

Earth Space Science (Course #2001310 Hons #2001320)









Quarter	Big Idea		Benchmark Description	Suggested Pacing Days*
First Quarter (39 days)	Earth Systems	1	SC.912.E.7.3 Earth systems - atmosphere, hydrosphere, cryosphere, geosphere, and biosphere - and how they interact with each other.	3
	Cycling of Matter	2	SC.912.E.7.1 Analyze the movement of matter and energy through the water and carbon cycles.	5
	Heat Energy Transfer	3	SC.912.P.10.4 Describe and explain how convection, conduction, and radiation transfer heat.	6
	Weather	4	SC.912.E.7.5, SC.912.E.7.6 Identify the physical factors that generate weather conditions and predict future weather conditions based on observations and models.	7
	Climate	5	SC.912.E.7.8, SC.912.E.7.4 Summarize the physical factors that influence the climate of a geographic area, notably Florida in particular.	9
	Ocean Motion	6	SC.912.E.7.2 Describe how movement in the ocean contributes to global climate conditions.	5
Second Quarter (36 days)	Physical Forces and Motion	7	SC.912.P.10.10 Introduce the four fundamental forces: gravitational, electromagnetic, weak nuclear, and strong nuclear.	8
	Motion	8	SC.912.P.12.2 Investigate the motion of an object, with respect to position, velocity, acceleration, and time.	10
	Gravity	9	SC.912.P.12.4 Describe how gravitational force depends on mass and distance.	5
	Electromagnetic Radiation and Waves	10	SC.912.P.10.19, SC.912.P.10.20, SC.912.P.10.18, SC.912.P.10.16 Compare and contrast the different parts of the electromagnetic spectrum in terms of wavelength, frequency, and energy.	15
Third Quarter (34 days)	Plate Tectonics, Geological Processes	11	SC.912.E.6.1, SC.912.E.7.7, SC.912.E.6.3, SC.912.E.6.2, SC.912.E.6.4, SC.912.E.6.5 Explore how surface and subsurface geological processes shape global features.	12
	The Big Bang	12	SC.912.E.5.1 Cite evidence used to develop the scientific theory of the Big Bang and origin of the universe.	5
	Organization and Distribution of Matter	13	SC.912.E.5.2 Identify patterns in the organization and distribution of matter in the universe and the forces that determine them (astronomical distances).	9
	Nuclear Reactions and Star Formation	14	SC.912.P.10.11, SC.912.E.5.3 Compare nuclear reactions and the energy changes associated with them. Describe the evolution and properties of stars.	13
Fourth Quarter (27 days)**	Planetary Systems	15	SC.912.E.5.4, SC.912.E.5.5, SC.912.E.5.6 Explore forces among planetary systems and the relationship between the Sun, Moon, and Earth.	18
	Origin of Life on Earth	16	SC.912.L.15.8 , SC.912.L.15.1 Describe the scientific explanations of the origin of life on Earth. Explain how the theory of Evolution is supported by evidence.	14
	Space Exploration	17	SC.912.E.5.9 Analyze the broad effects of space exploration on the economy and culture of Florida.	8

^{*}The days provided for each unit/topic is an estimate that may be adjusted by subject-level PLCs based on student achievement data and should be adjusted, The recommended days shown are less than the actual days for each quarter to allow for additional time for routines, testing, absences, remediation and outside considerations.

^{**} This does not include the days in May or June due to testing schedules and end of year events.