

# FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT



## AP Environmental Science

<b>Board Approval Date: June 15, 2023</b>	<b>Course Length: 2 Semesters</b>
<b>Grading: A-F</b>	<b>Credits: 5 Credits per Semester</b>
<b>Proposed Grade Level(s): 10, 11, 12</b>	<b>Subject Area: Life Science Elective Area (if applicable): Advanced Placement (Science)</b>
<b>Prerequisite(s): Required: Two years of college prep science, completion of IM1. Recommended: Completion of Biology, Chemistry, IM2</b>	<b>Corequisite(s):</b>
<b>CTE Sector/Pathway:</b>	
<b>Intent to Pursue 'A-G' College Prep Status: Yes</b>	
<b>A-G Course Identifier: (d) Laboratory Science</b>	
<b>Graduation Requirement: No</b>	
<b>Course Intent: District Course Program (if applicable): AP</b>	
<p><b>The Folsom Cordova Unified School District prohibits discrimination, intimidation, harassment (including sexual harassment) or bullying based on a person's actual or perceived ancestry, color, disability, race or ethnicity, religion, gender, gender identity or gender expression, immigration status, national origin, sex, sexual orientation, or association with a person or group with one or more of these actual or perceived characteristics. For concerns/questions or complaints, contact the Title IX Coordinator(s), Equity Compliance Officer(s) and Section 504 Coordinator(s) :</b></p> <p><b>Donald Ogden, Associate Superintendent – Human Resources, Title IX Coordinator (Employees) &amp; Equity Compliance Officer</b>  <b>dogden@fcusd.org</b>  <b>916-294-9000 Ext 104410</b></p> <p><b>Jim Huber Ed. D., Assistant Superintendent – Educational Services, Title IX Coordinator (Students), Section 504 Coordinator &amp; Equity Compliance Officer</b>  <b>jhuber@fcusd.org</b>  <b>916-294-9000 Ext 104625</b></p>	

## COURSE DESCRIPTION:

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world through inquiry-based lab investigations and field work as they explore concepts like the four Big Ideas; energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability. Students will identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study, and thus meets the UC Subject “d” Physics, Biology, or Chemistry Lab Science requirement. It is required that students have the opportunity to spend a minimum of 25% of instructional time engaged in hands-on, inquiry-based laboratory and/or fieldwork investigations. This course prepares students to pass the AP Environmental Science exam.

## DETAILED UNITS OF INSTRUCTION:

Unit Number/Title	Unit Essential Questions	Examples of Formative Assessments	Examples of Summative Assessment
<b>1. The Living World Ecosystems</b>	How does energy change forms? How old is the water you drink?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>2. The Living World: Biodiversity</b>	Can an invasive species be considered a native species if it occupies a place for a long time?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>3. Populations</b>	How do changes in habitats influence changes in species over time? How is educational opportunity for women connected to human population changes?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>4. Earth Systems and Resources</b>	How does energy from the sun influence the weather? How can earthquakes be predicted?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>5. Land and Water Use</b>	How does your use of natural resources impact the world? Why are sustainable practices difficult to implement?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>6. Energy Resources and</b>	Why are fossil fuels the most widely used energy	*Reading Quizzes *AP Classroom Topic	*AP Classroom MCQ *FRQ Exams

<b>Consumption</b>	resources if they are nonrenewable?	*Quizzes Progress Checks	
<b>7. Atmospheric Pollution</b>	Where does air pollution go once it is airborne?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>8. Aquatic and Terrestrial Pollution</b>	How does pollution impact your health? How can you decrease your waste?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams
<b>9. Global Change</b>	Why are laws created to protect endangered species? How can local human activities have a global impact?	*Reading Quizzes *AP Classroom Topic *Quizzes Progress Checks	*AP Classroom MCQ *FRQ Exams

### **ESSENTIAL STANDARDS:**

<https://apcentral.collegeboard.org/media/pdf/ap-environmental-science-course-and-exam-description.pdf>

### **RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:**

#### **Link to Common Core Standards (if applicable):**

Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.

<https://www.cde.ca.gov/be/st/ss/documents/finaelaccsstandards.pdf>

#### **Link to Framework (if applicable):**

Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

<https://apcentral.collegeboard.org/media/pdf/ap-environmental-science-course-and-exam-description.pdf>

#### **Link to Subject Area Content Standards (if applicable):**

Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.

<https://www.cde.ca.gov/ci/sc/ee/envirprinciplesconcepts.asp>

#### **Link to Program Content Area Standards (if applicable):**

Program Content Area Standards apply to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

<https://apcentral.collegeboard.org/media/pdf/ap-environmental-science-course-and-exam-description.pdf>

**TEXTBOOKS AND RESOURCE MATERIALS:**

**Textbooks**

<b>Board Approved</b>	<b>Pilot Completion Date (If applicable)</b>	<b>Textbook Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Edition</b>	<b>Date</b>
<i>Yes</i>		<i>Environmental Science for AP, 4th Edition</i>	Friedland and Releya	Bedford, Freeman & Worth	4th	4/1/2023

**Other Resource Materials**

AP Classroom, HHMI, YouTube, etc. Lab Materials from Flinn Science, Wards, etc.

**Supplemental Materials**

Board approved supplemental materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.): Science Outside Case Studies, Science Outside Lab Manual, Gizmos