# Program Worksheet: Honours Ecology

| First Year | BIOL 112 ____  
|            | BIOL 121 ____  
|            | BIOL 140 or 180  
|            | ————  
|            | CHEM 121 or  
|            | CHEM 120 & 115  
|            | ————  
|            | CHEM 123 or  
|            | CHEM 130 & 135  
|            | ————  
| *          | BIOL Fundamentals Courses:  
|            | BIOL 200 ____  
|            | BIOL 230 ____  
|            | BIOL 260 ____  
|            | ————  
|            | BIOL 233 or 234  
|            | ————  
| One of:    | PHYS 101, 106,  
|            | 107, 117, 131  
|            | ————  
| *          | Organismal Courses:  
|            | One from:  
|            | BIOL 204 ____  
|            | BIOL 205 ____  
|            | ————  
| One of:    | CPSC 100, 103,  
|            | 110, 301 or DSCI  
|            | 100  ————  
| One of:    | MATH 100, 102,  
|            | 104, 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:  
|            | ————  
|            | and  
|            | ————  
|            | Electives [3cr]:  
|            | ————  
|            | 31cr  |

| Second Year | *Biology Fundamentals Courses:  
|             | BIOL 200 ____  
|             | BIOL 230 ____  
|             | BIOL 260 ____  
|             | ————  
|             | BIOL 233 or 234  
|             | ————  
| *          | Organismal Courses:  
|            | One from:  
|            | BIOL 204 ____  
|            | BIOL 205 ____  
|            | ————  
| One of:    | CHEM 233 ____  
|            | CHEM 235 ____  
|            | or  
|            | CHEM 203 ____  
|            | 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 Two from list:  
|            | ————  
|            | ————  
| ***Ecology Selections [12cr]:  
|            | ————  
|            | ————  
|            | ————  
|            | ————  
| Electives [10cr]:  
|            | ————  
|            | ————  
|            | ————  
|            | ————  |

**Minimum Total Credits = 132cr**

* One Organismal and/or one Fundamentals course can be deferred to 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 326, 331, 337, 340, 341, 342, 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 419 - Ecological Parasitology
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.