

SCI 311 Geology Project I

Purpose

Demonstrate your understanding of the structures, processes, and materials of the solid Earth.

What it is

Your project is a formal way to demonstrate that you understand the content covered in Unit I of the course. It should thoroughly fulfill at least two of the unit objectives.

Unit I objectives

- Describe the scope of the science of geology and its relevance to human life.
- Describe the origin of the Earth as part of the Solar System.
- Describe the general structural and compositional features of the interior of the Earth.
- Describe and explain the development of the Theory of Plate Tectonics.
- Describe and explain the behavior of Earth's tectonic plates.
- Identify the categories of tectonic plate boundaries and hot spots, their topographical features, and their physical activity.
- Describe the characteristics of prominent minerals of the Earth's crust.
- Explain how minerals form, and what this tells us about the history of rocks and the Earth.

Possible projects

These are some ideas for a project. You are free to suggest others. I will approve of projects that demonstrate your mastery of the required unit objectives.

- A concept map describing the theory of plate tectonics
- A concept map describing the layers and materials composing the Earth
- A report on a geologist who contributed to the Theory of Plate Tectonics, including the contributions and how they affected the development of the theory
- A report on a geologic hot spot, including the evidence for its existence as a hot spot and its effects on surrounding areas
- A quiz covering the unit objectives

Graded Components

Sign up: Select a project. Describe succinctly what form your project will take, and which of the unit objectives it will cover.

Outline: Give an overview of your project in more detail than your sign-up.

Annotated bibliography: List your project's sources of information and how they can be accessed. Summarize the content of each source and identify what information from the source was used in your project.

Rough Draft: Your project itself. The more complete it is, the more useful feedback your instructor can provide

Conference: Meet with the instructor to discuss your outline or rough draft. You may have more than one conference with the instructor, but one must take place before the end of Structured Study time on September 13.

Final Draft: The completed project.

Dates and Deadlines

Aug 26	Project assigned
Aug 31	Sign-ups due
Sep 2	Work day
Sep 5	Outlines due
Sep 9	Rough Drafts due
Sep 15	Project due

Scoring

Sign-up (5 points)

Let the instructor know what you intend to do for your project, and identify the unit objectives that it covers.

+3	Identifies the form of the project.
+2	Identifies two unit objectives addressed.

Outline (5 points)

Provide an organized overview of the project.

5	Has an informative title, headings, subheadings, and brief, informative text.
4	Has informative title, headings, and brief, informative text.
3	Has informative title, headings, and subheadings, but text is lacking, not informative, or verbose.
≤ 2	Lacks title, headings, or organization.

Rough Draft (10 points)

This is the full project, but not polished.

10	Contains all parts of the project, addressing all of the specified unit objectives.
6	Submission lacks substantial portions of the project.

Conference (10 points)

Show up to the conference on time and discuss your submission.

10	Shows up on time and discusses the submission in good faith.
5	More than five minutes late.
3	Does not meaningfully discuss the submission.
0	More than ten minutes late.

Annotated bibliography (10 points)

Identify all sources of information used in the project (Wikipedia does not count), give their full look-up information, and describe them and their contribution to the project.

+5	Contains at least two references.
+21	Gives complete look-up information for all references.
+3	Describes each reference and its relevance to the project.

Final Report (60 points)

+15	Neat and visually appealing.
+30	Demonstrates mastery of two unit objectives.
+15	Organized and easily understandable.