

Earth Science, Part 1 (EARTH-041-300-001)

Syllabus

What You Should Already Know

You should already have a working knowledge of the major components of the earth's systems. Pre-algebra skills will be helpful. You should have good reading skills, as you will read some scientific reports from the United States Geologic Survey. Your most important skill will be a good work ethic.

Prerequisites

This course has no prerequisites, but you should already know how to complete basic tasks on a computer (including word processing) to be able to do the assignments in this course. You will also need access to a digital camera or scanner to take and share pictures in some of the assignments.

Course Materials

This course has no textbook. The information you will need will be found in the reading material and video resources with each lesson.

You can find [Course Resources](#) in the Getting Started module. These resources include a glossary, video library, and materials list. There are some activities that require materials that you will need to supply.

Knowledge: Course Learning Outcomes

Throughout this course, you will:

- Study the nature of the sun and how it provides energy to the earth
- Study the history of the universe
- Study our solar system
- Study the transformation of solar energy into heat and chemical energy on Earth
- Study the history of the earth
- Explore the different spheres of the earth and landscape characteristics

Upon completion of this course you should be able to

- Explain the history of the universe and the earth
- Explain the methods used for dating the earth and the universe
- Explain the characteristics of the celestial bodies composing the universe
- Explain plate tectonics and the movement of the earth
- Explain the causes and results of natural disasters within the context of the history of the earth

Skill: Information and Discovery

As you complete this Earth Science course, you will be increasing the twenty-first-century skill of critical thinking, with a specific focus on Information and Discovery. You will have the opportunity to earn a micro-credential, which is like a digital certificate, to showcase your abilities. The micro-credential looks like this:

Attribute: Kindness

An attribute is a quality, characteristic, or trait. You can develop attributes to make yourself a better person. Attributes can include things like respect, gratitude, and kindness. In this course you will learn more about one attribute. This will be a great way to develop into an even more amazing person than you already are.

Grading and Assignments

Your grade in this course will be based on these assignments and exams. You must pass the final exam with a 60% to earn credit for the course.

Table of Assignments and Grade Percentages

Assignment or Exam	Grading	Percent of Total Grade
Reflections	Computer	10%
Discussions	Instructor	5%
Assignments	Instructor	50%
Quizzes	Computer	15%
Final Exam*	Computer	20%

* You must pass the final exam to earn credit for the course. You may retake the final exam once, for a fee.

Grade Scale

Your letter grade is calculated according to these percentages.

Grading	Scale
A	100% – 93%
A-	92% – 90%
B+	89% – 87%
B	86% – 83%

B-	82% – 80%
C+	79% – 77%
C	76% – 73%
C-	72% – 70%
D+	69% – 67%
D	66% – 63%
D-	62% – 60%
F (fail)	59% – 0%

Course Organization

Next-Level Reflections

Next Level Reflection assignments are found throughout the course as a way to help you formalize your thoughts about what you are learning. Completion of the NLRs counts toward your overall grade.

Discuss Knowledge Assignments

With your peers you will participate in discussions to review concepts or share opinions. In addition to creating your own posts, it is essential to respond to your classmates in a way that furthers the discussion.

Build Knowledge Assignments

Frequently, your weekly module will require the completion of a BK Assignment. The purpose of these activities are to build your knowledge of key vocabulary or core concepts. You will be required to record and submit your work, as these are teacher graded.

Apply Knowledge Assignments

Occasionally, you will be asked to complete a larger assignment that reinforces content information with crosscutting concepts in a way that shows your science and engineering practice skills. These may span more than one weekly module and are teacher graded.

Quizzes

Each quiz consists of 15 multiple choice questions. They will cover multiple weeks of content, but are open book. These are computer graded and will provide immediate feedback.

Essays

Twice throughout the semester you will complete assignments that will help you review and prepare for the final exam. One will be a mid-term essay, allowing you to summarize concepts from the first half of the course. One will be an end-of-term essay, allowing you to summarize concepts from the second half of the course.

Final Exam

The final exam is similar to the unit quizzes and includes approximately 35 multiple-choice, true/false or multiple-select questions on everything covered in this course. This exam is computer graded. It will be taken closed book and is proctored.