# Program Worksheet: Honours Evolutionary Biology

<table>
<thead>
<tr>
<th>First Year</th>
<th>BIOL 112 ____</th>
<th>BIOL 140 ____</th>
<th>BIOL 121 ____</th>
<th>One of:</th>
<th>One of:</th>
<th>Communication Requirement 6cr of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 111/121 or CHEM 120 &amp; 115 ____</td>
<td>CHEM 113/123 or CHEM 130 &amp; 135 ____</td>
<td>PHYS 101, 106, 107, 117, 131 ____</td>
<td>MATH 100, 102, 104, 120, 180, or 184 ____</td>
<td>MATH 101, 103, 105, or 121 ____</td>
<td>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:</td>
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<tr>
<td></td>
<td><strong>Biology Fundamentals Courses:</strong></td>
<td><strong>Organismal Courses:</strong></td>
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<td></td>
<td>BIOL 200 ____</td>
<td>BIOL 230 ____</td>
<td>BIOL 260 ____</td>
<td>BIOL 203 ____</td>
<td>BIOL 204 ____</td>
<td>BIOL 205 ____</td>
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<td></td>
<td>BIOL 233 ____</td>
<td>or</td>
<td>BIOL 234 ____</td>
<td>and</td>
<td>Electives [3cr]:</td>
<td></td>
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<tr>
<td>Second Year</td>
<td><strong>Biology Lab Selections</strong></td>
<td>Two from list [4cr]:</td>
<td></td>
<td>***Life Science Selections [9cr]:</td>
<td>Arts Electives [12cr]:</td>
<td></td>
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<tr>
<td></td>
<td>BIOL 300 ____</td>
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<td></td>
<td>BIOL 347 ____</td>
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<tr>
<td>Third Year</td>
<td>BIOL 336 ____</td>
<td>EOSC 326 ____</td>
<td></td>
<td>Two from:</td>
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<tr>
<td></td>
<td>BIOL 415 ____</td>
<td>BIOL 417 ____</td>
<td>BIOL 434 ____</td>
<td>BIOL 417 ____</td>
<td>BIOL 418 ____</td>
<td>BIOL 434 ____</td>
</tr>
<tr>
<td></td>
<td>OR</td>
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<tr>
<td>Fourth Year</td>
<td>BIOL 447 ____</td>
<td>BIOL 449 ____</td>
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</tbody>
</table>

Minimum Total credits = 132cr

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

**Biology Laboratory Selections:**
BIOL 301, 306, 326, 331, 337, 340, 341, 342, 351, 352, 363, 402, 403, 404, or 437

Note: MRNE courses with permission of 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, 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].
****Evolutionary Biology Selections:

BIOL 310 - Introduction to Animal Behaviour
BIOL 320 – Survey of Algae
BIOL 321 – Morphology and Evolution of Bryophytes
BIOL 323 - Structure and Reproduction of Fungi
BIOL 324 – Introduction to Seed Plant Taxonomy
BIOL 326 – Experimental Biology of Invertebrates
BIOL 327 – Introduction to Entomology
BIOL 328 – Introduction to Parasitology
BIOL 332 - Protistology
BIOL 412 - Phytogeography
BIOL 413 - Zoogeography
BIOL 415 - Evolutionary Processes in Plants
BIOL 417 - Phylogenetic Biology
BIOL 418 - Evolutionary Ecology
BIOL 427 - Ornithology and Herpetology
BIOL 428 – Evolutionary Morphology of Marine Invertebrates
BIOL 430 - Genome Evolution
BIOL 434 - Population Genetics
BIOL 465 – Diversity and Evolution of Fishes

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.