

## **EARTH SCIENCE 2007-2008**

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### **COURSE DESCRIPTION**

This Earth science course is the study of the Earth, its characteristics, meteorological phenomena, and outer space. Major topics include geology, astronomy, meteorology, and oceanography. As students study geomorphic features and major geologic processes of the past, present and future, they will be taught from a content and concept basis with an emphasis on scientific processes and correlations with biblical accounts of Creation and the Flood.

### **COURSE GOALS**

This Earth science course will help the student to achieve the following:

1. Understand the basic laws, principles, and theories of Earth science.
2. Understand the meteorological phenomena the impact our planet.
3. Use and understand conceptual models to explain Earth processes.
4. Identify features of given objects i.e. planets, suns, asteroids and comets.
5. Dive into the world of oceanography and understand the structures of the ocean floor.
6. Understand the major geologic processes and how they shape the objects in the solar system.
7. Construct geological time scales for both the uniformity and catastrophic models.
8. Recognize geomorphic features and explain the geologic processes of the Earth.
9. Understand how geology influences the quality of living in an area.
10. Be aware of environmental changes in relation to geomorphic and population impact.
11. Develop hypotheses that explain the observable features of the Earth
12. Understand the implications of catastrophes and the massive, fossil-bearing, sedimentary deposits.
13. Be aware of career opportunities in the field of Earth science and the requirements of those vocations.

### **COURSE TEXTBOOKS**

*Earth Science: Geology, the Environment, and the Universe*, Glencoe

### **COURSE EVALUATIONS**

- There will be a test after each chapter
- There will be a cumulative final in January and one in June. (The one in June will cover from the final in January to June.)
- Homework
- Classwork (bell work, participation, assignments)
- Projects
- Quizzes

## **COURSE TOPIC OUTLINE**

The following is a general outline of topics to be covered in this class (subject to change if necessary):

Chapters	Topic
1	The Nature of Science
2	Mapping our World
3	Matter and Atomic Structure
4	Minerals
5	Igneous Rock
6	Sedimentary and Metamorphic
7	Weathering, Erosion, and Soil
8	Mass Movements, Wind, and Glaciers
9	Surface Water
10	Groundwater
11	Atmosphere
12	Meteorology
13	The Nature of Storms
14	Climate
15	Physical Oceanography
16	The Marine Environment
17	Plate Tectonics
18	Volcanic Activity
19	Earthquakes
20	Mountain Building
21	Fossils and Rock Record
22	The Precambrian Earth
23	The Paleozoic Era
24	The Mesozoic and Cenozoic Eras
25	Earth Resources
26	Energy Resources
27	Human Impact on Earth Resources
28	The Sun-Earth-Moon System
29	Our Solar System
30	Stars
31	Galaxies and the Universe

## **COURSE ASSIGNMENT DUE DATES**

After each chapter there will be a 50 minutes test, which will not be accumulative. Only finals are accumulative. The test will be made up of matching, multiple choice, fill-in-the-blank, and essay.

There will be a quiz daily except on the day of a test and the day after the test.

Homework will be due the day after assigned at the beginning of class. Late assignments will only be accepted one day after the day due at half the points.

There will be a project that the learner will present to the class. There will be a more detailed description for the learner to follow about mid-semester.

Class assignments will be due at the class time allotted.

### **COURSE GRADING SYSTEM**

The grades will be earned on a point system. The letter grade will be given in accordance to the points the learner earned, points are approximated:

Chapter test: 100 points (x 31)  
Classwork: 25 points per day (x 135)  
Quizzes: 10 points (x 135)  
Projects: 200 points (x 2)  
Finals: 250 points (x 2)  
Total points 8725 (possible)

**A = 8725 to 8361**

**A- = 8360 to 7996**

**B+ = 7995 to 7631**

**B = 7630 to 7266**

**B- = 7265 to 6901**

**C+ = 6900 to 6536**

**C = 6535 to 6171**

**C- = 6170 to 5806**

**D+ = 5805 to 5441**

**D = 5440 to 5076**

**D- = 5075 to 4711**

**F+ = 4710 to 4346**

**F = 4345 or less**