

Program Worksheet: Honours Animal 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 ____	<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:	31cr
Second Year	*Biology Fundamentals Courses: BIOL 200 ____ BIOL 230 ____ BIOL 234 ____ BIOL 260 ____	*Organismal Courses: BIOL 204 ____ BIOL 205 ____	<i>One of:</i> CHEM 233 ____ CHEM 235 ____ or CHEM 203 ____ or CHEM 223 ____ CHEM 225 ____	_____ and _____ Electives [3cr]: _____	30cr
Third Year	BIOL 363 ____ BIOL 347 ____ <i>Two of:</i> BIOL 364, BIOL 370, 371 or 372 _____ _____	BIOL 300 ____ BIOL 336 ____ **Biology Lab Selections <u>One from list:</u> _____	**** Animal Biology Selections [12cr]: _____ _____ _____ _____ Arts Electives [12cr]: _____ _____ _____	Electives [8 to 10cr]: _____ _____ _____ _____	71cr
Fourth Year	BIOL 447 ____ BIOL 449 ____	***Life Science Selections [9cr]: _____ _____ _____			
Minimum Total Credits = 132					

* One of **BIOL 204, 205** and/or one **Fundamentals** course can be deferred to the third year.

****Biology Laboratory Selections:**

One of BIOL 306, 311, 326, 331, 337, 340, 341, 402, 403, 404, or 437

NOTE: MRNE courses may be taken with 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 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].

******Animal Biology Selections:**

BIOL 310 – Introduction to Animal Behaviour
BIOL 325 – Introduction to Animal Mechanics and Locomotion
BIOL 326 – Experimental Biology of Invertebrates
BIOL 327 – Introduction to Entomology
BIOL 331 – Developmental Biology
BIOL 370 - Principles of Muscle Physiology and Energetics
BIOL 371 - Principles of Neurobiology I
BIOL 372 - Principles of Neurobiology II
BIOL 410 – Current Topics in Animal Behaviour
BIOL 411 - Insect Ecology
BIOL 413 – Zoogeography
BIOL 416 – Principles of Conservation Biology
BIOL 418 – Evolutionary Ecology
BIOL 425 – Biomechanics
BIOL 427 – Ornithology and Herpetology
BIOL 428 – Evolutionary Morphology of Marine Invertebrates
BIOL 450 – Molecular Adaptation of Animals to the Environment
BIOL 451 – Comparative Neurobiology
BIOL 454 - Comparative Animal Physiology
BIOL 456 – Comparative and Molecular Endocrinology
BIOL 457 – Comparative Environmental Physiology
BIOL 458 – Developmental Neurobiology
BIOL 459 – Neurobiology of Sensory and Motor Systems
BIOL 460 – Neurobiology of Vision
BIOL 465 – Diversity and Evolution of Fishes
MRNE – Bamfield courses with permission of a Biology Advisor