**G117 Lab 13: Final Project**

This is your final lab for G117! You can choose one of the two options provided below.

## OPTION (1): Virtual Field Trip to a National Park

In this assignment you will go on a virtual field trip to a national park and discuss how the park was formed and how this relates to the topics we’ve covered in G117 this semester.

Visit the U.S. Geological Survey’s website that hosts virtual field trips of our national parks (<https://www.usgs.gov/science-support/osqi/yes/national-parks>). Choose a national park that you’re interested in and explore the information available on the U.S.G.S.’ webpage for that national park. ![C:\Documents and Settings\TEMP\Local Settings\Temporary Internet Files\Content.IE5\2MQAA6TE\MC900391752[1].wmf]()

* Answer the following questions about the national park:
	+ Which national park did you choose? (1 sentence)
	+ What stuck out to you about this national park/why did you end up choosing this one? (1-2 sentences)
	+ Briefly describe the geology of this national park (1 paragraph)
	+ Briefly describe how this national park was formed geologically (1-2 paragraphs)
	+ What topics have we covered in G117 that you feel are relevant at this national park? (1-2 sentences)
	+ Choose one of these topics, and briefly describe how it is relevant at the national park you chose (1 paragraph). Think: how do the geologic features/processes at this park relate to humans?

Note: Material copied from the module content, textbook, or any other source will not be accepted. You will receive a zero on the entire assignment if you copy text from any source.

You will be graded on the accuracy and completeness of your write-up describing the national park:

* **5 points for answering all of the questions asked above.**
* **10 points for your description of the park’s geology and description of how the national park was formed geologically.**
* **5 points for your description of which topics we’ve covered in G117 that are relevant at this national park, and your specific description of one of these topics.**

## Upload a word document of your completed assignment on Canvas.

## OPTION (2): Google Map of Geology

![C:\Documents and Settings\TEMP\Local Settings\Temporary Internet Files\Content.IE5\2MQAA6TE\MC900391752[1].wmf]()Here you will use the Google Maps website (www.mymaps.google.com) to create a map that identifies and discusses geologic features or processes on Earth and how they relate to the topics we’ve covered in G117 this semester. Here is a page describing how to make a Google Map using the mapping system: <https://www.google.com/earth/outreach/tutorials/custommaps.html>

**Create a map of 10 unique geologic features worldwide that are clearly visible on the map and defined in the course modules, videos, or text. You may identify any type of geologic feature, but each must be completely different and unique.**

 Your goal is to produce an informative map that shows viewers some of the interesting geologic phenomena and features of Earth. All of your features must be geologic in nature – see your textbook and the list on the next page for ideas and examples.

* For each of the 10 features, you will create a placemark. For 5 of the 10 features, you will provide a 5 or more sentence explanation of the feature you identified. You are not required to add video or photos to your placemarkers, but you may do so if you’d like!
* Your explanations must briefly explain the GEOLOGY of the feature – how did it form and/or what processes were involved (about 4 sentences)? Also, you must explain how the feature or process that created it relates to the topics we’ve covered in G117 this semester (about one sentence); think: how does this feature/process relate to humans?
	+ This should be in complete sentences and your own words. Material copied from the module content, textbook, or any other source will not be accepted. You will receive a zero on the entire assignment if you copy your descriptions from any source.
* Create a URL link of your map to using the “Link” tool of the Google Maps website, and send this URL to your instructor via Canvas. You must follow the directions under “Sharing Your Map with Volunteers” in the tutorial linked above, a simple copy and paste will not produce a URL that is viewable by your instructor.

You will be graded on the accuracy and completeness of the map you create:

* **10 points for correctly marking and describing geologic features on Earth (1 point each)**
* **15 points for the quality, accuracy and originality of your descriptions and placemarks (3 points for each description).**

**Upload the URL to your completed map on Canvas.**

Some examples of geologic features to help you brainstorm ideas:

* Caves
* Beaches
* Rivers/Streams
* Volcanoes
* Mountains
* Dunes
* Deserts
* Ocean features (Mid-ocean ridges/trenches/estuaries)
* Lakes/Ponds/Seas/Springs
* Coral Reefs
* Canyons
* Lava fields/domes
* Coastlines/Bluffs
* Faults (related to plate tectonics & earthquakes)
* Glaciers
* Volcanic Islands
* Mines
* Paleosols