Fall 2011 - ES 482/582: Foundations of Ecology
Instructor: Dr. Brian Starzomski, School of Environmental Studies (starzom@uvic.ca)
Schedule: 1 meeting per week, Tuesday 4:30-7:20pm Harry Hickman 116

This is primarily a reading course where we delve deeply into some classic ecology research papers on topics including, but not limited to, the following: the niche, populations, communities, ecosystems, food webs, the rise of experimental ecology, theoretical ecology, conservation biology, meta-analysis, island biogeography, metacommunities, climate change, and neutral theory. We will also examine and discuss the characteristics that make successful research ecologists and research programs. The class will be primarily driven by student discussion and presentations.

Evaluation:
Undergraduate student component:
Profile of a research ecologist (group project)- 25%
- 2-3 page summary (pdf)
- 12-15 minute presentation (ppt)
Weekly questions (questions submitted weekly before class on the papers read that week)- 20%
Discussion and understanding of the papers we read- 25%
Final paper prepared by the student- 30%
- A paper on an ecological topic of interest to the student. Examples include: What is the state of the art in constructing grizzly bear home range boundaries, and how were these techniques developed? What is the history of the stability-diversity debate in ecology, and where does it stand now? What have we learned in 10 years of exploring the neutral theory of biodiversity? How does network theory apply to ecology?

Grad student component:
Student presentations- 25% on papers in class,
Discussion and understanding of the papers we read- 25%
Weekly questions (questions submitted weekly before class on the papers read that week)- 20%
Final paper prepared by the student- 30%
- A paper related to the graduate student’s research interest. This could be an early version of a literature review for their thesis or proposal, a draft of an early analysis of data, or something similar.

There are no exams. This class will take a seminar-style format, and thus it is essential to include a substantial portion of the mark for the students’ comprehension and discussion of research papers with their colleagues and peers.

The required textbook for the course is the following:

Papers:

Week 2 (September 20)
1. Last part of How to Do Ecology book


Week 3 (September 27)


Week 4 (October 4) Ecologist Profiles Week 1


Week 5 (October 11) Ecologist Profiles Week 2


Week 6 (October 18) Ecologist Profiles Week 3


Week 7 (October 25) Ecologist Profiles Week 4


Week 8 (November 1) Ecologist Profiles Week 5


Week 9 (November 15)
Grad student papers 1

Week 10 (November 22)
Grad student papers 2

Week 11 (November 29)
Grad student papers 3

Papers due: December 6th