

MONT 101N – Analyzing Environmental Data
The Midterm Project Paper
March 9, 2018

The oral presentations you are doing for the Natural World Cluster on March 12 are the first step in the midterm projects. As stated in the course syllabus, the second step will be a research paper consisting of about 10 pages of main text (see below for an idea how to handle diagrams, data, graphs, etc. if you decide to include lots of them) plus a bibliography of sources, prepared and submitted as a group assignment by your project group. It's fine to think about splitting up the writing section by section within the group, but everyone should participate in the planning of the overall paper and the decisions of what to include.

This writing assignment will be different from the other writing assignments we have done this year because its goals are for you to collect information about your topic from the various sources you find, and then present your analysis of that information. The evaluation of your project papers will be based on how well you have addressed the following guidelines and expectations:

- All of these projects will require you to do some mathematics beyond what we discussed in class and on the regular problem sets.
- Distill your investigations into a central argument. A good research paper of this kind should be more than just a compilation of information from all the different sources you consulted. It should clearly show that you have thought independently about the information you found, that you have weighed the evidence for the various claims that were made in your sources, and that you have a central theme or argument about your topic that you want to present. It is certainly permissible to say you disagree with points of view presented in some sources, if you can explain why you think that and back up your opinions with appropriate evidence.
- The paper should be *well organized* and the writing should give the reader a clear indication where you are heading with your central argument at all times.
- Pay special attention to the first few paragraphs that will serve as an introduction. Catch the reader's attention, explain the significance of the topic or theme you will discuss. Say what you will do in general terms, without going into all the details from the start.
- Also pay special attention to the final few paragraphs, which will serve as a conclusion for your paper. Don't overstate the importance of your findings, and be honest if there are limitations. You might discuss how your investigations could be continued in further research.
- Give proper credit to sources you consulted that contributed to your ideas about the questions you studied. (In a longer thesis, it would be expected that another section reviewing the most relevant contributions of previous work on related subjects would be included – that kind of full literature review is *not expected for this assignment*.) Use footnotes or endnotes to identify direct quotations from your sources, and also to indicate the sources that contribute to specific points you are making.

- In a *References* section at the end, include all books, articles, websites you used in the preparation of the work. For books, give the author(s), title, publisher, place and year of publication. For articles, give the author(s), title, journal name, volume, year, and pages. For any websites, give the full URL, the author (if that can be determined), and the date you consulted.
- Be clear, concise, and correct in your writing. Aim for *no typos, misspellings, or grammatical problems*. But even more importantly, each paragraph should have a clearly evident purpose in relation to your main argument.
- Use figures, graphs, etc. sparingly in the main text. (If you want to include more of these, that can be done in an additional Appendix section at the end.)
- Proofread your work carefully and have an “impartial” reader or readers look at it and give you comments. This can be one of the other teams or me. Be prepared and willing to *revise* your work based on the comments you get. Of course, this means that the writing must not be put off until the afternoon of March 23(!) Be sure you get started early enough so that the input can be put to productive use.