Geology 4L: Final Paper/Presentation

Goal: To understand the spheres that make up the **Earth system** and the processes through which they interact.

Note: Your final project has **two parts**: a short paper and a set of slides outlining your project topic's main points. You will also have an extra credit option to record a short presentation of your slides.

Step 1: Choose Your Topic and Create a Proposal

Using what you have learned this semester in Geology 4L, you will choose an event or process about which you are interested in learning more (*Some examples include: Mount St. Helen eruption, super volcano eruptions, wildfires, increasing CO_2 levels in the atmosphere, the formation of diamonds, Hurricane Maria, a large meteor impact*, etc.). Make sure to pick a topic that is specific, but large enough to affect **at least four** of Earth's spheres that we discussed this semester (i.e. atmosphere, geosphere, hydrosphere, biosphere, cosmosphere).

If you need help on scoping a research topic, checkout this link to a short video about how to choose a reasonable topic: https://www.youtube.com/watch?v=BDuqfJQhFeM
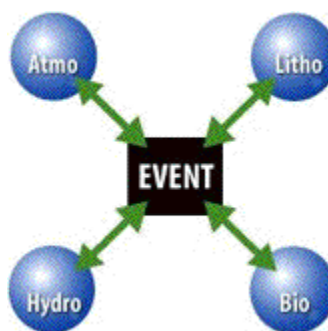
Part of your grade will depend on your topic proposal and references, so make sure you follow all of the instructions.

Once you decide on a topic, you will submit a **brief topic proposal**. This can be an outline for your paper or a paragraph stating what you will be writing about, why it interests you, and what spheres you will cover in your paper.

Along with your proposal/outline, include *at least two references* you intend to use for their paper. Your instructor will approve your topic and references and may give you some advice or suggestions if you need it. Email your instructor if you are confused or need help choosing a topic!

Step 2: Writing Your Paper

Your paper should: 1) focus on how your chosen event or process affects at least four spheres and 2) include as many connections as possible to what you have learned in the Geology 4L labs. 3) All papers must **include information on how this event affects/is affected by human activity**. Use the diagram below to help you think about the types of interactions that could occur.

I encourage you to think creatively and to incorporate the expertise of your major and what you have learned in other classes into your project *if it fits into the scope of the project*.

Paper Requirements:

1. Follow GSA or a similar format for style and citations (You can choose a format you are comfortable with, but whatever format you choose, be consistent!) A quick guide to GSA format can be found here: https://www.sjsu.edu/geology/docs/gsa_format_guidelines.pdf

2. Papers should have a **title**, **reference page**, be around 500 to 700 words (not including references), and be double spaced.

3. Use **at least three reputable references** to gather information for your paper. You will need to include a reference page and use **in-text citations** in the body of your paper. Some examples of acceptable references are:
   - News articles
   - Science journals
   - Peer-reviewed papers
   - Textbooks or reference books on your subject of choice
   - Science videos from sources like PBS, BBC, National Geographic, etc.

   A good way to vet sources for use in research papers, or just general research is to use the CRAAP test, check out the link here: https://researchguides.ben.edu/source-evaluation

***Wikipedia, blogs, unpublished papers, etc. are not acceptable sources for information about your subject.

4. Plagiarism will not be tolerated. Make sure your paper is in your own words and properly cited. **You will submit your paper via Canvas with TurnItIn (a plagiarism-checking software).**

Step 3: Creating Your Slides

The final step in your project will be creating **3 to 5 slides** with PowerPoint or Google Slides outlining your paper's main points. Your slides should be **mostly visuals** (pictures, graphs, figures, etc.) with a few text points.

There will be a <u>discussion board</u> where you will post your slides. <u>For extra credit</u>, you can use Canvas Studio, Youtube, etc. to record and post a brief presentation of your slides (2 or 3 minutes). Extra credit points will also be awarded for thoughtful comments on a classmate's slides or presentation.

Summary of Requirements and Grade Breakdown

1. **Topic and Reference Proposal – (10 pts)**
   - Identify and describe a topic
   - Rough outline and two references
2. **Paper – (80 pts)**
   - Introduce your topic and specifically discuss how it interacts with four spheres we've learned about in class. Content, writing quality, format, and citations will be considered in grading (see paper rubric).
3. **Slides/Visuals - (10 pts)**
4. **Extra credit - (7 pts)**
   - record your presentation with canvas studio (or youtube/another platform) (5 pts)
   - comment on someone's slides or presentation (2 points)