

AP ENVIRONMENTAL SCIENCE
The Early College at Guilford 2024-25

Instructor:	Jennifer Buck	Email:	buckj@gcsnc.com jbuck1@guilford.edu
Canvas:	https://gcs.instructure.com/courses/320994	APES CED	https://apcentral.collegeboard.org/media/pdf/ap-environmental-science-course-and-exam-description.pdf
Textbook:	Friedland Andrew and Reyla, Rick, AP Environmental Science, Freeman 2019	AP Classroom:	https://apclassroom.collegeboard.org/14/home
Remind101	A Day - @ecgapesa to 81010 B Day - @ecgapesb to 81010	Help sessions:	Monday 8:15-9:00 AM Other mornings and/or lunch periods by appointment

COURSE DESCRIPTION:

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. *

The course is constructed around **four big ideas** which serve as the foundation and allow students to create meaningful connections among concepts. The big ideas are often overarching concepts or themes that become threads that run throughout the course. *

Big Idea 1: Energy Transfer (ENG) Energy conversions underlie all ecological processes. Energy cannot be created; it must come from somewhere. As energy flows through systems, at each step, more of it becomes unusable.

Big Idea 2: Interactions Between Earth Systems (ERT) The Earth is one interconnected system. Natural systems change over time and space. Biogeochemical systems vary in ability to recover from disturbances.

Big Idea 3: Interactions Between Different Species and The Environment (EIN) Humans alter natural systems and have had an impact on the environment for millions of years. Technology and population growth have enabled humans to increase both the rate and scale of their impact on the environment.

Big Idea 4: Sustainability (STB) Human survival depends on developing practices that will achieve sustainable systems. A suitable combination of conservation and development is required. The management of resources is essential. Understanding the role of cultural, social, and economic factors is vital to the development of solutions.

There are **seven science practices** embedded within the content for AP Environmental Science. Each practice describes what a student should be able to do while exploring course concepts.

SP 1: Concept Explanation - Explain environmental concepts, processes, and models presented in written format.

SP 2: Visual Representations - Analyze visual representations of environmental concepts and processes.

SP 3: Text Analysis - Analyze sources of information about environmental issues.

SP 4: Scientific Experiments - Analyze research studies that test environmental principles.

SP 5: Data Analysis - Analyze and interpret quantitative data represented in tables, charts, and graphs.

SP 6: Mathematical Routines - Apply quantitative methods to address environmental concepts.

SP 7: Environmental Solutions - Propose and justify solutions to environmental problems.

Please refer to [College Board AP Environmental Course and Exam Description](#) for a complete overview of the AP Environmental course.

* Adapted from the College Board Course and Exam Description

UNITS OF STUDY	TENTATIVE ASSESSMENT DATES *
Unit 1: The Living World: Ecosystems	August 29/30 (will also include unit 0 content)
Unit 2: The Living World: Biodiversity	September 19/20
Unit 3: Populations	October 9/10
Unit 4: Earth Systems and Resources	October 31/Nov 1
Unit 5: Land and Water Use	December 10/11
Cumulative Midterm	December 16
Unit 6: Energy Resources and Consumption	January 30/31
Unit 7: Atmospheric Pollution	February 13/14
Unit 8: Aquatic and Terrestrial Pollution	March 26/27
Unit 9: Global Change	April 22/23
Final Cumulative Exam**	April 28-May 1
College Board APES Exam	May 13 – 12:00 PM

*All dates are subject to change

** Final Cumulative Exam will be administered over a two-day period for each class section and will count as the final exam grade (20% of course grade, in accordance with GCS policy).

SUPPLIES	GRADING POLICY
Chromebook or personal laptop/tablet Any 3-5 subject spiral-bound notebook (preferably used solely for APES) Graph paper Three-ring binder (can be used for other classes) Pencils and pens Calculator	Unit Assessments/Quarterly Projects: 70% All other assignments/quizzes: 30% *Not all assigned work will receive a grade

STUDENT EXPECTATIONS:

- 1) **Be responsible** – Come prepared for class, having completed the assigned work. Take responsibility for your learning.
- 2) **Be respectful** – We will practice kindness in this classroom. Respect yourself, your classmates, your instructors, and school property. This includes being on time for class and consuming all food prior to entering the classroom.
- 3) **Be reflective** – A reflective attitude is helpful in school and in adulthood. *Is what I am doing producing the desired results? What is expected of me? How can I improve my work? Am I getting what I need in school? What steps could I take to get the results I desire?*

FLIPPED CLASSROOM:

To cover the required material and give adequate time for exploration and application of the material, it is essential that students complete the reading, notes, and unit packets on a consistent basis. These assignments are the “homework” for the class. Completing notes and readings before the class allows us the opportunity to discuss, debate, examine, and explore the concepts in more depth than merely “taking notes”. However, without the consistent completion of these at-home assignments, the student may feel lost during the class activities. The assignments and readings will be posted on the class Canvas page and/or listed in the unit note packets. There may be daily checks for completion as well as unannounced quizzes on material to assess the students' readiness for explorations or activities.

CELL PHONE POLICY:

Students should turn cell phones off or silence them and put them in their backpacks (not in pockets, on the desk, etc.). When cell phones may be used for instructional purposes, the teacher will instruct students to retrieve them.

MAKE-UP WORK IS THE RESPONSIBILITY OF THE STUDENT.

If you are absent for any reason, YOU are responsible for asking what you have missed the day you return and arranging to make up the work. It is not the responsibility of the instructor to remind you that you have missed work. All handouts and homework assignments will be available in the classroom or on Canvas. All work missed must be made up within **three calendar days** (NOT class meeting days) of the date the student returns to school. When absent on the day of a major test, the test is to be made up on the date of return unless there are extenuating circumstances. Being absent the day before a quiz or test does not excuse a student from taking the test on the day of return.

LATE ASSIGNMENTS:

The Early College at Guilford policy is that no late work is accepted for Advanced Placement courses. Exceptions will only be granted in extenuating situations with a consultation with the instructor. **If you find you are getting behind in the class, please communicate with me so we can work out a plan.**

LAB WORK:

You are always responsible for an **individual** analysis of each lab, whether you do a lab with a partner or group. If you miss a lab, you must see me immediately to arrange a make up or alternate assignment. Even if you miss a lab, you are responsible for knowing the procedure, data, results, calculations, and conclusion of that experiment.

Early College at Guilford Honor Code for Grades 9 and 10

The Early College at Guilford is a unique educational institution that combines freedom and responsibility. In order to honor that freedom, students take on the responsibility of conducting themselves in such a way that reflects academic integrity both inside and outside the classroom. This honor code represents an underlying principle of ECG student life. It requires that students accept honesty and integrity as both individual and corporate values.

The core beliefs that underlie this code are:

Students function best in an educational environment untainted by academic dishonesty.

Trust is a vital element of the teacher-student relationship.

Widespread Honesty and Integrity enrich the quality of an educational environment.

The Early College at Guilford Honor Code

On my honor as a member of The Early College at Guilford Community I have neither given nor received any unauthorized assistance on this work, nor have I tolerated others' use of unauthorized assistance.

(Please reference student handbook for other specific information regarding the honor code)
