Class Title: Red Earth Science

Teacher Name: Kassandra Moneymaker

Class Day: Friday

Class Size: 15

Class Cost: $75

Class Fee: $96

Ages or color group served: Red

What level is this class: Level 3

Prerequisites: NA

Graduation Requirements: Completion of exam and project

Homework Requirements: Daily/Weekly

Class Description:

This comprehensive Earth Science course introduces students to the dynamic systems that shape our planet, from the solid Earth to the atmosphere and beyond. Students will explore geological processes, weather patterns, climate systems, and Earth's place in the universe through hands-on investigations, laboratory work, and real-world applications.

Week 1:

Introduction to Earth Science

Essential Question: How do scientists study Earth as a system?

Week 2:

Minerals and Rocks

Essential Question: How do Earth's materials form and change over time?

Week 3:

Plate Tectonics

Essential Question: How do Earth's plates move and reshape the surface?

Week 4:

Earthquakes and Volcanoes

Essential Question: How do internal Earth processes create natural hazards?

Week 5:

Weathering and Erosion

Essential Question: How do external processes break down and transport Earth materials?

Guest Speaker Josh Boatwright

Federal Conservationist (Lexington County)

Week 6:

Soil and Surface Processes

Essential Question: How do soils form and support life on Earth?

Week 7:

Surface Water and Groundwater

Essential Question: How does water move through Earth's systems?

Week 8:

Oceans and Coastal Processes

Essential Question: How do oceans influence Earth's systems?

Week 9:

Atmosphere and Weather

Essential Question: What processes create Earth's weather patterns?

Guest speaker Chris Miller (storm chaser/ammeter meteorologist

Week 10:

Climate and Climate Change

Essential Question: How does Earth's climate system work and change over time?

Week 11:

Earth's History and Geologic Time

Essential Question: How do we read Earth's history in rocks and fossils?

Week 12:

Earth's Place in Space and Review

Essential Question: How does Earth fit into the larger universe?