



Ecology Seminar (2022)

Biology 883.3.2

Instructors:

Dr. Philip D. McLoughlin

Course Coordinator

Room 310.5 CRSB (New Biology Bldg.)

306-966-4451

philip.mcloughlin@usask.ca

Dr. Mitch Weegman

Room 310.3 CSRB

306-966-4406

mitch.weegman@usask.ca

Goal:

To discuss advanced topics in ecology through the student-led reviews of ecology, scientific writing, editing, peer-review, and presentations of advanced topics in ecology to both a lay and academic audiences. The focus is on concepts and theories, not quantitative analysis, methods, or techniques.

Meetings:

The class will decide to meet at a prescribed time (depending on graduate student schedules), as needed for student presentations and group discussions (Room TBA). At each meeting we will accommodate 2 to 3 student presentations followed by class discussions based on the presentations (for the five registered students).

Evaluation:

Our goal, this year, is allow each student to develop a high-quality review of a topic in ecology and evolution, using an iterative model of development where students will act as both a writer of their own material and peer-reviewer of each others'; and hone their skills on presentations for both a public audience, and that of a scientific audience (e.g., as you might encounter at a conference). For peer-review, which will be assessed by your instructors (whom will act as journal editors), each student will be randomly assigned three papers to review as one might experience during the publication stage of an academic journal. Our goal is to learn from each other about a topic of interest in ecology, help each other write a review article on the topic by acting as a peer-reviewer, and to provide constructive feedback from written reviews and at the end of presentations. At the end of this course, students may wish to submit their final product to a journal for publication, although this is not a requirement of the course.

Responsibilities of each student will include:

- 1) Identification of an appropriate topic for a review paper in the field of ecology and evolution, to be presented to the instructors by Jan 25th (one-page outline).
- 2) Development of a first draft of their review paper in the field of ecology and evolution, with an initial draft due by Feb 25, 2022. This review paper should be formatted as a review following guidelines of the journal *Environmental Reviews* (noting the topic could relate to any topic in ecology and evolution). Maximum no. words including abstract, all tables, figures, references: 10000 words.
- 3) Diligent, “Anonymous” peer-review of three of your student colleagues’ submissions (as might be requested by an editor seeking peer-review of a submitted article), due to the instructor by March 5, 2022, which will be then promptly be returned to the writers in a package of review to help them further develop their paper.
- 4) Presentation of their chosen topic as a colourful, 30-min, public-oriented talk.
- 5) Submission of the final review paper (April 15) incorporating requested revisions.
- 6) Presentation of a 12-min, scientific conference presentation of their final review paper.

Assignment of Grades (%):

Item	Points, due date
Review-topic outline	5%, due January 25 th
First draft of review paper	10%, due March 1 st
Public-oriented seminar on topic and discussion	10%, two presentation day(s) TBA
Peer reviews (× 3) of colleague’s work on their first draft of their review paper	5% each (15%), all due March 5 th
Final revised submission of review	40%, due April 15 th
Accompanying “letter to editor”, addressing reviewer concerns	5%, due April 15 th with final paper
12-min, conference-style presentation of the review paper	5%, presentation day TBA (after April 15 th).
Class participation in discussion after presentations	10%

*All submissions for grading will occur via Canvas upload (assignment tab), by 11:59 PM on due date. Late submissions will be assessed 20% penalty. Failure to submit peer-reviews on due date will result in a grade of 0 for the missing peer review.

*Each deliverable will be assessed according to rubric that will be uploaded as an “assignment” on Canvas.