EARTH SCIENCE

Course Syllabus

Course Title	Grade Levels Offered	Credit Awarded	Content Area of Study	Prerequisites	Required or Elective
Earth Science	9-12	1 Credit/SY	Science	None	Required

Course Description

Students study 14 main topics of earth science: Representations of the Earth, Earth descriptions, the Earth and the Moon system, the Solar System, Stars and Galaxies, Earth chemistry, minerals, rocks, the atmosphere, weather and climate, water resources, weathering and erosion, forces in the Earth, and the Earth's geologic history. Assignments are short, fast-paced and well organized. Hands-on investigations are part of the course. They teach students to use their creative, inquisitive, and problem solving skills. Lab safety will be taught before students will be allowed to enter and use the lab equipment. Students will be graded on quizzes, tests, and lab experiments as well as their participation in class discussions.

COURSE OUTLINE

Semester One		Semester Two	
Quarter One:	**Grade Level Expectation Focus:**	**Quarter Three:**	**Grade Level Expectation Focus:**

• Lab Safety
• **Studying the Earth**—Chapter 1, L1-3
• Investigations
  ○ Making a Map
  ○ Reading a Topographic Map
• **Chapter test**
• **Describing the Earth**—Chapter 2, L1-6
• Investigations
  ○ Modeling the Earth's Rotation
  ○ Describing Location on a Round Surface
• **Chapter test**
• **The Earth and Moon System**—Chapter 3, L1-4
• Investigations
  ○ Orbit Model
  ○ Exploring Light Angle
• **Chapter Test**
• **The Solar System**—Chapter 4, L1-4
• Investigations
  ○ Observing sunspots
  ○ Modeling Distances in the Solar System
• **Chapter test**
	• SA 1.1 (9,10,11)
	• SA 1.2 (9,11)
	• SA 2.1 (9,10)
	• SB 4.2 (9)
	• SE 1.1 (10)
	• SE 2.1 (9, 10, 11)
	• SG 2.1 (9, 10)
	• SG 3.1 (9, 10)
	• R 3.5.1 (7,8,9,10)
	• R 3.5.2 (7,8,9,10)
	• R 3.4.2 (7,8,9,10)
	• R3.4.4 (7, 8, 9, 10)
	• W3.2.2 (7,8,9,10)
	• W3.2.4 (7, 8, 9,10)
	• MEA-1 (8, 9, 10)
	• M-S&P-1 (7, 8, 9, 10)
	• M S&P-2 (8, 9, 10)
	• M PS-4 (7, 8, 9)
	• M PS-5 (7, 8, 9, 10)
		• **The Earth's Atmosphere**—Chapter 9, L1-5
		• Investigations
		  ○ Making Calcite
		  ○ Identifying Rocks
		• **Chapter test**
		• **Weather and Climate**—Chapter 10, L1-4
		• Investigations
		  ○ Measuring Air Pressure
		  ○ Using a Weather Map
		• **Chapter test**
		• **The Earth's Water**—Chapter 11, L1-3
		• Investigations
		  ○ Exploring Evaporation
		  ○ Measuring the Effect of Salt
		• **Chapter test**
			• SA 1.1 (9,10,11)
			• SA 1.2 (9,11)
			• SA 2.1 (9,10)
			• SC 3.1 (9,10,11)
			• SD 1.1 (9,10)
			• SD 1.2 (9, 10, 11)
			• SD 3.1 (9, 10)
			• SD 3.2 (9)
			• SE 2.1 (9, 10, 11)
			• SG 2.1 (9, 10)
			• SG 3.1 (9, 10)
			• R 3.5.1 (7,8,9,10)
			• R 3.5.2 (7,8,9,10)
			• R 3.4.2 (7,8,9,10)
			• R3.4.4 (7, 8, 9, 10)
			• W3.2.2 (7,8,9,10)
			• W3,2,4 (7, 8, 9,10)
			• M-S&P-1 (7, 8, 9, 10)
			• M S&P-2 (8, 9, 10)
			• M PS- (7, 8, 9)