CAPSTONE PRESENTATION/PAPER

Overview: All students will work collaboratively in small-peer groups and develop a team presentation that critically analyzes a specific environmental question. Students will write individual papers on different aspects of the overall topic. The purpose of this assignment is to apply knowledge and critical analysis skills obtained during your time in the Environmental Studies major at UCSC to a specific environmental question; foster interdisciplinary teamwork skills; and refine research, writing, and presentation skills. Please note that you have two weeks until the project proposal due and another three weeks after that until the paper draft is due so you will need to begin work on this project immediately and budget your time accordingly throughout the quarter.

Presentation/group topic: Students should come to section January 8 with ideas (preferably more than one) for group presentation topics. Students will spend this section working out environmental questions that 3-5 students will study for the quarter. Students will work individually and in groups over the rest of the quarter to study this issue and produce a powerpoint presentation that aims to inform a general audience about this issue and to suggest possible strategies for resolving this issue. On Jan. 22 groups will give a brief (≤10 min.) presentation on their project proposal in order to get feedback from instructors and peers (20 points). On Feb. 26, March 3, 5, 10, and 12 students will give group presentations on the results of their project. Presentations will be 5 minutes per student (i.e. 15 min. for groups of three, 20 min. for groups of four) plus 5 minutes for questions. Note that given the time restrictions students will not be able to present all the information in their paper but the group will need to work together towards and integrated presentation. The dates on which each group will give presentations will be announced on Feb. 12 during section. Presentations will be graded out of a total of 55 points based on overall team content of presentation; content of individual sections; overall format, length, and clarity of presentation; individual speaking skills; and cooperation and organization of group during the project. Students will be given an opportunity to comment on the contributions of themselves and their peers.

The best way to get the powerpoint to us is to e-mail it (if it is under 5 megabytes) to Dr. Holl in advance of the presentation. Students can also bring their powerpoints on CD, memory stick, or their own computer, but should test their device in advance of their presentation. Regardless, students are required to give a copy of their powerpoint presentation to their primary grader to aid in evaluation.

Papers: Each student will individually write a paper on a certain aspect of the group topic. The paper should provide a critical analysis of a specific environmental question; in other words, the paper should not solely review information. The paper will be written in stages to allow students to receive feedback during the process.

Outline: On Jan. 22 students should come to section with a clear thesis question they will address in their paper, a preliminary outline of their paper, a bibliography of relevant references to help answer their thesis question, and a list of any questions or concerns they need feedback on to proceed with their paper.

Draft: On Feb. 17 three copies of a draft of the paper are due. This draft should be a well-researched and carefully written draft summarizing your knowledge of the issue. Remember that the more developed this draft is, the more focused feedback your reviewers can give. This draft should include the following sections:

1. A 1-2 paragraph general introduction to the problem being addressed to provide a context for your paper.
2. A paragraph that clearly states the goal of this paper and lays out your “roadmap” for the paper. In other words, what question are you addressing and how is your paper structured to address this question?
3. 4-5 pages presenting the information you’ve compiled to answer this question.
4. An outline of or text discussing the 3-5 main conclusions/recommendations you can draw based on your research in response to your question and what information you have presented that supports these conclusions recommendations. You may write out your entire critical analysis section to get feedback, but only an outline is required.
5. A cover letter listing specific points on which you would like feedback, what you think are the strengths and weaknesses of your papers, and additional points you still need to further research.

The draft should have page numbers and should be 1.5 or double spaced. The draft will be reviewed by both an instructor and two peers and will be graded. Be sure to spell-check and proofread your paper, and include a list of references cited. The instructors will spend a great deal of time and effort in reviewing your paper.

**Final paper:** The final paper is due March 16 at noon, and should be no longer than 10 pages double spaced, plus a cover sheet explaining how reviewers’ comments were addressed. The final draft of the paper should include sections 1-3 (above) as well as a fully developed critical analysis. In other words, based on your research what is the answer to your initial question? What conclusions or recommendations stem from the research presented? Papers will be graded out of 120 points: outline and bibliography (5 pt), draft (35 pt), and final paper (80 pt). Papers will be graded on thoroughness of research, organization, and writing style (draft), as well as critical analysis and addressing reviewers’ comments on the final paper.

**Topic selection:** You are welcome to select any environmentally-related question as long as you can find at least two other students to work with you on the topic. You are encouraged to pick local or regional topics where they can interact with agencies to apply the results of your research, and also to pick topics with which you have some familiarity. Below are a few examples of the range of topics past students have investigated. Also, I have posted some topics suggested by local agencies on the course web site.

**Examples of Previous Capstone Questions**

How is electronic waste disposed of and what strategies at the local, regional, and national level show the most promise in resolving the e-waste problem?

What are the obstacles to expanding solar energy in California and what steps might be taken to overcome these obstacles?

How will the Central California coast provide for the water needs of a growing population in an altered future climate?

How successful have wetland mitigation efforts been in meeting the “no net loss of wetlands” policy and how could wetland mitigation efforts be improved?

How successful has eco-labeling been in earning a price premium for environmentally-sensitive production methods, and how might it be improved?

How might the UCSC Long Range Development plan be improved to both meet enrollment growth and minimize environmental impacts?

How successful has bioprospecting been in helping countries to gain income and preserve natural habitat, and how might it be improved?

What species and revegetation practices should the Natural Resource Conservation Service recommend to land-owners to prevent erosion control without using invasive species?