Syllabus & Pacing Guide

1.) Syllabus

EARTH SCIENCE

COURSE DESCRIPTION

In this Earth Science course, students will explore the dynamic processes that shape our planet and its environment. The course covers key topics including geology, meteorology, oceanography, and astronomy, with a focus on the interactions between Earth's systems—geosphere, atmosphere, hydrosphere, and biosphere. Students will investigate the forces behind natural phenomena such as weather patterns, earthquakes, volcanic activity, and climate change. Through hands-on experiments, observations, and data analysis, students will develop critical thinking skills and an understanding of how human activity impacts the Earth's systems. This course also emphasizes the importance of scientific inquiry and the role of Earth science in addressing global challenges.

This course is the second semester of a 2-semester course (full-year)

COURSE SUBMISSIONS

All assignments will be graded through OnFire. Any attachments must be made in a Word document file, PDF, or Google Doc shareable link and turned in through OnFire.

REQUIRED TEXTS

None - All readings will be provided on OnFire.

GRADING BREAKDOWN

A 94-100%	C 73-76%
A- 90-93%	C- 70-72%
B+ 87-89%	D+ 67-69%
B 83-87%	D 63-66%
B- 80-82%	D- 59-63%
C+ 77-79%	F 58% or below

GRADED WEIGHT OF SCHOOLWORK

- It is important to note that you will receive unlimited attempts on all assignments and quizzes until you demonstrate mastery of the content. All quizzes will be randomized and do not show the correct answer, which makes it important to read the lesson material BEFORE taking the quiz and completing the assignments.
- **Assignments: 30%**

    - There are 5 assignments.
- **Quizzes: 30%**
    - There are a total of 23 quizzes.
- **Post-Assessments: 20%**
    - 2 post-assessments
- **Tests: 20%**
    - There are 6 tests

ONLINE TECHNOLOGIES

This course takes place online. Since we will not meet face-to-face, you must have the necessary technology and technical know-how to work effectively in this online learning environment. This online course will utilize OnFire as the learning management system. Please contact your instructor if you have trouble logging in or viewing any of the documents and links posted.

2.) Course Requirements

Course Materials

All courses require you to have access to a working computer and to the Internet.

All course work will be completed and graded through a digital learning management system known as Onfire.

Course Requirements

Students are required to do all testing on a computer.

All assignments will be graded through Onfire. Any attachments must be made in a Word or PDF document file and turned in through Onfire.

3.) Pacing Guide

INSTRUCTOR EXPECTATIONS AND PACING

A typical semester course at a traditional high school requires 80 hours in total, which is 40 hours per term. Since this is a self-paced course, completing it may take you longer or shorter. You are expected to spend 3-5 hours each week and submit at least one unit each.

Students will be allowed to complete the course at a pace that best suits them. The students will be responsible for completing and turning in all assignments according to their individual needs. However, make sure to look at your school's deadlines, to ensure that you are completing courses on track.

Parents/Guardians will be able to observe and view their student’s progress through OnFire.

It is suggested to put the assignments in your calendar at the beginning of the semester so you know which work to complete each week.

Week 1	Unit 1: Welcome!
	• Make sure to read the syllabus.
	Unit: The Water Cycle
	• Submit the following:
	  ◦ Quiz: Understanding the Water Cycle and Convservation
	  ◦ Quiz: The Water Cycle

Week 2	Unit: The Water Cycle
	• Submit the following:
	  ◦ Quiz: Water Movement
	  ◦ Quiz: Water Movement
	  ◦ Quiz: Water Purification and Convservation

Week 3	Unit: The Water Cycle
	• Submit the following
	  ◦ Unit Test: The Water Cycle
	Unit: Properties of Water
	• Submit the following:
	  ◦ Quiz: Properties of Water

Week 4	Unit: Properties of Water
	• Submit the following:
	  ◦ Assignment: Biotic and Abiotic Lab
	  ◦ Quiz: The Nitrogen Cycle

Week 5	Unit: Properties of Water
	• Submit the following:
	  ◦ Quiz: Going Through the Nitrogen Cycle
	  ◦ Assignment: Drying of the American West
	  ◦ Unit Test: Properties of Water

Week 6	Unit: Formation of Ocenas
	• Submit the following:
	  ◦ Quiz: Formation of Oceans
	  ◦ Quiz: Saltwater Ecosystems
	  ◦ Assignment: Water Density Lab

Week 7	Unit: Formation of Ocenas
	• Submit the following:
	  ◦ Quiz: Physical Dynamics of Oceans
	  ◦ Quiz: Human Impacts of the Environment
	  ◦ Unit Test: Formation of Oceans

Week 8	Unit: Term 3 Post-Assessment • Submit the following: ◦ Term 3 Post-Assessment

Week 9	Unit: Processes That Shape Earth
	• Submit the following:
	  ◦ Quiz: Processes That Shape Earth
	  ◦ Quiz: Technological Advancements

Week 10	Unit: Processes That Shape Earth
	• Submit the following:
	  ◦ Quiz: Informing the Public
	  ◦ Unit Test: Processes That Shape Earth

Week 11	Unit: Natural Hazards
	• Submit the following:
	  ◦ Assignment: Local Natural Hazards
	  ◦ Quiz: Natural Hazards

Week 12	Unit: Natural Hazards
	• Submit the following:
	  ◦ Quiz: Predicting Natural Hazards
	  ◦ Quiz: Preparing for a Natural Hazard

Week 13	Unit: Natural Hazards
	• Submit the following:
	  ◦ Quiz: Human-Engineered Structures
	  ◦ Unit Test: Natural Hazards

Week 14	Unit: Earth's Resources
	• Submit the following:
	  ◦ Quiz: Earth's Resources
	  ◦ Quiz: Renewable Energy
	  ◦ Quiz: Resource Development

Week 15	Unit: Earth's Resources
	• Submit the following:
	  ◦ Quiz: Natural Resources Review
	  ◦ Unit Test: Earth's Resources

Week 16 and 17	Unit: Final Assignment and Post-Assessment
	• Submit the following:
	  ◦ Assignment: Processes That Shape Earth
	  ◦ Term 4 Post-Assessment
	  ◦ Course Evaluation

4.) Course Standards

COURSE STANDARDS

The content contained within this course follows the following standards:

Standard 1: Students will understand the scientific evidence that supports theories that explain how the universe and the solar system developed. They will compare Earth to other objects in the solar system.

Standard 2: Students will understand Earth's internal structure and the dynamic nature of the tectonic plates that form its surface.

Standard 3: Students will understand the atmospheric processes that support life and cause weather and climate.

Standard 4: Students will understand the dynamics of the hydrosphere.

Standard 5: Students will understand how Earth science interacts with society.