

Professor Richard D. Bowden
Department of Environmental Science

e-mail: richard.bowden@allegheny.edu
Steffee Hall Room B203

Office Hours: M,W: 10-12; 3-4. Also by appointment. You are free to drop in anytime that I have office hours. Priority will be given to those who have signed up on the office hour sheet posted on my door.

Course Hours and Location: R 12:25 – 1:20 Steffee B 102

Important Websites:

ES Department Thesis Guidelines: <http://webpub.allegheny.edu/dept/envisci/ESInfo/seniorcomps.html>

ES Dept Thesis Dates: <http://webpub.allegheny.edu/dept/envisci/ESInfo/comps/schedule08-09.html>

Course Description

Successful research is both simple and complicated. It is simple in that it merely involves asking a question and then proceeding to find the answer. It is complicated in that it is often difficult to define precisely the question, and hard to determine the appropriate methods or techniques. Data analysis can be challenging and answers are not always straightforward. This seminar will give you an opportunity to explore issues in environmental research and problem solving related to your own senior thesis. We will work as a team to assist you with your research project, and we will work together to explore the means of successfully completing, analyzing, and presenting your results.

Grading Your grade will be calculated as follows:

Proposal: 20%

The best indicator of success is a well-written, tightly packaged proposal. We will revisit your Jr. Seminar proposal and insure that all is in order. Your proposal needs to be crisp, detailed, and sharply focused.

Thesis progress 50%

This is the semester to accomplish the majority of your work. By the end of the semester, your introduction and methods sections will be due. You will also develop a detailed plan of action for completion of your thesis.

Contribution to seminar 30%

We will interact a great deal both on your own thesis, and on those of your colleagues. We will also explore a number of related topics in class. Your grade will be based on both the quality and quantity of your input to our discussions and the quality of your assignments.

During the writing phase of your comp, you will work closely with other students in the seminar. These will be your buddies who will critique your thesis drafts prior to submitting drafts to me. Good writing does not occur in a vacuum - it requires numerous drafts and good advice from friendly critics. The days of writing a paper the night before it is due are over. Be aware that in the environmental field, virtually no one gets the writing correct the first time. Most professionals proceed through several drafts, as well as comments and suggestions from reviewers and editors. Writing is hard work, so expect to struggle here, and be prepared for MANY rewrites to your thesis sections. The rewards, however, from this struggle are great.

Honor Code

As seniors, you are aware of the student-initiated honor code, and the obligations of students and faculty. As a reminder, I take very seriously the honor code and I expect that you do also. Please be aware of any and all obligations you have pertaining to the code. A particular caution concerns plagiarism, especially as you begin writing your thesis. Plagiarism is intellectual theft - if you have any questions on this issue, see me at any time.

Assignments

Thesis Proposal Presentation.

Prepare a six (6) minute presentation of your proposed thesis work. This is to be a formal presentation, using appropriate visuals (PPT) in your delivery. Your presentation must:

- a. Explain and justify the relevance of your project
- b. EXPLICITLY state your hypothesis, question, or project
- c. Define the methods or approach you intend to use,
- d. Anticipate your findings or final product
- e. Point out actual or potential problem areas
- f. You may not exceed 6 minutes. You will be timed, and you will be cut off at that time. If you have not finished, you will be in trouble. You will want to practice your presentation, and have a watch or clock handy.

Thesis Proposal

Update your proposal to provide a clear thesis statement, concise methods section, and defined plan of action for the semester. The better your proposal, the greater your chances for success on your thesis. Your revised proposal will contain an introduction and methods section, and will be 5-8 pages in length, with at least 20 references, properly cited. You must also include a WEEK-TO-WEEK timeline for your project.

Revised Thesis Proposal

Based on comments received in your committee meeting, revise your written proposal. Submit your original proposal along with your revised copy.

Resume Preparation

Prepare your resume. You can use the examples in career services as a starting point for preparation of your resume. Bring enough copies for all members of the class.

Career and Graduate School planning

Find at least five actual employers or graduate schools that would potentially fit into your career plans. Contact, via telephone or e-mail, at least one person in EACH of the occupational areas, or one person in the graduate school, and find out the required job or school application qualifications.

- a. Provide me with a hard copy of correspondence with potential employers or graduate schools.
- b. Find out the most important academic AND personal skills necessary for this position.
- c. Describe your reaction to the information you have obtained. (500 word total for this assignment)

Thesis Introduction

Provide the first full draft of your introduction. Your introduction should follow the general plan of:

Overall statement of the issue
Greater detail on the specific problem that you are addressing
Your specific project, hypothesis, or line of inquiry

Bring copies for all members of the class.

Progress Report

Summarize and document your efforts to date. This should be two page document that outlines, in detail, what you have accomplished to date, work that remains, problems that you have overcome and those that remain, and where you are according to your projected timeline for completion.

Class Schedule

<u>Date</u>	<u>Class Topic</u>	<u>Assignments</u>
Aug 27	Where are we? Who are we? Why are we here? Upcoming deadlines.	
Sept 3 (4)	Thesis proposal presentation	Fall Form: Send to Lin Sutley <lin.sutley> an electronic copy of the Fall Form, including the name of your project advisor, your other committee member, your senior project topic, and a two-sentence description of your project. See the website for further details.
10	Thesis proposal presentation	Proposal Presentation
17	No class	Establish Committee Meeting Date
21 (M)	Thesis proposal presentation	Proposal Due 5 pm
24	Thesis proposal presentation	
Oct 1	TBA	-
8 (9)	Topics Discussion	Committee meetings completed
15	No Class	
22	Career Planning	Revised Thesis Proposal Due
29	Resume preparation	Resumes
Nov 5	Resume Reviews	Career and Grad Schools
12	Writing introductions	Thesis Introduction
19	THANKSGIVING BREAK	-
26	Progress Updates	
Dec 3 (10)	Introduction Reviews -----	- Progress Report Due

(Dates in parentheses are departmental deadlines)