

Earth Science

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Class Cost: \$270/per semester

Earth Science
Course Syllabus
Fall 2017- Spring 2018
Tuesday and Thursday

Course Purpose and Description In this course students will:
Fall Semester:

1. Identify the three major types of rock, and explain how each type forms and cycles within the rock cycle.
2. Interpret maps (topographic and geologic) and use maps to visualize landforms.
3. Identify processes in which matter and energy cycle on Earth, and summarize how energy is transferred through an ecosystem.
4. Describe how petroleum and natural gas develop and how they are removed from Earth.
5. Explore Earth's past by studying the rock record and using paleontological methodology
6. Describe the main features of the ocean floor and explain how sea-floor spreading provides a mechanism for continental drift.

Spring Semester:

7. Identify and describe the three types of plate boundaries and the causes of plate movement.
8. Discuss the types of seismic waves and how the structure of Earth's interior affects seismic waves.
9. Describe how weathering and various erosive factors affect Earth's landscape.
10. Describe the composition of ocean water and the cause of global ocean currents, including ENSO.
11. Describe the composition of Earth's atmosphere and how atmospheric gasses affect the thermal structure of the atmosphere.
12. Distinguish between weather and climate and how differential heating of Earth results in the global distribution of heat.
13. Evaluate unique characteristics of the sun, moon, terrestrial planets and gas planets and their movements.

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Class Materials

- Schoology account. Create a free account at Schoology.com and join the Earth Science class with this access code: 88KJV-FVWD3
- Textbook: Holt Earth Science: 2009 Edition
- A 1” binder to hold the lab packet. Lab packets will be distributed the first week of school. All activities, labs and test will be included in the lab packet. The binder must be brought to class each day.

Expectations

Students will be responsible for completing 3-5 hours of assignments outside of class each week that will include reading each chapter, completing chapter review questions, taking chapter tests, finishing in class assignment, and working on long-term projects. In class, students will take notes, conduct labs, participating in group projects and discussions.

Grading

Grading is a group effort and will be described in detail in our first class. Since students only spend two hours a week in class, our time will be focused on projects and labs while textbook questions and exams will be done at home. Chapter questions will be completed through Schoology, they are automatically graded and recorded. Chapter exams are in paper form and included in the Lab Binder, the answers keys can be found on Schoology. Students should complete exams and then correct any wrong answers. Corrected answers earn ½ credit. The exam score should be recorded by the overseeing teacher (parent or ES) though this job may be delegated to the student. The exam score will then be communicated to me so I can enter it into the Schoology gradebook. Partnership between student, instructor and the overseeing teacher is essential for the success of the student.

Point Breakdown

Chapter Questions:	Students will complete the chapter questions on Schoology. Grades are automatically recorded on Schoology. The questions can be attempted multiple times to improve score.	10-30 points each
Exams:	Chapter exams are included in the lab binder. Students should always correct their exams and fix all incorrect answers. ½ credit is given to all corrected answers.	25 points each
Labs:	Labs are usually done in class but students may have to finish the follow up questions at home. Labs will be graded for participation, effort, and completeness.	5-10 points each
Projects:	There will be at least one project per semester. Project topics will be chosen with student input. There will be a research and presentation component.	30 points
Midterm & Final:	Some charter schools have special requirements for midterm and final exams, therefore, I provide the exams but leave the proctoring and recording of the grade to the overseeing teacher.	50 points