Environmental Science Final Project **Due May 10, 2019**

Select a problem from the list, or propose your own for approval. Over the semester, collect and process the information into a final product, as described below.

Final Project Checklist

Choose an Issue:

- The issue can be a problem or event, one-time or ongoing, that is impacting our Earth and ultimately, human life. **Choose the issue by January 25**.

Research **completed by March 25**

- Learn all you can about the issue. Keep good notes. Save links to government, industry, scientific articles, news releases.
- Collect data, either your own or from a reliable source. (How will you be sure the data are reliable?) Vet your evidence for validity and reliability.

Create a Final Product:

Present the issue in a way that is easily and completely understood by your audience.
Your work should be thorough and descriptive. It might take the format of a webpage or website, a poster, a slide show, a presentation to an authentic audience, or in some cases, a class presentation of Socratic seminar. or another format. **You will need to determine the format by March 25.** Your final product must:

- Describe location
- Describe the issue and explain why it is an issue. What is the source of your data?
- Explain how the problem, event, or issue impacted or is still impacting humans, directly or indirectly through its impact on the biosphere, lithosphere, atmosphere, or hydrosphere.
- Include media and press information on the issue from both sides, if there are different perspectives in question, present both sides by:
    - Reviewing and critiquing 3 articles from each point of view (as part of your final work)
    - Writing 2 letters to the editor of a paper, one from each perspective, each one being evidence-based. This will be part of your final work.
    - Your final solution or recommendation must show consideration of all evidence and be non-biased.
- Describe your research methodology – how did you first learn about this issue and how/where did you learn more?
- Present data - graphs, charts, as appropriate
- An analysis of data – what does this mean? What are the implications for any of the spheres and ultimately, humans?
- Present solutions, possible solutions, and/or mitigation strategies

Reference ALL sources in APA format. ANY plagiarism will result in a failing grade, so check with me if in doubt.
Each section above will be worth 10% of the final grade. Progress will be monitored and graded as well.

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Timeline and checkpoints:

Weeks 1-2 (January 7-18) checkpoint 1

- Start a Google doc titled ISSUES-draft-lastname in your ISSUES-lastname folder. Add 3+ issues that interest you to the doc.
- Investigate issues by finding and skimming articles of interest about the issue.
- Add annotated links to your page for future reference.

Week 3 (January 22-25) checkpoint 2

- Choose a research issue by January 25.

Week 4 – Week 10 (January 28- March 15) checkpoint 3

- Add background info and data to your doc. This will be most of your work during this time.
- Research and data collection should be mostly finished by March 15. You may still add supplemental info after this date.
- Choose format for final project by March 15. You will need to support your choice of product based on the information you need to communicate.

Week 11 -Week 16 (March 18-April 26) checkpoint 4

- Assemble project, with discussion and consultation.
- Plan to complete the project by April 26.

Week-17-Week 18 (April 29-May 10)

- Finishing touches so project is ready for the final audience

Satisfactory progress at the end of each checkpoint will be worth 25 points. There is no partial credit.

Hints for a successful project

1. Follow the timeline and stay current. You will likely need to use some time outside of class.
2. We will work on this final project a*pproximately* 1 day in class each week. Use the time wisely.
3. Keep your information well-organized and pay attention to due dates. You will not be able to successfully complete this work in an evening, or even a weekend.

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TERMS

Annotated links – an active link to the exact webpage, with the title of the page and a description of the information that can be found there. See our class links page for examples (and links to pages you may find useful.) .

Evidence – observations, measurements, or experimental results collected and interpreted using valid scientific methodology. Usually used to support or reject a claim or hypothesis.

Quantifiable data – measurements; numerical data Also known as quantitative data.

Qualitative data – non-numeric observations