

LIFE SCIENCES STREAM, Honours BSc Environmental Science - 120 credits		
FACULTY OF SCIENCE AND ENGINEERING GENERAL EDUCATION REQUIREMENT (MUST BE SELECTED FROM APPROVED GENERAL EDUCATION COURSE LIST)		
12 general education credits (refer to General Education Requirements in the Faculty of Science and Engineering Regulations Governing Undergraduate Degree Requirements section, http://science.yorku.ca/gened-bsc.html).	Course Number	Credit
<i>Total credits for this section:</i>		<i>/12</i>
1000 LEVEL REQUIREMENT		
Computer Use: Fundamentals LE/CSE 1520 3.00 OR Computer Use for the Natural Sciences 1540 3.0		/3
*Physical Geography SC/GEOG 1400 6.0		/6
*Biological Science SC/BIOL 1010 6.0 OR (SC/BIOL 1000 3.0 + SC/BIOL 1001 3.0)		/6
Chemical Structure SC/CHEM 1000 3.0 + Chemical Dynamics SC/CHEM 1001 3.0		/6
Mathematics for the Life and Social Sciences SC/MATH 1505 6.0 OR (Applied Calculus I SC/MATH 1013 3.0 + Applied Calculus IISC/MATH 1014 3.0)		/6
<i>Total credits for this section:</i>		<i>/27</i>
2000 LEVEL REQUIREMENT		
The Hydrosphere SC/GEOG 2400 6.00		/6
Introduction to Vegetation and Soils SC/GEOG 2500 3.0 OR Geomorphology I SC/GEOG 2600 3.0 OR Geomorphology II SC/GEOG 2610 3.0		/3
Plant Biology SC/BIOL 2010 4.0, Animals SC/BIOL 2030 4.0, Ecology SC/BIOL 2050 4.0, Statistics for Biologists ⁹ SC/BIOL 2060 3.0		/15
<i>Total credits for this section:</i>		<i>/24</i>
3000/4000 LEVEL SCIENCE GEOGRAPHY REQUIREMENT		
6 credits from Terrestrial Ecosystems SC/GEOG 3200 3.0, Biogeography SC/GEOG 3500 3.0 (cross-listed to SC/BIOL 3500 3.0), Laboratory Analysis of Ecological Materials SC/GEOG 4180 4.0, Water Quality and Stream Ecosystems SC/GEOG 4200 3.0, Desert Ecosystems SC/GEOG 4410 3.0, Northern Forest Environments SC/GEOG 4500 3.0		/6
6 credits from Climatology of High Latitudes SC/GEOG 4205 3.0, Ecological Climatology SC/GEOG 4215 3.0, Hydrometeorology SC/GEOG 4210 3.0, SC/GEOG Dynamics of Snow and Ice SC/GEOG 4310 3.0, Physical Hydrology and Water Resources SC/GEOG 4400 3.0, Rivers: Environment and Process SC/GEOG 4600 3.0		/6
12 additional SC/GEOG credits at the 2000 level OR higher, chosen from the following: Geoinformatics SC/GEOG 2340 3.0, Geomorphology I SC/GEOG 2600 3.0, Geomorphology II SC/GEOG 2610 3.0, Geoinformatics: GIS I SC/GEOG 3340 3.0. Morphogenesis of Soils SC/GEOG 3360 3.0, Geoinformatics: Remote Sensing I SC/GEOG 3440 3.0, Methods of Sediment SC/GEOG 3510 3.0, Field Studies in Physical Geography SC/GEOG 3540 3.0, Disaster! Earth's Extreme Events SC/GEOG 3700 3.0, Physical Geography of the City SC/GEOG 3900 3.0, Honours Thesis SC/GEOG 4000 6.0 (only thesis topics in physical geography are eligible for science credit), Ecological Climatology SC/GEOG 4215 3.0, Directed Reading SC/GEOG 4290 3.0, Directed Reading SC/GEOG 4290 6.0, Dynamics of Snow and Ice SC/GEOG 4310 3.0, Geoinformatics: GIS II SC/GEOG 4340 3.0, Geoinformatics: Remote Sensing II SC/GEOG 4440 3.0, Advanced Field Studies in Physical Geography SC/GEOG 4541 3.0		/12
<i>Total credits for this section:</i>		<i>/24</i>
3000/4000 BIOLOGY REQUIREMENT		
Field Course SC/BIOL 3001 3.0 OR 3001 2.0 (an ecology field course)		/2-3
15 additional Biology credits at the 3000 OR 4000 level, chosen from the following: Field Course SC/BIOL 3002 3.0 OR SC/BIOL 3002 2.0 (a second ecology field course), Population Ecology SC/BIOL 3170 3.0, Honours Thesis SC/BIOL 4000 8.0 ++, Genomics SC/BIOL 4020 3.0, Behavioural Ecology SC/BIOL 4070 3.0, Freshwater Biology SC/BIOL 4080 3.0, Plant Ecology SC/BIOL 4090 4.0, Applied Plant Ecology SC/BIOL 4095 3.0, Natural History SC/BIOL 4100 3.0, Plant Evolution SC/BIOL 4130 3.0, General Entomology SC/BIOL 4230 4.0, Mammalian Systematics and Ecology SC/BIOL 4240 4.0, Conservation Biology SC/BIOL 4245 3.0, Birds and the Environment SC/BIOL 4250 3.0 +++, Biodiversity SC/BIOL 4255 3.0, Systematic Biology in Theory and Practice SC/BIOL 4260 3.0, Pollutants Invaders and Global Change SC/BIOL 4265 3.0, Fish Biology SC/BIOL 4340 3.0, Behavioural Genetics SC/BIOL 4400 3.0 +++, Herpetology SC/BIOL 4420 3.0	/15	
<i>Total credits for this section:</i>		<i>/17-18</i>
OTHER COURSES REQUIREMENT		
Additional elective credits as required to satisfy minimum credit values		
<i>Total credits for this section:</i>		<i>/15-16</i>
TOTAL CREDITS:		/120

- Notes:
- o to graduate in Honours requires a cumulative credit-weighted grade-point average of at least 5.0 (C+) overall;
 - o any course substitutes must be approved in writing by the Environmental Science Coordinator
 - [..] former course numbers OR requirements
 - * should be taken in Year 1 to satisfy prerequisite requirements for 2000-level required courses
 - ++ normally requires SC/BIOL 3100 2.0 as prerequisite, +++ requires SC/BIOL 2040 3.0 as prerequisite
- A minimum of 42 credits at the 3000 level OR higher and at least 12 credits from the major (BIOL OR GEOG) must be at the 4000 level.**