                      |                           | <b>18</b> |

|                                     |                         |              |
|-------------------------------------|-------------------------|--------------|
| <b>Third Year Spring</b>            |                         |              |
| <input type="checkbox"/> BIOL 301   | Genetics                | 4            |
| <input type="checkbox"/> BIOL xxx   | Marine Biology Elective | 1-4          |
| <input type="checkbox"/> PHYS 105   | Intro to Physics II     | 4            |
| <input type="checkbox"/> or 122     | Gen. Physics II         |              |
| <input type="checkbox"/> PHIL /RLST | 300+ Phil/RLST Elective | 3            |
| <input type="checkbox"/>            | Free Elective           | 3            |
| <b>Total Credits</b>                |                         | <b>15-18</b> |

|                                   |                         |              |
|-----------------------------------|-------------------------|--------------|
| <b>Fourth Year Spring</b>         |                         |              |
| <input type="checkbox"/> BIOL 402 | Evolution               | 3            |
| <input type="checkbox"/> BIOL xxx | Marine Biology Elective | 3-4          |
| <input type="checkbox"/> BIOL 431 | Biology Senior Seminar  | 1            |
| <input type="checkbox"/> EXAM 401 | Dept. Comp. Exam        | 0            |
| <input type="checkbox"/>          | Free Elective           | 3            |
| <input type="checkbox"/>          | Free Elective           | 3            |
| <b>Total Credits</b>              |                         | <b>13-14</b> |

Updated: 5/2021

### Biology Course Options (two of the following):

- BIOL 203 – Ecology (S)
- BIOL 204 – Invertebrate Zoology (F)
- BIOL 211 – Comparative Vertebrate Anatomy (S)
- BIOL 320 – Vertebrate Zoology (S)
- BIOL 401 – Cell & Molecular Biology (S)

### Marine Biology Electives:

8 credits of the following:

- BIOL 150 Aquarium Maintenance (AN)
- BIOL 312/MS 471 – Research Diver Techniques
- BIOL 322 – Field Biology
- BIOL 398 – Biology Internship
- BIOL 399 – Biology Internship

Summer courses from the Marine Consortium:

- MS-110 – Introduction to Oceanography
- MS-211 – Field Methods in Oceanography
- MS-221 – Marine Invertebrates
- MS-241 – Marine Biology
- MS-260 – Marine Ecology
- MS-300 – Behavior of Marine Organisms
- MS-331 – Chemical Oceanography
- MS-343 – Marine Ichthyology
- MS-345 – Marine Ornithology
- MS-451 – Coastal Environment Oceanography
- MS-464 – Biological Oceanography
- MS-471 – Research Diver Techniques
- MS-490 – Aquaculture
- MS-491 – Coral Reef Ecology
- MS-500 – Problems in Marine Science

### Suggestions:

- Consider undergraduate research and internships.
- If pursuing graduate school, prepare for graduate school entrance exams during summer after junior year.
- SOC 305 – Environmental Sociology is recommended for GETM IV.

\*\*\*Sequence of courses may be altered with consent of advisor.