Long Assignment for
Senior Seminar: Environmental Assessment and Project Development
Environmental Studies 461

Janet MacFall
Environmental Studies Department

Introduction for Faculty Colleagues

Course Goals
Environmental professionals are broadly trained with backgrounds in the humanities, social sciences and natural sciences. Professionals in this area commonly engage in group work and must have strong research, writing and verbal skills. They must be able to analyze data, conduct field research and critically analyze studies and other materials associated with environmental issues. They must also recognize the value of community partnerships in their work. The goal of this course is for students to improve and demonstrate these cross-disciplinary skills in the development of a professional, environmentally focused project.

The Assignment I Distribute to Students

ENS 461 - Senior Seminar: Environmental Assessment and Project Development
Semester Project

Objectives
To improve upon and demonstrate the above skills, students will work collaboratively on a project related to a local environmental issue. Students will be expected to:

- Clearly identify the specific goal and expected outcome of their project
- Create a project development plan with an appropriate timeline and benchmarks
- Collect and analyze data relevant to their project
- Locate, read, synthesize and use relevant literature in development of their project, with emphasis on primary sources
• Work collaboratively as a group in project design, development, analysis and presentation, using techniques of professional project management (as described in Measures of Success)

• Work with appropriate community members as respected, valued partners

• Prepare an appropriate summary report and professional presentation of their work

**Semester Sequence**
This series of assignments will guide you and your project team through development of your project, gathering evidence and information, assessing and analyzing, and developing a final conclusion and/or recommendation.

The final product of the semester will be a professional project report and group presentation of your work. These documents and presentations will be shared with your project partner from outside the University as well as with Environmental Studies faculty, students, and other interested stakeholders.

Some of the assignments will have a separate document describing them. These include:

1. Log/Journal,
2. Exploratory Literature Review and Annotated Bibliography,
3. Contributory Literature Review and Annotated Bibliography,

Otherwise, please use the briefer instructions below.

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**Part 1**

**Brainstorming!**

Identify and present the perspective and knowledge of the students in the Project Team. You will do these assignments in class, and will turn in your work before leaving the classroom for other activities.

1. Consider the topic you will be researching and developing throughout the semester. Make a list of everything you know about this topic – do not stop and consider whether it is correct or not. What do you think you know? You will not be evaluated on the correctness of your list. Explore your
assumptions, consider what you think you know from other classes, life experiences, internships, readings, conversations, etc.

2. Now make a list of questions you could ask to help you become more expert on your project topic. What would be helpful to know? Where would this information fit in your project as it develops over the semester. Where could you find or collect this information from?

3. Again consider the topic you will be researching and developing throughout the semester WITH YOUR PROJECT TEAM. Your team will now make a list of everything the team collectively knows. Discuss your list as it grows with your project team. Be as complete as you can.

4. Now revisit the list you make initially in step 1 of this assignment. Are there some points that you included that were rejected and not included in the list made by the project team? Put a ** next to the items in your personal list that were not included in the project team list.

5. As a final step, the Project Team will make a list of questions that will help the team to become more expert on the project topic. What questions will help the team develop the project management plan? What kind of information could be collected to address the project question? Where could this information be obtained – from the literature? From research the Project Team does? From your project partners? From other sources?

6. You will turn in:

   a. the list of information and notes that are uniquely yours

   **AND**

   b. the list of information and questions from the Project Team.

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**Part 2**

**Forming!**

In this assignment, you will learn how to design a concept map that clearly identifies the project goal(s) and desired target condition. What information will be needed? How will information which is collected be analyzed and used in the project? You will use the text “Measures of Success”, which will be provided by the course instructors.

1. Each team will choose a case study in the text “Measures of Success”. The four case studies include: Savannah, Tropical Forest, Coastal and Wetlands ecosystems.
2. Read the materials describing the case study. Write a paragraph that summarizes: the goal of the project, the stakeholders, challenges to success, what information was collected and how it was analyzed, what was the final outcome, and how success was accessed? You can construct the paragraph using a bullet list, with additional explanation.

3. With your team, draw a concept map using the structure described in the text for your case study. How does your concept map differ from the one presented in the text?

4. Prepare a 8 – 10 minute presentation for the class that summarizes the case study and describes your concept map.

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**Part 3**  
**Conforming - Exploratory Literature Review and Annotated Bibliography**

A more detailed instruction sheet will be provided.

1. With your Project Team, choose a topic that will help answer the questions you and your team have about the project.

2. Annotated Bibliography – Identify sources from the relevant professional literature that will help you to answer the question. Extract information from the literature you have found and read.

3. Use the literature to answer your question, then form a hypothesis that helps you to form and develop the project in partnership with the Project Team.

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**Part 4**  
**Forming your Project**

Using the information you learned and analyzed, with your team develop a concept map that describes the project development plan for your project.

Use the same format and summary questions that you used in Assignment 2, based on the text “Measures of Success”.

1. With your team and outside project partners, define the goal(s) of your project, and the final target condition.
2. Who are the stakeholders in your project? Direct stakeholders? Indirect stakeholders? Broader audience/community? Who could be impacted by the project as it develops during the semester, and after your semester project is completed?

3. What information is needed for the project to develop? How will it be analyzed?

4. What are the challenges to success, and how will your project team develop them?

5. With your project team, draw a concept map using the format in “Measures of Success”.

6. Give a 8 – 10 minute presentation to the class that summarizes the project and the project management plan. Conclude your presentation by displaying and briefly explaining your concept map.

7. Post your concept map and related text on your WIKI, to begin to document the progress of your project. As your team revisits and revises the workplan and the Concept Map, they should be sequentially posted and documented on your WIKI. This provides a roadmap of where your team has been, and may give some ideas of where to go.

8. This will serve as the Preliminary Project Management Plan for your Team.

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**Part 5**

**Norming through Discussion with your Project Team**

Begin work on your project!

1. Using your project management plan, concept map, and exploratory literature review as a guide, identify what information must be collected, and how will it be analyzed and used? What information is needed from the literature? Does raw data need to be collected and analyzed?

2. Revise the Project Management Plan including a tentative timeline and benchmarks (goals to be met along the way). Post this information on your WIKI.
Part 6
Begin Performing

Write the first drafts of the Introduction and Materials and Methods for your final report. Each person (you) will write individual documents. Your Project Team will then work collaboratively using the Introduction and Materials and Methods from each team member to construct a collaborative, team written Introduction and Materials and Methods. These documents will guide future project development.

1. Using the information from your Exploratory Literature Review and your Project Management Plan, prepare a first draft of the Introduction and Materials and Methods of your final report.

2. The Introduction should set the stage. What is known from the literature about your project? What is not known? What challenges are presented from other similar projects? The document should end with a concluding paragraph that clearly states the goals/target conditions of the project based on stakeholder needs and the literature. Use the literature that has been collectively assembled by the Project Team. The Annotated Bibliographies and the Exploratory Literature Reviews should have ALL been posted on the WIKI. You should use all of the information available to you. A target for the Introduction would be around 1,000 words.

3. Write the Materials and Methods for the project. This document will guide the initial data gathering and should reflect the Project Management Plan that your project team has developed. This document should be as long as it needs to be, and should be sufficiently detailed that your class Professors will know what your plans are, including a timeline.

4. NOW, work as a Project Team and collaboratively write an Introduction for the Team report. You should use the Introductions written by the individual team members to guide the collective document. This will be done IN CLASS.

5. NOW, work as a Project Team and collaboratively write a Materials and Methods which will guide the project as it develops. You should use the Materials and Methods which have been written by individual team members to guide the collective document. This will be done IN CLASS.

6. The Project Team Introduction and Materials and Methods (including timelines) documents will be posted on the WIKIs.
Part 7
Literature Collection and Writing a Contributory Literature Review and Annotated Bibliography

A separate instruction sheet will be distributed.

Each student will do a Contributory Literature Review and Annotated Bibliography. Each student will choose a topic that makes a unique contribution to the project development. Through examination and analysis of relevant literature, they will become the team expert on that topic.

Part 8
Storming

From the information that has been collected so far, analyze the information which has been gathered by the team. Is it supporting project development? Is your information and approach addressing the initial question? Revisit the Project Management Plan and go through the Project Management Cycle as described in “Measures of Success”. Is the project meeting the target condition? Revise the WIKI.
Part 9
Re-Norming

With your Project Team, give a 10 minute presentation to the class that describes the structure of the project, how it has changed, and how the work done by the Project Team members is moving the project toward reaching the “target goal”. Solicit feedback from the class to identify strengths, weaknesses, where additional work would strengthen the project, and where adaptive management might change the project management plan and concept map.

1. The Project Team will prepare a 10 minute powerpoint that was collaboratively prepared and presented to the class.

2. A recorder from the Project Team will record comments from the class and instructors.

3. Comments sheets should also be distributed to everyone in the class. Your class colleagues should be given five minutes to provide written comments, which are also collected and considered by the Project Team.

4. Information from the class will be used to re-visit the project management cycle. A revised Project Management Plan with timeline and Concept Map will be created by the Project Team. It will be posted for sharing on the Team WIKI.

Part 10
Presentation of your Project Progress and Outcomes

The semester has gone by quickly! It is now time to bring your project to closure.

Each team will be responsible for writing a Final Report and presenting a professional level presentation to the project partners, environmental studies faculty, other stakeholders, colleagues and any others who might be interested in your project.

1. The Project Team should design a model that shows the parts of the project, beginning with the Introduction, then Materials and Methods, then Data Collected and Analyzed, ending with Conclusions and Outcomes. The Team should write a paragraph (which may include bullet lists) that describes the project and deliverable outcomes.
2. The Project Report should be organized into a 12 minute PowerPoint Presentation that can be shared with an audience that includes the project stakeholders, faculty, students and other interested parties.

3. The Project Report presentation will be practiced on the first Monday following Thanksgiving. It will first only be presented to the class and the professors. Comments should be written down by the Project Team recorder. The presentation should be revised in response to comments received.

4. On the final class period of the semester, the Project Presentation will be presented to an audience of project stakeholders (for all projects), your classmates, faculty, and friends. The presentation should be 12 minutes, with an additional 3 minutes for questions.

5. A digital copy of the presentation should be made available on the Team Wiki and e-mailed to both professors.

**Final Oral Presentation**
Each project team will present a 12 minute oral presentation to the project partners, faculty, colleagues, other interested stakeholders. There will be 5 minutes at the end for discussion and questions.

The presentation should be arranged into the same sections as the Final Project Report, and the sections should be presented in the same order. A different team member may be responsible for presenting different sections of the presentation. It is important that all team members participate both in the presentation and in the question/answer session at the end. Team members may choose to present a part of the project that they feel they are most expert in or which they feel the strongest sense of ownership for. It is important that the presentation reflect the highly performing team that you have become!

Presentations should be constructed using PowerPoint. The PowerPoint file should be posted on the team WIKI. It should also be e-mailed to both course instructors following the final presentation.

**Grading**
Grades will be based on (with 8 points for each criteria below):

- **Delivery.** Were slides well designed and presented. Did the presenters speak clearly with a professional demeanor? Was responsibility for presentation shared between team members?

- **Clarity.** Was information clearly presented both visually and orally? Were the project partners clearly identified and the project goal/target condition presented with support?
• Project management plan – was it clear how the project was conceptualized, managed and developed? A slide with the final concept map and a project management timeline or plan could be helpful.

• Data collection/analysis presentation – was it clear and orderly? Was it tied to the identified goal/target condition?

• Conclusion/recommendation – were conclusions clearly based on the evidence which was collected and analyzed? Does it address the identified goal/target condition? Were the needs of the project partner met?

It is important to remember that this class is a prelude to your graduation and to the paths guiding you to life after Elon – whether they lead to becoming an environmental professional or another life choice.

This final project will be a reflection of your accomplishments – as well as your potential.

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**Part 11**

**Professional Report to be shared with Project Partners**

A final report will be written, to be turned in at the scheduled time for exams. Comments and questions presented during the Presentation should be addressed. Only one report, collaboratively written by the Project Team, will be turned in. It should include the following sections: Introduction, Materials and Methods, Data collected and analyzed, Conclusion and Project Outcomes, Literature Cited.

**Final Report**
The Final Report will be organized into the following sections:

- Introduction
- Project Management Plan (Materials and Methods
- Information Collected with Discussion
- Final Conclusions and Recommendations
- Literature Cited

The draft of the Introduction was written earlier in the semester, by each individual team member and then as a collectively written Introduction for the Team Report.

**Introduction**
The Introduction should set the stage. What is known from the literature about your project? What is not known? What challenges are presented from other
similar projects? The Introduction should clearly be based on EVIDENCE FROM THE LITERATURE and from the PROJECT PARTNER. It should not be speculative, but should clearly set the stage for explaining how/why the goals/target conditions of the project were chosen.

The Introduction document should end with a concluding paragraph that clearly states the goals/target conditions of the project based on stakeholder needs and evidence from the literature. Use evidence from the literature that has been collectively assembled by the Project Team. The Annotated Bibliographies and the Exploratory Literature Reviews should have ALL been posted on the WIKI. You should use all of the information available to you. A target length for the Introduction would be around 1,000 words.

**Project Management Plan**
The following section should be a presentation of the Project Management Plan, describing the materials and methods used in project development. The team should use the documentation that has been placed on the WIKI both collectively and individually to provide the framework for describing the Project Management Plan. It should document who was involved, sources of information, timelines, targets/goals and how they were achieved.

**Information Collected and Analyzed**
The next section should be a description of the information that was collected, both from the field and from the literature, that assisted with project development. This section will include more specifics on project development than were included in the Project Management Plan.

Your successful project also depends on how you and your team ANALYZED and SYNTHESIZED the information that was collected. What information was needed to move your team toward your project goal/target condition? How was that information analyzed, and then used in developing your team conclusions and recommendations?

**Final Conclusions and Recommendations**
What was the final outcome of your team project? Did your final conclusions/recommendations meet the goals/target conditions identified by the client? If your project recommendations are implemented, how could the success of the project next stage (when your team has passed the responsibility to others) be measured and evaluated? What is the final message you want your project partners and others to take away from your semester of work?

**Literature Cited**
Use a format that is appropriate for your profession to provide for citations for all literature used in your final report document.

The length of your final report will really depend on the complexity of your project, how well it was research and analyzed, and what needed to be in the final written presentation.
Grading
Everyone wants to know how their Final Project Report will be evaluated for grading.

Criteria will include:

- Clarity of writing. Does the report clearly state the goal/target condition identified by the project partner? Is the Project Management Plan clearly and succinctly written, and is it clearly addressing the identified goal/target condition? Is the data collection and analysis clearly presented? - 20 pts

- Is the final conclusion/recommendation **EVIDENCE and ANALYSIS** based? Is the evidence appropriate for your specific project? - 35 pts

- Does the project meet the needs of the project partner by meeting the goal/target condition? -- - 15 pts

- Has the literature been appropriately identified and used, then clearly cited? - 10 pts

Part 12
Log/Journal that Documents the Evidence of the Project Progress and Achievements

One log/journal will be turned in from each student in the class.

Part 13
WIKI

As a project team, you will be expected to maintain a WIKI in Moodle that documents evidence of project development and team progress. It should include all copies of concept maps, project management plans, literature reviews, annotated bibliographies, contact information, and any other information which has contributed to the project development and progress.

Grading

Each assignment will be worth a number of points as indicated below. Calculation of your final course grade will be determined:

| Individual | 45% |
| Team | 55% |
Part 1 - Brainstorming
Individual Document – 10 pts.
Team Document – 10 pts.

Part 2 - Forming!
Team Concept Map Diagram & Presentation from *Measures of Success*– 15 pts.

Part 3 - Conforming – Exploratory Literature Review and Annotated Bibliography
Individual Literature Review – 25 pts.
Individual Annotated Bibliography – 16 pts.

Part 4 - Forming your Project
Team concept map – 20 pts

Part 5 - Norming through discussion with your Project Team
Team Project Management Plan – 20 pts

Part 6 - Begin Performing
Team Introduction and Materials and Methods – 20 pts.

Part 7 - Literature Collection and writing a Contributory Literature Review and Annotated Bibliography
Individual Literature Review – 35 pts.
Individual Annotated Bibliography – 16 pts.

Part 8 - Storming
Team analysis – included in the WIKI documentation below.

Part 9 - Re-Norming – Brief Update Presentation to the Class
Team Presentation – 15 pts.

Part 10 - Presentation of your Project Progress and Outcomes
Team Presentation – 40 pts.

Part 11 - Final Project Report to be shared with project partners
Team Report – 80 pts.

Part 12 - Log/Journal that documents the evidence of the project progress and achievements
Individual Points – 10 pts./week

Part 13 - WIKI documentation
Team points – 20 pts. Mid semester
Team points – 20 pts. End of semester
Below is a table showing the value of each assignment. I have also included columns so you can write you and keep track of your own progress.
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