## **ANIMAL BIOLOGY: HONOURS**

#### First & Second Year:

First Year (33 credits)	☐ BIOL 112 ☐ BIOL 121 & 140	☐ CHEM 121 & 123 or ☐ CHEM 111 & 113	PHYS 101 or 121  Elective (3 credits)	Two of MATH:  100, 102, 104, 120, 180, or 184  101, 103, 105, 121	ENGL (6 credits of 100 level English) - ENGL 112 recommended
Second Year (31 to 32 credits)	☐ BIOL 200	□ BIOL 204 □ BIOL 205	☐ CHEM 233 ☐ CHEM 235 ☐ CHEM 205	Electives (6 credits) - BIOL 209 & 210 recommended	Arts Electives (6 credits)

## Registration Notes for 1<sup>st</sup> & 2<sup>nd</sup> year Biology:

- 1. BIOL 112,121, and 140 are prerequisites to the Major or Honours program options in the Biology Program. Students who have completed Biology 12 may enter into these courses directly. Students with Biology 11 may enter BIOL 112 if they have Chem 12. BIOL 112 is acceptable as the sole prerequisite for BIOL 121. Students without high school biology must take BIOL 111 before registering in BIOL 112,121, and 140.
- 2. Students without Physics 12 must replace elective with PHYS 100 (prior to PHYS 101).
- 3. Three credits of first-year English courses may be deferred to second year.

#### **Third & Fourth Year:**

Third Year (37 credits)	□BIOL 353	☐ BIOL 334 ☐ BIOL 335 or 336	□BIOL 300	☐ BIOL 302 (3) ☐ BIOL 303 (3)	Arts Electives (6 credits)	Elective (3) -BIOL 347 recommended  Animal Biology Elective
Fourth Year (36 credits)	Animal Biology Electives 300 level or higher (6 Credits)	Animal Biology Electives 300 level or higher (6 Credits)	Animal Biology Electives 300 level or higher (6 Credits)	Electives (6 credits)	Elective (3)	BIOL 449 (6 credits)

# Registration Notes for 3<sup>rd</sup> & 4<sup>th</sup> year Biology:

- 1. Students **must take** their physiology course (BIOL 350,351/352, or 353) in **third year**. If other constraints (i.e. Co-op or Exchange student) require that you take this course in 4<sup>th</sup> year you should make this known to an advisor and the Biology Office.
- 2. Program Electives ~ See list on reverse side
- 3. BIOL 449 Submit BIOL 449 Honours Thesis Applications to the Biology Office.

For further information please see the Biology Program website <a href="http://www.zoology.ubc.ca/bpg/index.html">http://www.zoology.ubc.ca/bpg/index.html</a> or Visit the Biology Program Office Rm. 2521!!!

## **Animal Biology Program Electives**

Some courses listed here may not be available in the current year. Please check the UBC Course Schedule website for current course availability <a href="http://courses.students.ubc.ca!!!">http://courses.students.ubc.ca!!!</a>

- AGRO 315 Animal Welfare and the Ethics of Animal Use
- ANAT 390 Introduction to Microscopic Human Anatomy
- ANAT 391 Introduction to Gross Human Anatomy
- ANSC 313 Principles of Animal Breeding
- ANSC 321 Methods in Animal Nutrition
- ANSC 322 Animal Nutrition
- ANSC 323 Experimental Nutrition
- ANSC 414- Comparative Nutrition
- BIOC 302 Biochemistry
- BIOL 301 Biomathematics
- BIOL 305 Biological/Geological Oceanography
- BIOL 310 Animal Behaviour
- BIOL 325 Animal Mechanics and Locomotion
- BIOL 327 Entomology
- BIOL 328 Parasitology
- BIOL 331 Developmental Biology
- BIOL 332 Protistology
- BIOL 336 Evolutionary Genetics
- BIOL 337 Genetics Laboratory
- BIOL 405 Marine Ecology
- BIOL 410 Animal Behaviour
- BIOL 413 Zoogeography
- BIOL 416 Conservation Biology
- BIOL 418 Evolutionary Biology
- BIOL 419 Ecological Parasitology
- BIOL 425 Biomechanics
- BIOL 427 Terrestrial Vertebrates
- BIOL 430 Genome Evolution
- BIOL 434 Population Genetics
- BIOL 440 Functional and Comparative History of Vertebrates
- BIOL 441 Animal Cell Biology
- BIOL 445 Darwin's Fishes
- BIOL 446 History and Philosophy of Biology
- BIOL 450 Molecular Adaptation of Animals to the Environment
- BIOL 453 Animal Physiology Laboratory
- BIOL 454 Comparative Animal Physiology
- BIOL 455 Comparative Neurobiology
- BIOL 456 Comparative and Molecular Endocrinology
- BIOL 457 Comparative Environmental Physiology
- BIOL 458 Developmental Neurobiology
- BIOL 463 Gene Regulation in Development
- BIOL 464 Animal Development Genetics
- BIOL 465 Biology of Fishes
- MATH 361 Introduction to Mathematical Biology
- MATH 462 Projects in Mathematical Biology
- MRNE 410 Marine Invertebrates
- MRNE 411 Invertebrate Embryology
- MRNE 412 Biology of Fishes
- MRNE 413 Marine Molluscs
- MRNE 430 Marine Ecology
- MRNE 440 Marine Birds
- EOSC 371 Biological/Geological Oceanography
- EOSC 474 (OCGY 410) Marine Pollution
- EOSC 478 (OCGY 420) Introduction to Fisheries Science