

## Program Worksheet: Honours Marine Biology

<b>First Year</b>	BIOL 112 ____ BIOL 121 ____ BIOL 140 or 180 ____  CHEM 121 or CHEM 120 & 115 ____ CHEM 123 or CHEM 130 & 135 ____	<i>One of:</i> PHYS 101, 106, 107, 117, 131 ____  <i>One of:</i> CPSC 100, 103, 110, 301 or DSCI 100 ____	<i>One of:</i> MATH 100, 102, 104, 120, 180, or 184 ____  <i>One of:</i> MATH 101, 103, 105, or 121 ____	<b>Communication Requirement 6cr of</b> 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  _____ and _____  Electives [3cr]: _____	31cr
<b>Second Year</b>	<b>*Biology Fundamentals Courses:</b> BIOL 200 ____ BIOL 230 ____ BIOL 260 ____  BIOL 233 or 234 ____	<b>*Organismal Courses:</b> BIOL 205 ____ BIOL 209 ____	<i>One of:</i> CHEM 233 ____ CHEM 235 ____ or CHEM 203 ____ or CHEM 223 ____ CHEM 225 ____	Electives [3cr]: _____	30cr
<b>Third Year</b>	BIOL 300 ____ BIOL 347 ____ BIOL 320 ____ BIOL 326 ____ BIOL 336 ____	<b>**Biology Lab Selections</b> <u>One from list:</u> _____ _____	<b>****Marine Biology Selections [12cr]:</b> _____ _____ _____ _____	Electives [12cr]: _____ _____ _____ _____	71cr
<b>Fourth Year</b>	BIOL 447 ____ BIOL 449 ____	<b>***Life Science Selections [9cr]:</b> _____ _____ _____	Arts Electives [12cr]: _____ _____ _____ _____	Electives [12cr]: _____ _____ _____ _____	71cr
<b>Minimum Total Credits = 132cr</b>					

\* One **Organismal** and/or one **Fundamentals** course can be deferred to third year.

### \*\*Biology Laboratory Selections:

BIOL 306, 331, 337, 340, 341, 342, 351, 352, 363, 402, 403, 404, or 437

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

### \*\*\*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, 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 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.

**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.