Program Worksheet: Honours Marine Biology

First Year	BIOL 112 BIOL 121 BIOL 140 or 180 One of CHEM 111, 121, 141 or CHEM 120 & 115 CHEM 123 or CHEM 130 & 135	One of: PHYS 101, 106, 107, 117, 131 One of: CPSC 100, 103, 110, 301 or DSCI 100	One of: MATH 100, 102, 104, 110, 120, 180, or 184 One of: MATH 101, 103, 105, or 121	Communication Requirement 6cr of WRDS 150; SCIE 113; any of ENGL 100, 110, 111, 112, 120, or 121; SCIE 300 or CHEM 300; APSC 176; LFS 150; FRST 150, Arts One; ASTU 100, 101	31cr
Second Year	*Biology Fundamentals Courses: BIOL 200 BIOL 230 BIOL 234 BIOL 260	*Organismal Courses: BIOL 205 BIOL 209	One of: CHEM 233 CHEM 235 or CHEM 203 or CHEM 223 CHEM 225	and Electives [3cr]: ————	30cr
Third Year	BIOL 300 BIOL 347 BIOL 320 BIOL 326 BIOL 336	**Biology Lab Selections One from list:	****Marine Biology Selections [12cr]:	Electives [12cr]:	74
Fourth Year	BIOL 447 BIOL 449	***Life Science Selections [9cr]:	Arts Electives [12cr]:		71cr
Minimum Total Credits = 132cr					

**Biology Laboratory Selections:

BIOL 301, 306, 311, 331, 337, 340, 341, 351, 352, 363, 402, 403, 404, or 437

Note: MRNE may be taken with the permission of a biology advisor.

Faculty of Science Elective Requirements:

(May be any level if the upper-level requirement of 48 upper-level credits including at least 30 credits from the Faculty of Science is satisfied. Also, up to 18 credits of course work in a faculty other than Science or Arts may be taken for credit.)

- Arts Electives 12 credits from the Faculty of Arts.
- Electives May be from any faculty.

***Life Science Selection:

Life Science selections that count towards the Science credit requirement: Any third- or fourth-year course in BIOC, CAPS, MICB, or MRNE that is open to Life Science majors plus: ENVR 430, EOSC 470, 474, 475, 478, GEOS (or GEOB) 307, 407, FNH 350, 351, 451, MATH 462, MEDG 410, 419, 420, 421, PCTH 305, 325. Life Science selections that do not count towards the Science credit requirement: APBI 311, 312, 314, 315, 318, 342, 401, 411, 418, 419, 442, 444, CONS 330, 440, 486, 496, FRST 302, 310, 385, 386,

^{*} One **Organismal** and/or one **Fundamentals** course can be deferred to the third year.

395, 399, 444, 485, 495.

Note: Life Science Selections do not include BIOL 300 and 336. Four credits of Biology lab selections are required; additional credits from Biology Lab Selections may count as Life Science Selections [i.e., BIOL 351 (4cr) = 2cr Biology Lab Selections & 2cr Life Science Selections].

****Marine Biology Selections:

BIOL 325 – Introduction to Animal Mechanics and Locomotion

BIOL 402 - Aquatic Ecology

BIOL 420 – Ocean Conservation and Sustainability

BIOL 428 – Evolutionary Morphology of Marine Invertebrates

BIOL 465 - Diversity and Evolution of Fishes

CONS 486 – Fish Conservation and Management

EOSC 372 - Introductory Oceanography: Circulation and Plankton

EOSC 373 - Introductory Oceanography: Climate and Ecosystems

EOSC 470 – Biological Oceanography

EOSC 475 - Marine Microbiology

Note: Any third- or fourth-year course in MRNE.