

Department of Biology Course Outline

SC/BIOL 4250 3.0, Birds and the Environment Winter 2021

Course Description

A review of the adaptations of birds to different environments, behaviour and ecology, biodiversity and evolution, and the current threats to the world's birds. Laboratories include field trips on campus, a study of bird anatomy and examination of museum specimens. Two lecture hours, three laboratory hours. (**note:** in winter 2021 this course is offered on-line only)

Prerequisites (strictly enforced)

SC/BIOL 2050 4.0, SC/BIOL 2060 3.0

Course Instructor(s) and Contact Information

Dr. Bridget Stutchbury (bstutch@yorku.ca)

Office hours: 11:30-12:30 Mon & Wed, and other times by request

Schedule/Course Format

Synchronous Lectures and Labs (will be recorded)

Lectures, Mon & Wed 10:30a (Zoom)

Labs: Mon, Tues, Wed, Fri 2:30p (Zoom; synchronous portion < 2hr in duration)

Technology Requirements

Good internet connection for zoom synchronous lectures and labs, viewing recorded lectures/labs, and downloading/uploading files.

Proctortrack is not used in this course.

Evaluation

15% each for 3 midterm lecture exams (asynchronous; Feb, Mar, Apr)

20% take-home final (asynchronous, Apr exam period, covers entire course)

35% lab quizzes and assignments (best 8 of 10 labs)

Important Dates

Weekend and Reading Week due dates have been avoided. For each test, quiz, or assignment, there is a wide window of time on a given day, or during a week, that you can submit your test/assignment via eClass.

Students who miss due dates are not required to submit documentation as per York U policy, but are expected to complete the test, quiz, or assignment as soon as possible. Inform your instructor (lectures: Dr. Stutchbury; labs: your TA) of any long delays.

Midterm 1 (15%; Lectures 1-8; asynchronous). 40 min exam; Feb 8 to Feb 10.

Midterm 2 (15%; Lectures 9-16; asynchronous). 40 min exam; Mar 15 to Mar 17

Midterm 3 (15%; Lectures 17-23; asynchronous). 40 min exam; Apr 12 to Apr 14

Final Exam (20%; all lectures, essay questions; asynchronous). Take home. Due Apr 28.

Labs have weekly assignments and/or quizzes due on your lab day. Each lab is worth 10 points and overall lab grade is based on best 8 out of 10 labs.

Resources

No textbook – lectures and labs on eClass

For case studies used in lecture, you will be provided with the scientific reference or web site link so you can look up the article yourself if you need to (e.g. for clarification, or for use in other courses). Unless told otherwise, you are not required to read the original articles upon which the case studies are based.

Some lectures also have YouTube/other videos associated with them – you are expected to watch the videos and understand content.

Some labs have required reading – you are expected to read this material before you come to lab.

Some labs have video or audio files you will need to download.

Learning Outcomes

- (1) Describe the concepts, theories, and key principles in bird evolution and conservation
- (2) Describe the goals, methods, evidence and conclusions of scientific studies on bird behaviour, physiology, morphology, biodiversity and conservation
- (3) Develop core skills in bird identification by sight and sound
- (4) Test hypotheses for bird behaviour and population declines by analyzing data
- (5) Develop and/or apply scientific methodology for observing wild birds
- (6) Effective science writing for a lay audience

Course Content

Lectures are given synchronously via zoom (and recorded); students are encouraged to pose questions via chat room and participate in zoom white board and polling activities.

Powerpoint slides are also posted on eClass and contain notes for each slide.

Lecture topics include (see course schedule on eClass):

Evolution of Birds
Flight & Physiology
Reproductive System
Parental Care & Mating Systems
Disease
Communication & Vision
Avian Intelligence
Avian Engineering
Global Bird Declines
Threats on Wintering & Breeding Grounds & Migration
Pesticides
Conservation of Grassland, Wetland, and Island Birds
Climate Change

Labs are a blend of asynchronous activities and synchronous zoom sessions with your TA on your lab day.

Lab topics include (see course schedule on eClass):

Bird Identification by sight and sound
Winter Ecology
Bird-Window Collisions
Migratory Songbird Declines
Breeding Bird Survey
Point Count Survey & Field Notebook

Other Information

Other Resources:

Cornell Lab of Ornithology Merlin Bird ID App & Bird Academy Online courses

Cornell Lab of Ornithology "All About Birds" web site <http://www.allaboutbirds.org/Page.aspx?pid=1189>

Birds of the World Online (through York U library)

Course Policies

Students seeking an extension on lecture tests/exams should contact Dr. Stutchbury (bstutch@yorku.ca) and for labs contact your TA

Zoom Lectures and Labs: Professional and respectful conduct toward instructors and other students is required at all times. Unless otherwise instructed, please turn off your video and audio while participating in synchronous lectures and labs.

Plagiarism: We have a zero-tolerance policy for plagiarism, so you should not copy material into lecture tests and lab assignments. Co-authors on an assignment must assume equal responsibility for the content. Students who submit assignments that contain sentences or paragraphs that are plagiarized will automatically receive a grade of zero for that assignment and the incident will be referred to the Dean's Office for further investigation.

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/>