

## EWHS Course Scope & Sequence

<b>Course Title</b>	<b>Earth and Space Science</b>			
<b>Course Overview</b>	<p>In this course, students use the Science and Engineering Practices and Crosscutting Concepts of Science to build understanding of: the universe and Earth's place in it (stars, planets, and Earth's history); the dynamic and interrelated systems of the Earth (Earth materials, plate tectonics and other large scale system interactions, water and Earth's surface processes, weather and climate); and the interactions between Earth's surface processes and human activities (natural resources, natural hazards, human impact on Earth systems, and global climate change). Engineering design is incorporated as students consider technological solutions to real-world problems.</p>			
<b>Unit Component</b>	<b>Unit 1</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>Title</b>	Scientific Method	Creation and Expansion of the Universe	Earth's Interactions	Global Climate Change
<b>Guiding or Essential Questions</b> <i>(if applicable)</i>		Will the Apophis Asteroid strike in 2029?	How has Earth's surface changed over the course of time?	What happens to Earth if all the ice melts?
<b>Topic</b>  This should be the overarching theme or big idea. Brief overview of the unit.	This unit includes a review/introduction to science skills such as hypothesizing, scientific notation, converting to the metric scale, and more.	Students explore physical details about the Apophis asteroid, momentum, energy, and elements to make a decisive, evidence-backed claim as to whether the asteroid will strike Earth in 2029.	Students analyze changes on the surface of the Earth to construct their understanding of Pangea and tectonic plates.	Students explain interactions between Earth's surface processes and human activities in order to support their analysis of a major global challenge with specified qualitative and quantitative criteria and

				constraints in order to create and engineer a solution that accounts for societal needs and accountability.
<b>Length</b> <i>(in weeks)</i>	5 weeks	9 weeks	9 weeks	9 weeks