

## **BIOL 5961: Graduate Seminar in Ecology and Sustainability**

**Spring 2014**

Time: Fridays 12-1

Location: N202

Instructors: Dr. Matthew Cover and other faculty members in the Ecology and Sustainability Program

Graduate seminar (BIOL 5961) is usually organized in a “Journal Club” format, whereby we select, read, and discuss articles from peer-reviewed journals in the fields of ecology, environmental science and management, etc. During the spring semester, however, students have found it useful for us to engage in activities related to developing a thesis proposal.

### **Student Learning Objectives**

This seminar class will build upon and reinforce your existing knowledge and skills. By the end of this course, you should have improved your ability and confidence to:

1. Perform a literature review on a topic, and write a concise, enlightening topic summary that accurately summarizes and critically analyzes information and research findings on your selected topic;
2. Develop research ideas and identify unanswered questions based on the synthesis of the literature on a topic;
3. Assess and provide feedback on the clarity and content of writing done by other students using a rubric.

### **Grading**

Attendance and participation	25%
Weekly assignments (5% each x 15)	75%
Total	100%

Students will be graded on a letter graded basis, with pluses and minuses (+/-), using standard cutoffs (93% A, 90% A-, 87% B+, 83% B, etc.).

### **Attendance and Participation**

You are expected to attend and actively participate in every class session. One unexcused absence will be permitted before additional absences reduce your overall grade by 5% per absence. If you know you will miss class in advance, please let me know. You are expected to do your part to help create a collegial atmosphere conducive to scholarly discussion by encouraging your fellow students and being critical of the content of the discussion, not the speaker or their views.

### **Expectations**

**A collegial atmosphere.** It is very important that everyone in the class feel comfortable speaking up, disagreeing, and politely providing a critical eye towards each others’ work and ideas. It is best if we approach the seminar as a chance to help each other improve our understanding of new topics and our written communication skills.

**Punctuality.** Showing up to class on time is important, but even more important is completing and distributing your assignments on time. In this class we will be relying upon each other for critical reviews of each other’s work.

## **Schedule (subject to change)**

**January 29 (Weds)**- The thesis and the thesis proposal. Where are you at in the process?

Assignment: Review recent published research

**February 7 (Friday)**- Trends in ecological research; types of studies; literature searches

Assignment: Brainstorm of potential topics, systems, questions

**February 14**- Narrowing down a research topic; choosing an advisor

Assignment: Identifying local issues and problems

**February 21**- The organization of scientific papers. Developing a topic and a hook.

Assignment: Pitch your topics to potential advisors

**February 28**- Performing a comprehensive literature review

Assignment: Annotated Bibliography, Part 1

**March 7**- Identifying what is known and unknown

Assignment: Annotated Bibliography, Part 2

**March 14**- Questions

Assignment: Questions

**March 21**- Hypotheses and Objectives

Assignment: Refined question and hypotheses

**March 28**- The organization of thesis proposal introductions

Assignment: Four-point outline of introduction

**April 4** – Introduction paragraphs

Assignment: Detailed outline of introduction

**April 11**- Types of ecological study designs

Assignment: Hypotheses and study designs

**April 18**- Data analysis and expected results

Assignment: Annotated Bibliography on Methods

**April 24- No Class (Spring Break)**

Assignment: First Draft of Proposal

**May 2**- Peer review

Assignment: Second Draft of Proposal

**May 9**- Presenting your thesis proposal to your committee

Assignment: Final draft of thesis proposal

**May 16**- Feedback and discussion of the process