

Program Worksheet: Honours Ecology

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 ____	<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, 110, 120, 180, or 184 ____ <i>One of:</i> 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: _____ and _____ Electives [3cr]: _____	31cr
Second Year	*Biology Fundamentals Courses: BIOL 200 ____ BIOL 230 ____ BIOL 234 ____ BIOL 260 ____	*Organismal Courses: <u>One</u> from: BIOL 204 ____ BIOL 205 ____ <u>One</u> from: BIOL 209 ____ BIOL 210 ____	<i>One of:</i> CHEM 233 ____ CHEM 235 ____ or CHEM 203 ____ or CHEM 223 ____ CHEM 225 ____	Electives [3cr]: _____	30cr
Third Year	BIOL 300 ____ BIOL 347 ____	BIOL 306 ____ BIOL 336 ____ BIOL 415 or 418 ____	***Life Science Selections [9cr]: _____ _____ _____ _____	Arts Electives [12cr]: _____ _____ _____ _____	71cr
Fourth Year	BIOL 447 ____ BIOL 449 ____	**Biology Lab Selections <u>Two</u> from list: _____ _____	****Ecology Selections [12cr]: _____ _____ _____ _____	Electives [10cr]: _____ _____ _____ _____	
Minimum Total Credits = 132cr					

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

Note: It is recommended that BIOL 230 be taken in second year; it is prerequisite for a few Ecology selections.

****Biology Laboratory Selections:**

BIOL 311, 326, 331, 337, 340, 341, 351, 352, 363, 402, 403, 404, or 437.

NOTE: MRNE courses may be taken with permission from 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 for credit 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].

******Ecology Selections:**

BIOL 310 – Introduction to Animal Behaviour

BIOL 324 – Introduction to Seed Plant Taxonomy

BIOL 402 - Aquatic Ecology

BIOL 404 - Ecological Methodology

BIOL 406 - Plant Ecology I

BIOL 408 – Principles of Applied Ecology

BIOL 409 - Field Course in Ecology

BIOL 411 - Insect Ecology

BIOL 412 - Phytogeography

BIOL 413 - Zoogeography

BIOL 416 – Principles of Conservation Biology

BIOL 418 - Evolutionary Ecology

BIOL 434 - Population Genetics

BIOL 445 - Darwin's Fishes

BIOL 462 - Ecological Plant Biochemistry

FRST 432 – Molecular Ecology

MICB 301 – Microbial Ecophysiology

MRNE 430 - Marine Ecology

Note: MRNE courses with permission of 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.