



AP Environmental Science A v8.0 – Syllabus

Course Name

APENVIR-A

AP Environmental Science A v8.0

Course Information

APENVIR-A is the first semester of this two-semester course.

With the current changes in global climate, rising sea levels, and warming oceans, it is important for students to discover the state of Earth's systems and the consequences of human activities. AP Environmental Science provides students with a global view of their world and their role in it. It examines the scientific principles and concepts required to understand the interrelationships between ocean, land, and atmosphere that guide the natural world and allow Earth to be a planet suitable for life. Laboratory activities within the course support their learning of these relationships through reflective, hands-on, or virtual experiences. In addition, students identify and analyze environmental problems that are natural and human-made, determining their own ecological footprint in the world to discover how their activities affect the world around them. They evaluate the relative risks associated with environmental problems and examine alternative solutions, such as clean energy, sustainable practices, and conservation, for resolving or preventing future environmental problems.

Course Delivery Method

Online

Contacting Your Instructor

You may contact your instructor using your Canvas Inbox. Technical support is available 24/7 at [TTU K-12](#).

Course Topics

After completing this course, the students should have increased knowledge of:

- Module 1: Ecosystems
- Module 2: Biodiversity and Populations
- Module 3: Earth Systems
- Module 4: Natural Resources

Textbook and Materials

No textbooks required. All content is within Canvas.

- Calculator (four function, scientific, graphing)

Lab Materials

Module 1

- calculator
- paper
- pencil/pen
- digital charts or drawing tools (found in MS Word)

Module 3

- one sheet of plain white paper
- several sheets of old newspaper, or wax paper if available
- one thick water-based marker (Note: do not use permanent marker)
- one spray bottle containing water (place on "mist" setting)
- digital camera or camera from mobile device

Module 4

- 6 plastic cups
- 70 navy beans
- 40 kidney beans
- 40 black beans
- 100 black-eyed peas
- marker for labeling cups

Module 5

- a calculator

Enrichment activities (optional) require extra household supplies. Special items for these optional activities include a 250 mL beaker, a magnifying glass, iodine solution, an NPK kit, a thermometer, a protractor, and so on. Refer to lessons for these optional activities and their supplies.

Technical Requirements

- Internet access – preferably high speed (for accessing Canvas)
- browser (we recommend Chrome)
- supported browser plugins and settings
The following plugins and settings may be required to use our courses.
 - JavaScript enabled
 - Cookies enabled
 - Java installed
- Email
- Printing capabilities
- Adobe Reader (download from [Adobe](#))
- Audio and video capabilities (for watching/listening to course content)
- PDF app (free options available)

Technical Skill Requirements

Be comfortable with the following:

- accessing online learning materials via Canvas
- Internet search engines and browsers (we recommend Chrome)
- uploading assignments into Canvas (there will be instructions for uploading assignments)

Course Pacing

This course is designed to be completed in 18 weeks.

- Print this guide and use a calendar to fill in your goal dates for completing each Module.
- To achieve success, students are expected to submit work in each course weekly.
- Students can learn at their own pace; however, "any pace" still means that students must make progress in the course every week.
- Post the pace guide in a place where you and your Parent or Guardian will see it every day (on the refrigerator or next to the computer). Give yourself a check every time you complete a task, and celebrate your efforts!

Weeks	Lessons	Due Date (you write this in)
1	Checkpoint 1 01.00 Ecosystems Checklist 01.01 Introduction to Ecosystems 01.02 Biomes 01.03 Cycles	
2	01.04 Primary Productivity 01.05 Trophic Levels and Energy Flow	
3	01.06 Food Chains and Food Webs *01.08 Ecosystems Module Exam	
4	02.00 Biodiversity and Populations Checklist 02.01 Biodiversity 02.02 Ecological Relationships	
5	02.03 Natural Disruptions 02.04 Adaptation and Succession	
6	02.05 Population Species 02.06 Population Growth 02.07 Demographics	
7	02.08 Human Population Checkpoint 2 *02.10 Biodiversity and Populations Module Exam	
8	03.00 Earth Systems Checklist 03.01 Plate Tectonics 03.02 Soil and Watersheds	
9	03.03 Atmosphere and Wind 03.04 Solar Radiation and Seasons	
10	03.05 Weather and Climate *03.07 Earth Systems Module Exam	
11	04.00 Natural Resources Checklist 04.01 Tragedy of the Commons	
12	04.02 Agricultural Practices 04.03 Food Production	
13	04.04 Mining and Urbanization 04.05 Ecological Footprints	
14	04.06 Sustainability 04.07 Pest Management	
15	Checkpoint 2 *04.09 Natural Resources Module Exam	
16	*04.10 Final Exam	

Weeks	Lessons	Due Date (you write this in)
17	Floating Vacation Week	
18	Floating Vacation Week	

Course Credit

Your grade will be calculated as follows:

- formative assessments (50%)
- summative assessments (20%)
 - 01.08 Ecosystems Module Exam
 - 02.10 Biodiversity and Populations Module Exam
 - 03.07 Earth Systems Module Exam
 - 04.09 Natural Resources Module Exam
- summative final exam (30%)

Assignments are labeled as “summative” or “formative” under Grades in Canvas.

Course Completion and Extensions

- Students may not complete the course in less than 30 days.
- All courses expire 180 days after the enrollment date.

Academic Integrity

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

“Scholastic dishonesty” includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

Artificial Intelligence (AI) Use Policy

This policy covers any generative AI tool, such as ChatGPT, Elicit, Photo Math, etc. This includes text and artwork/graphics/video/audio, etc.

All work submitted in this course must be your own. You may not use artificial intelligence tools to complete your assignments in this course.

If an instructor suspects that an assignment is not the work of the student, it will receive a score of zero. The instructor will message the student or provide feedback on the assignment indicating the need to schedule a one-on-one video conference, during which the student will be required to demonstrate their skills or knowledge through an alternative or mutually agreed-upon assignment. The grade of the alternate or agreed upon assignment will be determined at the instructor's discretion with the highest possible score being 70%.

If it is determined that a student has violated final exam directions on Final Exam A or CBE Set 1, the exam will be scored as zero. The student may take Final Exam B or CBE Set 2 with the highest possible score being 70%.

The incident will be reported to Texas Tech K-12 Administration and documented in the student's file. Continued violations of Texas Tech University's Academic Integrity Policy will result in the removal of the student from the program.

Student/Parent Expectations

You will be expected to log into the Canvas course regularly to be aware of possible announcements/reminders and to pace your student's progress in the course.

The following are prohibited while using the Canvas interface:

- spamming;
- hacking; and
- using TTU or Canvas email for commercial purposes;

Inappropriate behavior shall result in consequences ranging from a request to correct the problem, to removal from the course or even the university, depending on the severity of the behavior. Disciplinary actions will be taken according to the TTU K-12 Student Handbook.

Communication

- You can expect a reply from your instructor within 2 business days.
- Use the Canvas Inbox for sending messages to your instructor.

Submitting Assignments

You will submit all assignments through Canvas, rather than by mail or email.

Technical Difficulties

Getting Help

For student assistance with Canvas, visit [TTU K-12 Support](#).

Computer Problems

A working computer is necessary for online coursework. Computer problems will not be accepted as a valid reason for failure to complete course activities within the allotted time frame. Identify a second computer, before the course begins, that you can use if you experience computer problems.

Server Problems

When the Canvas server needs to be taken down for maintenance, the Canvas administrator will post an announcement in your course informing you of the time and date. If the server experiences unforeseen problems, your course instructor will notify you.

Lost or Corrupted Files

You must keep/save a copy of every project/assignment on an external disk or personal computer. In the event of any kind of technology failure (e.g., Canvas server crash or virus infection, students' own computer problems, loss of files in cyberspace, etc.) or any disputes, the instructor may request or require you to resubmit the files. In some instances, the instructor may need to open another attempt within Canvas, so communication with your instructor is critical in these circumstances.