



**2025-2026**  
**AP Environmental Science | Texas**  
**Scope & Sequence**

**Course Overview:** The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, and environmental science, chemistry and geography.

Standards: (Include link to state standards or AP CED)										Academic Calendars			Essential Questions (optional)	Enduring Understandings (optional)	Lessons in this Unit (optional) <small><b>Bold</b> indicates a required lesson <i>Italics</i> indicates an optional lesson <i>Red</i> indicates a teacher-created lesson</small>
Unit Number	Unit Title	Subunits (optional)	Number of Core Instructional Days	Number of Success/Flex Days	Number of Other Instructional Days (optional)	Number of Assessment Days	Recommended total number of class periods	Summative Assessment	Scanning Deadline <small>The last day student data will be incorporated for district-wide analysis.</small>	Unit Start Date	Unit End Date	Assessment Date <small>Aligns with other standardized measures of student learning.</small>			
<b>FALL SEMESTER</b>															
1	Ecosystems		14	1		1	16	TX_SCI_APEnvironmentalScience_UE1	9/18/2025				<p>What is sustainability and how does it relate to the study of environmental science?</p> <p>How do species interact in a healthy ecosystem?</p> <p>How does energy move in a healthy ecosystem?</p> <p>How are species relationships and energy movement in an ecosystem modeled?</p> <p>How does matter move (especially key nutrients) in a healthy ecosystem?</p>	<p>The concept of sustainability is fundamental to the study of environmental science because it is the target that helps to identify good environmental practices.</p> <p>When humans use natural resources, they alter natural systems.</p> <p>Ecosystems are the results of biotic and abiotic interactions.</p> <p>Energy can be converted from one form to another.</p> <p>Ecosystems are powered by solar energy that moves from producers upward through the trophic levels of consumers.</p> <p>ALL matter cycles through the ecosystems, the hydrosphere, the atmosphere and the lithosphere.</p>	
2	Biodiversity		13	2		1	16	TX_SCI_APEnvironmentalScience_UE2	10/16/2025				<p>What are the three types of biodiversity? Why is each important?</p> <p>How is species diversity measured?</p> <p>What are the benefits of healthy ecosystems for humans and species?</p> <p>How and why do species' traits change over time?</p> <p>How do ecosystems change over time? How do they respond to disturbances?</p> <p>What are the primary types of reproductive strategies for different species?</p>	<p>Ecosystems have structure and diversity that change over time.</p> <p>Populations change over time in reaction to a variety of factors.</p> <p>Higher levels of biodiversity help ecosystems be more resilient to change.</p> <p>Humans are dependant on ecosystem services in a variety of ways.</p> <p>Biodiversity of ecosystems naturally increases over time.</p> <p>Changes to ecosystems and species take long periods of time.</p>	
4	Earth Systems & Resources		10	1		1	12	TX_SCI_APEnvironmentalScience_UE3	11/6/2025				<p>Why do earthquakes, volcanoes, and mountains exist in specific locations around the planet?</p> <p>How is soil formed? What are the key characteristics used to describe specific soils?</p> <p>Why is the climate different at different locations on planet Earth?</p>	<p>Earth's systems interact, resulting in a state of balance over time.</p> <p>Most of the Earth's atmospheric processes are driven by input of energy from the sun.</p> <p>The movement of tectonic plates is responsible for much of the topography of the Earth and natural disasters like earthquakes and volcano eruptions.</p> <p>Soil is constantly being formed, making it a renewable resource but it is a VERY slow process.</p> <p>Many factors influence the climate of a region which then determines the types of species that will be found there.</p>	
3	Human Populations & Agriculture		14	2		1	17	TX_SCI_APEnvironmentalScience_UE4	12/4/2025				<p>How are human populations modeled?</p> <p>How do human populations change over time? How are these changes modeled?</p> <p>How are we able to produce enough food to keep feeding a growing human population?</p> <p>What are the environmental impacts of producing enough food for a growing human population?</p>	<p>Human populations change in reaction to a variety of factors, including social and cultural factors.</p> <p>When humans use natural resources, they alter natural systems.</p> <p>Humans can mitigate their impact on land and water resources through sustainable use.</p> <p>Agriculture is the single largest anthropogenic impact on the environment.</p> <p>Methods of producing food vary significantly in their environmental impact.</p>	
5	Land & Water Use		7	0		0	7	None	None				<p>What are the environmental impacts of increasing urbanization?</p> <p>What are the environmental impacts of mining mineral resources?</p> <p>What are the environmental impacts of timber and wood production?</p> <p>How can wood and timber be produced more sustainably?</p>	<p>When humans use natural resources, they alter natural systems.</p> <p>Humans can mitigate their impact on land and water resources through sustainable use.</p> <p>Urban areas can be designed to decrease their environmental impact.</p> <p>Wood resources can be extracted with large or decreased environmental impacts.</p>	
<b>Semester Exam Window: 12/8/24 - 12/19/24   Scanning Deadline: 12/19/2025</b>															
<b>SPRING SEMESTER</b>															
6	Energy Resources		13	2		1	16	TX_SCI_APEnvironmentalScience_UE6	1/29/2026				<p>How much energy does human civilization require and how is energy use growing?</p> <p>What are the environmental impacts of the most common sources of energy (fossil fuels and nuclear)?</p> <p>What is the most sustainable way to generate energy for human use?</p>	<p>Humans use energy from a variety of sources, resulting in positive and negative consequences.</p> <p>Nonrenewable energy resources are not sustainable because they will eventually be depleted.</p> <p>Use of fossil fuels create significant amounts of air pollution and heavily contribute to climate change.</p> <p>renewable energy resources have less environmental impacts that nonrenewable energy resources but can still have significant impacts.</p>	
7	Atmospheric Pollution		10	1		1	12	TX_SCI_APEnvironmentalScience_UE7	2/19/2026				<p>What are the major sources of air pollution?</p> <p>What is the difference between primary air pollutants and secondary air pollutants?</p> <p>What are the environmental impacts of air pollution?</p> <p>What are the human health effects of air pollution?</p>	<p>Human activities have physical, chemical, and biological consequences for the atmosphere.</p> <p>Air pollution has significant impacts on the environment, beyond the atmosphere, and human health.</p>	
8	Aquatic & Terrestrial Pollution		18	2		1	21	TX_SCI_APEnvironmentalScience_UE8	4/2/2026				<p>What are the major environmental impacts of aquatic &amp; terrestrial pollution?</p> <p>How do certain toxins in pollution affect human health?</p> <p>Why do certain toxins magnify in an ecosystem?</p> <p>How is waste-water "disposed"?</p> <p>What is the most sustainable way to dispose of solid waste?</p>	<p>Human activities, including the use of resources, have physical, chemical, and biological consequences for ecosystems.</p> <p>Pollutants can have both direct and indirect impacts on the health of organisms, including humans.</p> <p>There are a variety of pollutants that have significant effects on species and biodiversity and human health.</p> <p>The linear system humans use to extract, use and dispose of material products is inherently unsustainable.</p> <p>Water resources are constantly be cycled and must be treated/purified after most human uses.</p>	
<b>Mock Exam Window: 3/23 - 4/2/2026   Scanning Deadline: 4/9/2026</b>															
9	Global Changes		15	1		1	17	TX_SCI_APEnvironmentalScience_UE9	4/30/2026				<p>Why is the ozone layer and why is it important for human and global sustainability?</p> <p>What are the causes of global climate change?</p> <p>What are the impacts of global climate change?</p> <p>Why do feedback loops make the impacts of climate change even more alarming?</p> <p>Why are species being lost at a rate that has caused scientists to dub the present days the anthropocene?</p> <p>Why is species loss so important to global sustainability?</p>	<p>Local and regional human activities can have impacts at the global level.</p> <p>The health of a species is closely tied to its ecosystem, and minor environmental changes can have a large impact.</p> <p>Species are being lost at a higher rate than any point in history.</p> <p>Global environmental problems are very difficult to address because of the large numbers of stakeholders.</p>	

**AP Exam Date: Wednesday May 13th, 2026 AM (subject to change)**