Marine Policy Project: Overview



Blue Ice Antarctica (from B. Longworth (WHOI) with permission)

This research project will be completed in four (4) parts throughout the term and will require students to identify, research, and build an argument (pro or con) regarding a specific issue related to the oceans. At the end of the term each student will have produced at least three (3) concisely written "letters of appeal," that may be sent to three different local, regional, national, international political organizations, corporations, or research institutions. See **Calendar** for due dates.

This project is worth 20% of the Final Grade (100 points)

Part 1: Identify the Issue: (10 points)

I will start out by saying that this is the most important part of any research project. If you take the time now to consider your issue carefully, determine that it is not too narrow or too broad, and find 4-5 good primary scientific references, you will have a much easier time writing your research paper in Part 2, and writing your letters of appeal in Part 4. Conversely, if you decide to pick the first topic that pops into your mind, you may be 'sweating it" during the writing phase.

The only restriction on the choice of an issue is that it must be related to the ocean. Read chapters 14 and 15 in the text book and look online for ideas. Other places to search are the NOAA Ocean Explorer website; the NASA Oceanography webpage; the USGS Pacific Coast and Marine Science Center; and the Monterey Bay Aquarium.

Some ideas include:

Mining Ocean Resources (choose a specific resource or geographic region): oil, manganese, diamonds, or deep ocean mining, in a specific geographic location.

Tidal and Wave Energy (choose a specific method and/or geographic region)

International Fishing Practices and Legislation: Overfishing, illegal fishing, methods, or fishing regulations, it would be best to focus on a single species and/or geographic region.

The Human Impact on Coastal Zone; choose a specific coastal zone issue and/or geographic region.

Waste Disposal in Oceans: chose one type of waste. For example: plastics, nuclear, sewage, illegal dumping, and coastal dumping. It would be best to also narrow this geographically (for example: the Bay Area, Northern Pacific, or the Galapagos Islands etc.)

Climate change and the oceans is too broad an issue to be adequately covered in a 3-4 page research paper. Students should focus on a single topic related to this issue. For example, ocean acidification impact on a specific marine ecosystem, the melting of polar ice impact on the Arctic or Antarctic, the impact of global sea level change on a specific city or region. Again, global climate change alone is much too large an issue to adequately address in a 3-4 page research paper.

Ocean Dead Zones (choose a specific dead zone/region)

For Grading Part 1:

Submit your proposed issue, explain why you chose it, and why it is important (Max: 1 page, double-spaced) and include several preliminary research sources/references. As soon as your proposal is approved you may continue your research.

Part 2: Research Document (40 points)

Research and produce a concisely written **3 - 4 page** paper on your chosen issue. The research paper should include at least **four primary scientific sources** that are properly cited using **scientific citing formats (APA)**, for both the text and bibliography.

See: http://owl.english.purdue.edu/owl/section/2/10/.

Pay special attention to the citation of references in the text:

http://owl.english.purdue.edu/owl/resource/560/02/

I am expecting to sees (author, year) or (organization, year) in the text. No embedded links!

This paper does not have to be written as an argument, but could be. Your research paper should have all the supporting information and documentation for the "appeal" you will be writing in Part 4.

A few comments regarding primary scientific sources/references:

Primary sources of scientific information are books, papers, and articles that have been through the rigorous process of review by experts in the field. A "peer reviewed" scientific article has been vetted by experts to make sure the data collection and analysis follow the principles of the <u>scientific method</u>.

Examples of journals that you can be assured have been through this process are as follows: Nature, Science, Scientific American, and National Geographic (also conference transactions and books); websites include NOAA, NASA, EPA, USGS as well as universities, and state, national or international research organizations. The *New York Times* and *LA Times* are often used as primary sources because it is well established that the articles have been through a rigorous editing and fact checking process. *National Inquirer* is never used as a primary source.

Wikipedia: Although it is a great place to look for links to primary sources, Wikipedia should never be cited as a primary source because although some of the information has been vetted, some have not, and it is hard to tell the difference between the two when they have been integrated into a Wikipedia page. Even in an article that cites another article, if you are thinking of using the idea that was in the cited article, make sure you have read the original article to assure the original authors 'comments are not being used out of context.

Blogs are particularly dangerous. Although blog authors often start off supporting their comments with reference to vetted information, sometimes blogs can take bazaar twists. I recently had a blog link sent to me by a very well-educated friend which started off referring to Jared Diamond's book "Collapse" and then veered off on a tyrant that I am pretty sure would have never been the intent of Diamond. The manner in which the blog entry was written suggested that the author was presenting Diamond's ideas. This is very scary!

For Grading Part 2:

The research paper should be typed, not longer than 4 pages + references, double-spaced, with at least one inch margins, and will be submitted electronically. Proper citing of references using scientific citing formats is critical.

Part 3: Identify "Targets" for the Letter of Appeal (20 points)

The ultimate goal here is to get your argument into the hands of someone that can and will do something about your issue. Although the President of the United States can do something about many ocean issues, it is highly unlikely he or she will. Therefore, Presidents, Prime Ministers, or the Secretary General of the United Nations should be off-limits because they are all busy with other issues!

It is best to target elected officials at the local or regional levels; they are much more likely to be familiar with your issue and its effect on the communities they represent. Students have had little success in the past with congress and senate members. I am suggesting you target locally. Your targets can also be individuals within corporations and/or research

institutes.

College professors in particular love to talk about their research topic!

When researching your targets, find out what their background is, and how long they have been in office or at their job. Find out what their position is on your issue; many should have a website with stated policy positions.

For Grading Part 3:

You are required to submit a list of at least 3 "targets" with a brief explanation of why you chose each individual, including their relevance to your issue, policy positions, and any personal connection you might have. For full credit on this assignment, it is expected that students will include specific names of an individual within each target organization, and a full address for each target.

Part 4: The Letters of Appeal (30 points)

Compose your three letters, no longer than 1.5 page **single spaced**, **single sided**, **with one inch margins** that is each a concise summary of your research paper. The trick here is to condense all the information included in your research paper to a length and clarity that the recipient can easily "digest." Clarity is all important! You no longer have to include your scientific notation, but should include references if they support your main point.

Your letters are argumentation and must be written in a persuasive style. Things to consider in the tone of your letter are the recipient, what their position is on the issues, and how much persuading you have to do. You may find yourself writing several versions of your letter for different targets.

For more insight on how to write a persuasive argument, here is a link to the University of North Carolina page. http://www.unc.edu/depts/wcweb/handouts/argument.html

Remember, your goal is to get the reader at the other end of your paper to understand your argument and do something about it. You are trying to get your letter past the summer intern doing a first pass of all web submissions and letters, and into the hands of your target, or a member of the target's staff, who deals specifically with your issue. (I offer my apologies to those of you who have worked as summer interns in political offices!)

For Grading Part 4:

Submit your final letters. These should be formal letters including full names and address for your three targets. Students are not required to send your letters to your targets, but it would be a good idea to do so if you feel strongly about your issue.

For help writing a formal letter go to:

http://owl.english.purdue.edu/owl/resource/653/01/

Extra Credit

If you do send the letters, I would be interested in hearing about any responses you receive. If you submit your responses to me via e-mail attachment before the final exam, I will give you extra credit on this assignment (maximum five points this assignment only).