

Department of Biology Course Outline

SC/BIOL 4245 3.0 Conservation Biology
Fall Term 2019

Course Description

This course explores the role of biological science in efforts to conserve natural resources, systems and the organisms therein. Two lecture hours, three laboratory hours. One term. Three credits.

Prerequisites (strictly enforced)

SC/BIOL 2050 4.0, SC/BIOL 2060 3.0

Course Instructor(s) and Contact Information

Course Director: Roberto Quinlan, rquinlan@yorku.ca

TAs: Katherine Odanaka (katherine.odanaka@gmail.com), Spencer Monckton (s.monckton@gmail.com)

Schedule

Lectures: Tue Thu 1.30-2.30 pm CB 115
Labs 2.30-5.30 Tue HNE 206 (lab section 01) or Thu CB 122 (lab section 03)

Evaluation

Introductory test	5%
Midterm	20%
Labs/assignments	50%
Final exam	25%

Important Dates

Quiz – 12 September – 2nd week of classes
Midterm 01 – 22 October
Assignment due dates:
Assignment 1 – week of 23 Sept
Assignment 2 – week of 07 Oct
Assignment 3 – week of 28 Oct
Assignment 4 – week of 04 Nov
Assignment 5 – week of 18 Nov
Assignment 6 – week of 25 Nov

First class 05 September 2019
Last class 03 December 2019
Fall reading term: 14-18 October 2019
Drop Deadline: 08 Nov 2019 (last day to drop without course on transcript)
Course Withdrawal Deadline: 09 Nov – 03 Dec 2019 (course still appears on transcript with "W")

Resources

No required text. Required readings posted to course Moodle website.
Lab manual available via course Moodle website

Learning Outcomes

Conservation Biology is a multidisciplinary subject that spans both the natural and social sciences, and includes the disciplines of ecology, evolution, genetics, law, politics, sociology, economics, philosophy and ethics.

The course will consist of lectures to cover background and "foundational" material, readings from primary and secondary literature, student presentations, discussions, and analysis of data, to fulfill the following learning objectives:

- 1) Enhance and refine important scientific skills including: the analysis and comprehension of scientific literature; effectively communicating scientific results and opinions/perspectives on scientific topics, both orally and written; the analysis of real data to analyse conservation biology issues
- 2) Explore scientific content associated with conservation biology, including the linkages between biological phenomena and geology, geography, chemistry and physics, and the linkages between the natural sciences and social sciences
- 3) To become familiar with global conservation issues and more local conservation issues facing Canada, Ontario, and the Greater Toronto Area.

Course Content

- 1) What is biodiversity? What is it exactly conservation biologists are trying to 'conserve'?
- 2) Committee on the status of endangered wildlife in Canada (COSEWIC), the Species-at-Risk Act (SARA), and Designatable Units (DUs)
- 3) What ecosystems in Canada are imperiled?
- 4) Species types in conservation biology
- 5) What do past speciation and extinction events have to inform us about the present-day?
- 6) 'Last ditch' efforts to conserve biodiversity
- 7) The design of protected spaces to conserve biodiversity
- 8) The tragedy of the commons in marine ecosystems

Other Information

Course Policies

Students who miss a test due to an illness or emergency must notify Dr. Quinlan via email within 48 hours, and provide supporting documentation to Dr Quinlan, via the undergraduate Biology office, within 5 **calendar** days. A midterm missed due to medical circumstances must be supported by an Attending Physician's Statement.

Missed final exam: Students who miss a final exam due to an illness or emergency must notify Dr. Quinlan via email within 48 hours, and provide supporting documentation for deferred standing following University procedure (<https://myacademicrecord.students.yorku.ca/deferred-standing>).

Late assignments: material submitted late will be levied a penalty of 30% per day.

University Policies

Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - <http://www.yorku.ca/academicintegrity/>

Important A note from the Faculty of Science Committee on Examinations and Academic Standards: Numerous students in Faculty of Science courses have been charged with academic misconduct when materials they uploaded to third party repository sites (e.g. Course Hero, One Class, etc.) were taken and used by unknown students in later offerings of the course. The Faculty's Committee on Examinations and Academic Standards (CEAS) found in these cases that the burden of proof in a charge of aiding and abetting had been met, since the uploading students had been found in all cases to be wilfully blind to the reasonable likelihood of supporting plagiarism in this manner. Accordingly, to avoid this risk, students are urged not to upload their work to these sites. Whenever a student submits work obtained through Course Hero or One Class, the submitting student will be charged with plagiarism and the uploading student will be charged with aiding and abetting.

Note also that exams, tests, and other assignments are the copyrighted works of the professor assigning them, whether copyright is overtly claimed or not (i.e. whether the © is used or not). Scanning these documents constitutes copying, which is a breach of Canadian copyright law, and the breach is aggravated when scans are shared or uploaded to third party repository sites.

Access/Disability

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

Students in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Counselling & Disability Services - <http://cds.info.yorku.ca/>

Counselling & Disability Services at Glendon - <https://www.glendon.yorku.ca/counselling/>

York Accessibility Hub - <http://accessibilityhub.info.yorku.ca/>

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the

term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete and submit an [Examination Accommodation Form](#) at least 3 weeks before the exam period begins. The form can be obtained from Student Client Services, Student Services Centre or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Student Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at - <http://secretariat-policies.info.yorku.ca/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/>