Seventh-Grade Science, Part 1 (GSCI-031-300-001)

GSCI-031 Syllabus.

Course Description

Get ready to become a science problem-solver! In Seventh Grade Science, you'll learn how to think like an engineer, exploring forces, motion, and Earth's changing surface through fun, hands-on investigations. Whether you're testing how magnets interact or modeling earthquakes, you'll use data and design to tackle real-world challenges. By the end, you'll see how science can shape a safer, smarter world—maybe even one you'll help build.

Prerequisites

There are no prerequisites for this course.

Course Materials and Technology

All the information is included in this course. Students do not need to buy additional textbooks.

Students must buy these materials and technology to complete the course:

- a webcam for the proctored final exam

Accommodation Needs

BYU Independent Study is committed to providing all students with the tools needed to succeed in their studies. If the student cannot access an assignment, needs an

accommodation, or has accessibility concerns, they should contact the BYU CE Accommodations Office through the Accessibility and Accommodations (High School) website so alternative assignments or other accessible options can be explored.

Course Outcomes

As students complete the course assignments, they will increase their knowledge, improve a skill, and develop an attribute.

Knowledge: Seventh-Grade Science, Part 1

In this course, *knowledge* refers to the subject matter and content students will learn while completing the readings, practices, quizzes, and assignments.

On successful completion of this course, students will be able to do the following:

1. Use the scientific method to define problems, test solutions, and evaluate results.
2. Explain how Newton's laws govern the motion of objects and use them to predict and analyze real-world scenarios involving forces and collisions.
3. Investigate the behavior of electric and magnetic forces and analyze the factors that affect their strength and applications.
4. Develop models to describe how Earth's systems—like the rock cycle and internal structure—interact through the cycling of matter and energy.
5. Analyze evidence from rocks, fossils, and landforms to construct explanations of Earth's history and the patterns of plate tectonic movement.

Twenty-First Century Skill: Design Thinking

As students complete this course's assignments, they will gain skills in design thinking. This skill is part of Critical Thinking.

Attribute: Resilience

This course focuses on developing the attribute of resilience in the context of science.

Grading and Assignments

The letter grade in this course will be based on these assignments and exams.

Assignment or Exam	Grading	Percent of Total Grade
Study Guides	computer-graded	15%
Assignments and Application Projects	teacher-graded	50%
Module Quizzes	computer-graded	5%
Midcourse Quiz	computer-graded	10%
Final Exam*	computer-graded	20%

*Students must pass the final exam with a 60 percent or higher to earn credit for the course. They may retake the final exam once for a fee.

Due Dates

The due dates in the course are only suggestions to help the students pace themselves. You do *not* need to complete assignments, quizzes, and exams by the due date set in the course.

Study Guides

Study guides are provided for each module. They will help students focus on the important concepts needed to be successful in this course and in life. Study guides will be due in each module and points will be awarded upon submission.

Application Projects

Application projects give the students opportunities to apply the concepts they have learned to real-life situations, scenarios, and events. They also evaluate the students' mastery of the skill for the course.

Assignments

Besides the application projects, you'll do other assignments to help you use the scientific method. These will connect to the science ideas you've been learning.

Module Quizzes

Quizzes are administered at the end of each module. Each quiz is open-book, open-note, and untimed. They consist entirely of multiple-choice questions and come directly from the lesson material and the videos.

Midcourse Quiz

This computer-graded quiz covers the material up to the midcourse quiz. The questions on the midcourse quiz are similar in format to the questions on the final exam.

Final Exam

Students must pass the final exam to earn credit for the course; they may retake it once, for a fee, upon request.

This exam is closed book and notes. Using any additional materials or resources including your e-book, textbook, or course notes is not allowed.

No other electronics allowed: Cell phones, iPads or tablets, smartwatches, audio devices (headphones), additional monitors or screens, or any other electronic devices except for the device used to take the test are not allowed in the test area.

Course Grade

The letter grade will be calculated according to these percentages.

Percent to Letter Grade Calculation	
A	93–100%
A–	90–<93%
B+	87–<90%
B	83–<87%
B–	80–<83%
C+	77–<80%
C	73–<77%
C–	70–<73%
D+	67–<70%
D	63–<67%
D–	60–<63%
F (fail)	0–<60%