



Midterm Paper Guidelines

Project objectives:

1. Identify an ecological and/or environmental problem that is caused by the designed/built human environment.
 - Please define the ecological and/or environmental problem as specifically as possible. For example, “pollution” is too broad a problem; if you want to discuss pollution, you need to choose and research a specific pollutant.
 - Explain what harm is involved in this problem and how that harm relates to ecosystems and/or the human environment. Please make sure that you make it clear whether this harm is done to human beings, to other organisms, or both. If there is harm done to humans, make it clear whether this harm is direct (such as threatening human health) or indirect (such as depleting an important resource or ecosystem service).
 - You may not use one of the specific ecological or environmental problems we covered in class; however, there are many related problems that you can choose.
2. Describe the root cause(s) of this ecological and/or environmental problem.
 - Explain how the built environment causes or contributes to this problem. What elements of the built environment are involved? What human activities related to these elements of the built environment cause or contribute to the problem?
 - To fully meet this objective, you need to cite SCIENTIFIC EVIDENCE (in other words DATA) that identifies the root causes of the ecological and/or environmental problem. Whenever possible, you should trace this evidence back to its source.
 - Discuss the kinds of experiments and/or observational studies used to produce this data.
 - To receive full credit, you must cite at least FIVE SOURCES OF RELEVANT DATA. These sources could be papers from the primary literature, reports from reputable agencies/organizations, or online summaries of data posted on reputable sites. Please contact your instructor if you are unsure about the validity of data you have uncovered, particularly if it comes from the web.
 - Use figures, graphs, or tables from your sources in your *Appendix* (see below). Make sure to properly cite the source of all components of the *Appendix*.
 - Where the root causes remain uncertain, explain why existing scientific evidence fails to clearly identify what is causing the problem and suggest the kind(s) of research that needs to be done.
3. Discuss your proposed solution(s) to this problem.
 - In order to solve this problem and/or prevent it from happening in the future, how should we change the way we design, build, and/or maintain our built environment? Clearly explain how your proposed solution works and how it would be implemented.
 - What are the other possible solutions to this problem? Discuss the pro’s and con’s of every potential solution. Justify your proposed solution based on its costs/benefits compared to other potential solutions.
 - Use data from the scientific literature to support the choice of your proposed solution.
 - Ground your solution in the political, economic, and social realities of the region/country in which this problem is occurring. Your solution will be judged not only on its potential ecological/environmental efficacy, but also its real-world feasibility. BUT, don’t allow this stipulation prevent you from thinking big: many of the solutions required to solve ecological/environmental problems must occur on a large scale. ALSO, don’t allow political cynicism to limit your suggestions: assume that if your argument is convincing enough, you could muster political support for your proposed solution.

Proposals:

You are required to submit a formal project proposal by Friday, **February 28th, 2014 @ 11:59 pm**. All project proposals must include a concept map that:

- A. Shows the sources that you used to inform your project and the ideas and information provided by these sources;
- B. Shows all of the key ideas and concepts needed to understand the problem that you plan to investigate;
- C. Explains all of the potential solutions you plan to consider; and
- D. Connects the sources that informed your project (from "A" above) to an exploration of your focal problem (from "B" above) to the potential solutions you plan to consider (from "C" above).

For more help on how to create this concept map, go to <http://wp.me/p1BPr1-1pB>. In addition to the required concept map, you may also include explanatory text in the "notes" section of the *LMS* submission page or on your concept map itself. Your instructor will post comments on *LMS* in response to your proposal; if you have any questions about this feedback, you should contact your instructor during office hours, by phone, or via email.

Format of the Paper:

1. Please present your work in type-written, **single-spaced** format. Font should be 12 point, margins should be 1" on all sides.
2. Produce at least three (3) and no more than six (6) pages of **single-spaced** text.
3. Provide an *Appendix* (does not count towards page minimum or maximum) that presents figures, charts, images, or other helpful auxiliary information to support your paper. Label each part of your *Appendix* with a letter (for example, the first item will be "Appendix A"). Make sure that you refer to all parts of the *Appendix* in the main text of your paper.
4. Reference all ideas that are not your own using a numbered *Bibliography* (does not count towards page minimum or maximum) appearing at the end of your paper. Either superscripts¹ or bracketed [2] citations are acceptable, but use one consistent format for all your citations.

Citations:

1. All citations must be referenced in the text. In referencing your citations, use the correct number from your numbered bibliography. *For example:* "Methane released by livestock represents a major contribution to greenhouse gas emissions [6]."
2. Please use a standard bibliographical format and use it consistently.
3. Please be careful about web citations. Much of what is published on the web is unreliable. It is up to you to assess the validity of all your sources.
4. Internet references should be cited with a page title, a full URL address, and the date accessed. *For example:* Jensen, Christopher X J., "The Quest for the Perfect Hive", <http://www.christopherxjensen.com/2010/06/07/the-quest-for-the-perfect-hive/>, Accessed 9-Sept-2012.

Submission of the project:

This project is due on Friday, **April 4th, 2014 @ 11:59 pm EST**. All papers should be directly uploaded to the *Learning Management System* in *Adobe PDF* format. There is a 10% penalty per day of lateness.

How you will be graded:

Your grade will be primarily based on how well you meet the objectives stated above. In addition, your instructor will assess how well you expressed an understanding of ecological concepts. All written work is expected to use proper spelling and grammar, except where obvious and necessary creative liberties are being taken with the language. Please see the *LMS* for sample grading sheets that provide you with a precise idea of how you will be graded.

On academic honesty:

Plagiarism of any kind will not be tolerated. All cases of suspected plagiarism will be turned over to the Registrar's office for potential referral to the academic judiciary. Please be careful to indicate the source of all ideas other than your own; this includes both direct quotes ("ecology is the science of...") and paraphrasing of books, scientific papers, and websites. Careful citation makes you seem more authoritative in whatever you write. For more detailed information on avoiding plagiarism, please see: <http://www.christopherxjensen.com/teaching/for-students/#no-plagiarism>.