

## Course Syllabus

### Earth Science

Mr. Chamberlain

[jchamberlain@gatewayacademy.us](mailto:jchamberlain@gatewayacademy.us)

gatewayarchacademy@gmail.com

### **Introduction**

Welcome Students to Gateway Academy my name is Mr. Chamberlain and welcome to Earth Science class. I have over 17 years of educational experience including 9 years as a Social Studies & Science teacher and 5 years as an administrator. I am looking forward to giving you a quality education and helping you accomplish your goals.

### **Classroom Expectations, Protocols and Accommodations**

- Always follow the Honor code Be Safe, Be Responsible, Be Respectful
- Students are encouraged to use Google for assignments, communication and organization of electronic classwork.
- Show up to class on time with materials and ready to learn
- Unfinished classwork can be finished at home
- Technology use is to be focused on Academics only
- When printing documents students must gain Teacher approval
- Students assignments can be completed electronically or handwritten
- Attendance is mandatory (Virtual or in person)
- Student Cameras are to be activated during Zoom class
- Stay engaged during the entire lesson
- Have Fun

### **Grade Configuration**

- **40% In-Class Assignments/Class Discussions**
- **40% Projects**
- **20% Assessments**

## **Learning Methods and Organizational Strategies**

Organizational skills and structure for all individual students will be promoted and implemented using AVID strategies. All students will have a portfolio for the class, this portfolio can be created with the students google account. Objective based learning combined with essential questions is the backbone of the Class. Inquiry will be fostered by helping students create high level questions and classroom discussions will also be used to allow students to express their interpretations and evaluations about the Curriculum. All assessments will be focused on the content covered and the curriculum is aligned to the State standards. Continuous feedback will be given using different methods to promote student retention of the Curriculum .

## **Core Discipline Descriptors**

Earth science (also known as the Earth Sciences, geoscience, or the geosciences) is an umbrella term for the sciences related to the planet Earth. The main disciplines within Earth science include geology, geodesy, geophysics, soil science, oceanography, hydrology, glaciology, and atmospheric sciences. These disciplines are oriented toward studying the various areas or "spheres" of the Earth system, such as the atmosphere, hydrosphere, lithosphere, and biosphere.

## **Curriculum and Content Covered**

### Earth's spheres

---

- Geology: This discipline is devoted to the study of the rocky parts of the Earth's crust (or lithosphere) and its historic development. Major subdisciplines are mineralogy and petrology, geochemistry, geomorphology, paleontology, stratigraphy, engineering geology, and sedimentology.
- Geodesy and Geophysics: Joined together in the International Union of Geodesy and Geophysics (IUGG),<sup>[1]</sup> these disciplines investigate the figure (size and shape) of the Earth, its reaction to forces, and its potential fields, such as the magnetic and gravitational fields. Geophysicists also explore the Earth's core and mantle and the natural deposits, while geodesists study the movement of stars and satellites.

- Soil science: It involves studying the outermost layer of the Earth's crust that is subject to soil formation processes. This layer is known as the *pedosphere*. Major subdisciplines include edaphology (the study of the influence of soils on living things) and pedology (the study of soil formation, structure, and classification).
- Oceanography and Hydrology (including Limnology): They encompass studying the marine and freshwater domains of the Earth, which make up the hydrosphere. Major subdisciplines include hydrogeology and physical, chemical, and biological oceanography. Within the scientific union IUGG, these disciplines (except the chemical ones) are joined with geophysics.
- Glaciology: It covers the icy parts of the Earth, also known as the *cryosphere*.
- Atmospheric sciences: Meteorology, climatology, and aeronomy (physics and chemistry of the upper atmosphere) are the main subdisciplines of the atmospheric sciences. They cover the gaseous parts of the Earth, that is, the atmosphere, between the surface and the exosphere (at an altitude of about 1,000 kilometers).