

## 2021 Pacing Guide

Course: AP Environmental Science

Grade: 10-12

<u>Months/Days</u>	<u>UNITS</u>	<u>STANDARDS</u>	<u>CONTENT</u> Topics being covered? What do students need to know? ( <i>nouns</i> )	<u>ACTIVITIES</u> w/Integration of Technology & Career Ready Practices	<u>ASSESSMENTS</u> What evidence (formative/summative) is utilized to establish that the content, standards, & skills have been mastered?
September/15	Unit 1: The Living World: Ecosystems	HS: ESS2-2 HS: ESS2-5 HS: ESS2-6 HS: ESS2-7	Ecosystems, Cycles, Biodiversity	Carbon Cycle Activity Debate: Human Impact on Nitrogen Cycle Graph NPP's	Lesson Quiz Unit 1 exam Analyze an environmental problem and propose a solution
October/12	Unit 2: The Living World: Biodiversity	HS-ESS3-3 HS-LS2-7 HS-LS4-6	Biodiversity, Ecological Succession, Adaptation	Island Biogeography activity, Adaptation game, wetland analysis	Lesson Quiz Unit 2 exam Design an Investigation
October-November/ 13	Unit 3: Populations	HS-ESS3-1 HS-ESS3-3 HS-ESS3-4 HS-ESS3-6 HS-LS4-6 HS-ETS1-3	Population dynamics, carrying capacity, Population growth and resource availability	Invasive activity, error analysis, Demographic analysis	Lesson Quiz Unit 3 exam Analyze an environmental problem and propose a solution using calculations

<b>November-December/12</b>	<b>Unit 4: Earth Systems and Resources</b>	<b>ESS1-5 ESS2-1 ESS2-3 HS-PS2-5 HS-PS2-1 HS-ETS1-3</b>	<b>Plate tectonics, Soils and conservation, Atmosphere and Climate</b>	<b>Mapping Seismic Energy, Graph the atmospheric layers, Debate El Nino and La Nina</b>	<b>Lesson Quiz Unit 4 exam Design an Investigation</b>
<b>December-January/ 19</b>	<b>Unit 5: Land and Water Use</b>	<b>ESS3-1 ESS3-3 ESS3-4 ESS3-6 HS-LS4-6 HS-ETS1-3</b>	<b>Environmental disruption, agricultural practices, sustainable practices</b>	<b>Soil conservation lab, Practice FRQ's, calculate ecological footprint</b>	<b>Lesson Quiz Unit 5 exam Analyze an environmental problem and propose a solution</b>
<b>January-February/ 17</b>	<b>Unit 6: Energy Resources and Consumption</b>	<b>HS-ESS2-2 HS-ESS2-4 HS-ESS2-6 HS-ESS1-4 HS-PS4-4</b>	<b>Renewable and Nonrenewable resources, energy consumption, impact of human activity</b>	<b>Pros and Cons debate, Solar Lab Independent Research</b>	<b>Lesson Quiz Unit 6 exam Analyze an environmental problem and propose a solution using calculations</b>
<b>February-March/ 12</b>	<b>Unit 7: Atmospheric Pollution</b>	<b>HS-ESS2-4 HS-ESS3-1 HS-ESS3-4 HS-ESS3-5 HS-ESS3-6</b>	<b>Indoor and Outdoor Pollution Clean Air Act Acid Rain, Particulates</b>	<b>Acid Rain effects lab, Particulate catchers</b>	<b>Lesson Quiz Unit 7 exam Design an Investigation</b>
<b>March-April/ 20</b>	<b>Unit 8: Aquatic and Terrestrial Pollution</b>	<b>HS-ESS1-4 HS-ESS2-2 HS-ESS2-4</b>	<b>Sources of pollution, Eutrophication,</b>	<b>Waste Management activity,</b>	<b>Lesson Quiz Unit 8 exam Analyze an</b>

		HS-ESS2-6 HS-PS4-4	Human Impact, Waste management	Decomposition Rate Lab, Public Health Investigation	environmental problem and propose a solution using calculations
April-May/ 20	Unit 9: GLobal Change	HS-ESS3-1 HS-ESS3-4 HS-ESS3-6	Global Impact of Human activities, Climate Change, Ocean Warming, Endangered Species	Case Study on an Invasive Species and its Effects Development Debate Acidification Lab	Lesson Quiz Unit 9 exam Analyze an environmental problem and propose a solution