

Department of Biology Course Outline

BIOL 4265 Biology in Environmental Management Fall 2020

Course Description

This course summarizes our progress in conceptualizing, understanding and in solving large-scale ecological problems caused by the introduction of pollutants and exotic species to the environment

Prerequisites (strictly enforced)

Prerequisites: SC/BIOL 2050 4.00, SC/BIOL 2060 3.00; or permission of the Instructor.

Course Instructor(s) and Contact Information

Stephanie Haas
218 Lumbers
e-mail: shaas014@yorku.ca
Office hours: Generally available after THURS class. Please email to set up appointment.

Schedule/Course Format

Mixture of Synchronous and asynchronous
Date and Time of synchronous lectures: THURSDAY 10:00
Course Session: FALL 2020 - Start date: September 9, 2020.
Course ID: N58B01

Technology Requirements

High speed internet, camera, audio capability (microphone) ability to stream online lectures, ability to support video conferencing software

Evaluation

Evaluation Components of Final Grade and related information.
Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles

Pre-class questions. 10%
Participation. 10%
Assignments. 30%
Essay. 25%
Presentation. 25%

Important Dates

First Class: Sept 10

Last Class: Dec 8

Assignments: 3 in total one per month, variable dates

Essay: Nov. 13 at midnight

Presentations: Nov 24 – Dec 8

Drop Deadline: Fri Nov 6, 2020 (last day to drop without course on transcript)

Course Withdrawal Deadline: Tues Dec 8, 2020 (course still appears on transcript with 'W')

For drop deadlines and additional important dates such as holidays, refer to the "Important Dates" section of the Registrar's Website: <https://registrar.yorku.ca/enrol/dates/fw19>

Resources

Videos, links to resources and readings will be provided on the Moodle website.

Learning Outcomes

Upon successful completion of this course, students should be able to:

1. Critically read environmental science peer-reviewed journal publications.
2. Reverse-engineer the critical reproducible science tools from most natural science peer-reviewed journal publications.
3. Appreciate the extent and scope of environmental challenges we face globally.
4. Explain the balance between direct human needs and environmental health.
5. Effectively communicate scientific findings for environmental management.

Course Content

This course involves learning about environmental science issues and the tools used to research them through a series of case studies that will be discussed in class. Students will be required to read a peer-reviewed paper for each case study, answer questions on the paper before class and be prepared to discuss it in class on Thursdays. These questions will be preparation for the final presentation and more in-depth analysis expected in the essay.

Outline – order of topics (and combination) is subject to change in the first 6 weeks

Sept 10 – intro

Sept 15 & 17 – pollinator declines & citizen science

Sept 22 & 24 – climate change & modelling

Sept 29 & Oct 1 – invasive species & surveys/data collection

Oct 6 & 8 – land use challenges & open data

Oct 20 & 22 – coastal habitat functioning & mapping

Oct 27 & 29 – ocean health & systematic review

Nov 3 & 5 – fisheries and catch management & meta-analysis

Nov 10 & 12 – agriculture & science communication

Nov 17 & 19 – ecological impact assessments and legislation

Nov 24 & 26 – presentations

Dec 1 & 3 – presentations

Dec 8 – presentation overflow

Other Information

Expectations

Students are expected to prepare for synchronous classes on Thursdays in the following ways:

1. Watch the asynchronous lecture associated with the Tuesday of that week.
2. Thoroughly read the assigned paper for that week's discussion and be prepared to discuss it.
3. Answer and submit the questions based on the paper and topic of that week

This course will involve discussion with your peers; however, weekly questions and the essay are expected to be done independently. Essays will be handed in to Turnitin for plagiarism checking.

Course Policies

Pre-lecture questions are due by midnight the night before the class and will not be accepted late. Late essays will be deducted 20% after the first day and 5% every day after that. Students that anticipate being unable to submit on the due date are expected to submit early. For the sake of privacy of other students, students are not allowed to record sessions with their own devices. All asynchronous and synchronous lectures will be recorded and posted on Moodle. Discussions will be recorded but only made public if permissions are granted by students.

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-and-or-harassing-behaviour-in-academic-situations-senate-policy/>

