Bachelor of Science, Biology – Marine Biology Concentration (BI-M): 2023-2024 Catalog

Course No.	Description	Cr.
First Year	**Fall**	
□ BIOL 110	Evolution, Ecol, & Plant Biol.	4
□ CHEM 121	Chemistry Principles I	4
□ BIOL/MS xxx	Marine Biology Elective(s)	1
□ WRIT 102	Research Writing	3
□ ECON/PLSC/PSYC/SOC	Social Science I	3
□ BIOL 131	Biology First Year Seminar	0
□ CORE 103	Fall Comm. Enrich. Series	0
Total Credits		**15**

Course No.	Description	Cr.
First Year	**Spring**	
□ BIOL 111	Molecules, Cells, & Anim. Phys.	4
□ CHEM 122	Chemistry Principles II	4
□ MATH 112	Calculus	3
or MATH 121	Calculus/Geom I	
□ CORE 113	Gen Ed 1st Year Seminar	3
□ FTAE 105	Franciscan Goals for Today	3
□ CORE 104	Spring Comm. Enrich. Series	0
Total Credits		**17**

Course No.	Description	Cr.
Second Year	**Fall**	
□ BIOL 218	Marine Biology	4
□ CHEM 221	Organic Chemistry I	4
□ LANG xxx	Foreign Lang. (102 or higher)	3
□ PHIL 205	Discovering Philosophy	3
□ ECON/PLSC/PSYC/SOC	Social Science II	3
Total Credits		**17**

Course No.	Description	Cr.
Second Year	**Spring**	
□ BIOL xxx	Biological Discipline A or B	4
□ CHEM 222	Organic Chemistry II	4
□ BIOL 315	Biostatistics	4
□ LIT 104, 201, 202, 204, 207, 270	Literature	3
□ BIOL 231	Biology Sophomore Seminar	0
□	Diversity Elective	3
Total Credits		**18**

Course No.	Description	Cr.
Third Year	**Fall**	
□ BIOL 203	Ecology	4
□ PHYS 104	Intro to Physics I	4
or 121	Gen. Physics I	
□ FNAR xxx	Fine Arts Elective	3
□ HIST xxx	History Elect. 100-200 level	3
□ BIOL 331	Biology Junior Seminar	0
□ EXAM 301	Writing Competency	0
Total Credits		**14**

Course No.	Description	Cr.
Third Year	**Spring**	
□ BIOL 301	Genetics	4
□ BIOL 223/MS 223	Oceanography	3
□ PHYS 105	Intro to Physics II	4
or 122	Gen. Physics II	
□ PHIL /FTAE	300+ Phil/FTAE Elective	3
□ BIOL/MS xxx	Marine Bio Elective	3
Total Credits		**17**

Course No.	Description	Cr.
Fourth Year	**Fall**	
□ BIOL xxx	Biological Discipline A or B	4
□ BIOL/MS xxx	Marine Biology Elective	2
□ CORE 407	Keystone Seminar	3
□ ECON/PLSC/PSYC/SOC	Social Science III	3
□	Free Elective	3
□	Free Elective	1
Total Credits		**16**

Course No.	Description	Cr.
Fourth Year	**Spring**	
□ BIOL 402	Evolution	3
□ BIOL xxx	Biological Discipline III	4
□ BIOL 431	Biology Senior Seminar	1
□ EXAM 401	Dept. Comp. Exam	0
□	Free Elective	3
□	Free Elective	3
Total Credits		**14**

128 Total Required Credits

****Sequence of courses may be altered with consent of advisor.* *Updated: 5/2023*

Biological Discipline Electives

Three of the following, including at least one from each group:

Group A

- BIOL 204 – Invertebrate Zoology (F)
- BIOL 320 – Vertebrate Zoology (S)
- BIOL 211 – Comparative Vertebrate Anatomy (S)

Group B

- BIOL 345 - Environmental Animal Physiology (S)
- BIOL 401 – Cell & Molecular Biology (S)
- BIOL 302 - General Microbiology (F)

Marine Biology Electives:

6 credits of the following:

- MS 101 Open Water Diver (F,S)
- BIOL 150 Aquarium Maintenance (AN)
- BIOL 311/MS 491 Coral Reef Ecology (S)
- BIOL 312/MS 471 – Research Diver Techniques
- BIOL 322 – Field Biology (S, marine focus)
- BIOL 398 – Biology Internship
- BIOL 399 – Biology Internship
- BIOL 194/294/394/494 Biological Research
- BIOL 487 Independent Study (marine focus)

Summer courses from the Marine Consortium:

- MS-211 – Field Methods in Oceanography
- MS-221 – Marine Invertebrates
- 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-490 – Aquaculture
- 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.