Geology/Astronomy

Mrs. Reed

Calhoun High School

1 Credit

COURSE DESCRIPTION

In this yearlong Earth and Space course, students will be exposed to the various topics of Earth and its relation to space. Topics will include and introduction to Earth science, geologic time, Earth’s spheres, plate tectonics, minerals and matter, rocks, weathering and soil formation, global climate change, black holes, meteors, asteroids and meteorites, nebula and galaxies, planets, stars, and solar systems. Students will use critical thinking and problem solving skills to question, reason, and analyze the material in relation to laboratory problems and real world problems. This course will include laboratory investigation to reinforce the concepts covered.

Prerequisites: Successful completion of Physical Science.

COURSE OBJECTIVES

* Describe the history of Planet Earth
* Describe Earth’s materials and systems
* Understand plate tectonics and large-scale system interactions
* Understand nuclear processes
* Describe the roles of water in Earth’s surface processes
* Understand weather and climate
* Understand biogeology
* Describe Earth and the solar system
* Understand global climate change
* Describe Earth’s natural resources
* Understand human impacts on Earth’s systems
* Describe the universe and its stars
* Describe the energy in chemical processes and everyday life
* Describe electromagnetic radiation

METHODS OF INSTRUCTION

Lecture, problem based learning, laboratory investigations, group projects, discussion, tech-rich lessons, daily assignments, written assessments.

GRADE CRITERIA

Daily 10%

Homework/Labs 20%

Quizzes 30%

Tests 40%

GRADING SCALE

A = 93-100 B+ = 91 C+ = 83 D+ = 75

A - = 92 B = 85-90 C = 77-82 D = 69-74

B - = 84 C - = 76 D - = 68

MATERIALS

Students will need a three ring binder, preferably 1 ½” or larger. They will also need a notebook, writing utensils (no colored ink, only blue or black), and a scientific calculator.

TEXTBOOK

To be determined