BIOD52: Biodiversity and Conservation
2021 Winter

Instructor: Nathan Lovejoy
Online office hours: Please contact me via email to set up
Email: nathan.lovejoy@utoronto.ca

Schedule: Weds 1-3pm, online (synchronous) via Zoom,

Calendar: A seminar exploration of current topics in biodiversity and conservation, including genetic, organismal, and community levels. Examples include DNA barcoding, adaptive radiations, phylogenetic trees, and biodiversity hotspots. Skills development in critical thinking and interpretation of the primary literature is emphasized, with coursework involving group presentations, discussions, and written analyses.

Prerequisite: BIOC50H3 or BIOC63H3

Goal: The goal of this course is to develop in-depth knowledge and understanding of current topics in the fields of biodiversity and systematics. Work in these areas forms the basis for understanding how diversity in the natural world originated, is ecologically maintained, and is best protected. We will select topics that may be contentious, and should provide the basis for constructive analysis and debate. An objective of the course is to develop abilities in the analysis, evaluation, and presentation of primary scientific literature.

Format: This is a seminar class, where discussion and debate on topics will be encouraged. You should be fully prepared to be active participants at each meeting. Scientific topics and related articles will be assigned for each week. Before class each week, you should: (1) carefully read the assigned papers, (2) write a one page summary of the readings and include one question per paper that you plan to ask during the class discussion, (3) make note of any other questions/comments you have regarding the topic, so that you can ask these during the discussion.

Each student will take part in leading two of the class topics (as part of a small group). The group responsible for presenting that week's topic (see below) will make a presentation and then moderate a discussion of the assigned material. For this, the student groups should: (1) consult additional sources of literature on the topic (approximately 5 additional journal articles), (2) prepare an approximately 30 to 40 minute Powerpoint presentation of the week's topic, (3) after the presentation, moderate a discussion among members of the class. Instead of writing a one page summary for that week, the group should turn in their list of the additional sources of literature consulted.

Final Paper: Students will prepare and present a major research assignment on a topic chosen in consultation with the instructor. This research paper should ideally be framed as an analysis or discussion of a topic, rather than a survey or overview. The paper should include approximately 3000 words of text (double spaced) with additional pages for figures/tables/references. To prepare this paper, students are expected to read (and cite) approximately 10 to 15 articles from the primary scientific literature. Additional instructions regarding content and format will be provided. The final paper is due on the last day of UTSC classes.

Grading scheme:

One page summaries/questions of weekly readings:	20%
Participation in class discussions:	15%
Presenting and leading two class discussions:	30%
Final research paper:	35%

Access*Ability*:
Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Access*Ability* Services as soon as possible.
Access*Ability* Services staff (located in AA142, Arts & Admin Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability@utsc.utoronto.ca.

Academic Integrity
Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil. utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.