



Class Title: Orange Earth Science

Teacher Name: Candice Braun

Class Day: Monday

Class Size: 15

Overall Class Cost: \$52

Individual Student Supply Fee: \$78

Class Fee: \$96

Ages or color group served: Orange

What level is this class: Level 3

Prerequisites: 📌 Students should:

- Be reading at or near grade level
- Be able to read textbook-style material independently
- Write a structured paragraph with minimal assistance

- Follow multi-step directions
- Complete weekly homework independently
- Be prepared for consistent reading and written assignments

This course is best suited for students who are ready to strengthen their independent study skills and take ownership of their learning.

Graduation Requirements: 🎓 Completion Requirements

To successfully complete Earth Science, students must:

- Meet HCU Attendance policy
- Participate regularly in class discussions and activities
- Complete 80% of the assigned weekly reading and homework
- Demonstrate understanding through adequately graded quizzes and/or unit tests
- Show growth in textbook navigation and independent study skills

Final evaluation will be based on consistent effort, mastery of key concepts, and demonstrated improvement in reading comprehension and written responses.

Homework Requirements: Students should expect consistent weekly homework to reinforce textbook navigation and independent study skills.

Homework may include:

- Assigned textbook reading
- Chapter outlining or guided notes
- Vocabulary definitions and application
- Written summaries of assigned sections
- Study questions from the text

- Occasional quizzes/tests
- Periodic projects or research assignments
- Written reflections or Lab responses (as applicable)

Students should plan for approximately 1-2 hours of work per week outside of class, depending on reading speed and mastery level. Designed for touching the subject multiple days a week in smaller chunks.

This course is intentionally designed to build independent learning habits. Students will be expected to complete reading assignments even when the material feels challenging and to come prepared to discuss and apply.

Class Description:

 Earth & Space Science (Orange Level)

This course uses Abeka's Earth & Space Science text as the foundation for an engaging and skill-focused study of geology, meteorology, astronomy, and Earth systems. Students will explore topics such as rock formation, weather patterns, natural resources, and the structure of the universe while building a solid understanding of scientific concepts.

But this class is more than content.

Earth & Space Science is intentionally designed to strengthen informational text mastery and high school readiness skills. Students will learn how to:

- Navigate and break down a textbook chapter
- Identify main ideas and supporting details
 - Annotate and outline effectively
- Build and apply scientific vocabulary

- Interpret charts, diagrams, and graphs
- Write clear, structured summaries and responses
- Study and retain information independently

This course helps students develop the discipline to read and process material that may not always be “fun,” but is essential for academic growth. The goal is to build confident, capable learners who are prepared for high school-level coursework.

Week 1:

Chapter 1: Introduction to Science

Scientific method

Measurement and tools

Branches of Earth Science

Understanding scientific text structure

Skill Focus: How to read and outline a science textbook chapter.

Week 2:

Chapter 2: Foundations of Geology

Earth's structure

Physical properties of Earth materials

Basic geologic principles

Skill Focus: Identifying main ideas and supporting details in multi-section readings.

Week 3:

Chapter 3 (Part 1): Minerals

Properties of minerals

Identification methods

Crystals and composition

Skill Focus: Academic vocabulary and diagram interpretation.

Week 4:

Chapter 3 (Part 2): Rocks & The Rock Cycle

Types of rocks

Rock formation

The rock cycle

Skill Focus: Cause-and-effect in scientific processes.

Week 5:

Chapter 4: Weathering and Erosion

Mechanical vs. chemical weathering

Erosion and deposition

Landform formation

Skill Focus: Comparing processes and writing structured summaries.

Week 6:

Chapter 5: Interpreting the Fossil Record

Fossil formation

Reading the geologic column

Evidence from Earth's past

Skill Focus: Extracting evidence and evaluating scientific explanations.

Week 7:

Chapter 6 (Part 1): A Survey of the Seas

Ocean structure

Seafloor features

Ocean composition

Skill Focus: Interpreting labeled diagrams and scientific visuals.

Week 8:

Chapter 6 (Part 2): Ocean Systems & Currents

Ocean movement

Tides and currents

Human interaction with marine systems

Skill Focus: Identifying key concepts in longer reading assignments.

Week 9:

Chapter 7: The Atmosphere

Layers of the atmosphere

Air pressure and temperature

Atmospheric composition

Skill Focus: Reading charts and applying scientific vocabulary.

Week 10:

Chapter 8: Water Vapor and Air Masses

Humidity

Air masses

Fronts

Skill Focus: Summarizing complex scientific explanations.

Week 11:

Chapter 9: Storms and Forecasting

Storm systems

Weather patterns

Forecasting methods

Skill Focus: Interpreting data and understanding predictive models.

Week 12:

Chapter 12: Environmental Science

Natural resources

Human impact on Earth systems

Stewardship and conservation

Cumulative review

Skill Focus: Synthesizing information across multiple chapters and demonstrating independent mastery.