

# GEOLOGY

Session 3-4 : Thursdays 11:00am - 12:30pm

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## **Course Description:**

Geology comes from the Greek words *geo* meaning 'earth', and *logy* meaning 'study of'. Geology is a science that focuses on gaining a better understanding of the structure and history of the Earth, our home. We will focus on the two main divisions:

**Physical Geology**, which examines the chemical and physical nature of the Earth and the processes that operate on and inside of it.

**Historical Geology**, examines the origins of Earth and incorporates biology, chemistry and physics to create a narrative about how the Earth came to be and how it has changed over time.

## **Materials:**

- A composition notebook or other single subject spiral notebook, college ruled
- Dedicated section in a binder for notes, handouts and build instructions for labs.
- Pencils, pens, colored pencils

## **Expectations:**

Students will be expected to attend as many sessions as possible as knowledge built during this course is cumulative and dependent upon retention. There will be small reading assignments outside of class but most of the learning will take place in person.

During the course of the class we will be using various building tools for STEAM projects (scissors, box-cutters, pins, hot glue, water, and more) it is each student's responsibility to treat the tools and their fellow students with care and respect. **Rock samples are for class use only and must remain with the sets.**

The student notebook will be periodically reviewed by me and will account for 25% of the overall grade earned. Students are expected to take notes/draw sketches during any direct instruction or observation.

## **Grading:**

20% Attendance

25% Notebook checks

30% Participation: To include attendance, preparation for labs, proper care of equipment

25% Lab and project "builds"

## **Course Outline:**

**Week 1:** Intro, Class rules/Expectations, Ice Breaker

**Week 2:** Technology in Geology

**Week 3-4 :** Rocks, Minerals and Soils

**Week 5-6:** Earth's Layers

**Week 7-8:** Earth's Dynamics

**Week 9-10:** Spheres of The Earth

**Week 11-12:** Geosphere/Atmosphere

**Week 13-14:** Hydrosphere/Biosphere

**Week 15:** The Magnetosphere

**Week 16:** Final Projects