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|  | **Thurgood Marshall**  **High School**  Home of the Mighty Buffs |  |

**Advanced Placement (AP) Environmental Science Syllabus 2025 – 2026**

**Instructor:** Dr. M. Farner **Email:** Michael.farner@fortbendisd.gov

**Room:** S106 **Tutorials:** 3:10 – 4:00 Tuesdays

**Conference:** 2nd Period (8:27 a.m. – 9:20 a.m.)

**Course Overview:**

Advanced Placement Environmental Science (“APES”) is a college-level environmental science course. This course is taught as a traditional science course, incorporating laboratory activities, virtual activities, short-term projects, long-term studies, field investigations, and the use of technology for gathering data (LabQuest II data probes, including dissolved oxygen, temperature probes, and pH meters as well as data analysis software). Experiences in the laboratory and field and through virtual internet labs will provide students with opportunities to relate classroom concepts to real-world applications of environmental science. Through these experiences, students will be recording data, gathering evidence and presenting it to their peers verbally and in writing in different formats both digitally and via poster sessions. Students will be able to explore specific real-world environmental issues and gain an awareness of the science behind these issues. Students will explore the impact of our growing human population and understand that they have a stake in the future of the environment.

The course follows guidelines established by the College Board with the goal to provide students with scientific principles, concepts, and methodologies required to understand interrelationships in the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternatives for resolving and/or preventing them, including environmental policies and legislation.

APES is interdisciplinary and incorporates a wide variety of topics from many different areas of study. There are several major unifying themes, or big ideas, that cut across the topics within APES. The following big ideas provide the foundation for the structure of the APES course:

1. Big Idea 1: Energy Transfer (ENG)
2. Big Idea 2: Interactions Between Earth Systems (ERT)
3. Big Idea 3: Interactions Between Different Species and the Environment (EIN)
4. Big Idea 4: Sustainability (STB)

In order for students to immerse themselves in the big ideas and content of the APES course, they will apply several major scientific skills and practices that allow them to engage in authentic scientific inquiry. The following scientific processes provide the foundation for the exploration of the APES course:

1. Science Practice 1: Concept Application
2. Science Practice 2: Visual Representations
3. Science Practice 3: Text Analysis
4. Science Practice 4: Scientific Experiments
5. Science Practice 5: Data Analysis
6. Science Practice 6: Mathematical Routines
7. Science Practice 7: Environmental Solutions

Students will understand the big ideas and perform the science skills and practices through deep study of nine major topics indicated by the College Board as the units of study. The units within the APES course with corresponding exam weighting are as follows:

1. Unit 1: The Living World: Ecosystems 6–8%
2. Unit 2: The Living World: Biodiversity 6–8%
3. Unit 3: Populations 10–15%
4. Unit 4: Earth Systems and Resources 10–15%
5. Unit 5: Land and Water Use 10–15%
6. Unit 6: Energy Resources and Consumption 10–15%
7. Unit 7: Atmospheric Pollution 7–10%
8. Unit 8: Aquatic and Terrestrial Pollution 7–10%
9. Unit 9: Global Change 15–20%

**Textbook and Resources:**

* **Primary Textbook:** Miller, G. Tyler., and Scott E. Spoolman. Exploring Environmental Science for AP, Enhanced AP Edition; 1st ed. Cengage. 2024
* *College Board Website*: <https://apstudent.collegeboard.org/apcourse/ap-biology>
* *AP Classroom:* <https://apclassroom.collegeboard.org>

**Materials:**

* 5 subject spiral notebook OR 3 ring binder with dividers
* AP Environmental Science textbook (online)
* Black or blue ink pens
* Pencils
* Lab Notebook (to be provided)
* Colored pencils
* Laptop & charger
* Lab coat (optional; can be kept in class)
* colored tabs (optional)
* 4-Function Calculator (no TI calculators!)

**Student Expectations:**

***Students in this course will be held to high expectations and mature responsibilities just as a college freshman taking an Introductory Science college course.***

The AP Environmental Science course is designed to provide students with an overview and understanding of the issues associated with environmental science from the perspective of ecosystem structure and impact, population balance and environmental interaction, pollution effects, resource utilization and impact upon the environment and human health. The AP Environmental Science course has been developed as a college-level, interdisciplinary approach that incorporates biology, geology, chemistry, geography and environmental studies. Tests, quizzes, lab reports and research projects are the major forms of student evaluation. The focus of this course is preparation for successful completion of the AP Environmental Science exam in May.

**AP Exam**

* Students in this class are **EXPECTED and HIGHLY ENCOURAGED** to take the AP Exam.
* **AP Environmental Science (APES) Exam—May 15, 2026**
* The AP Environmental Science Exam will test your understanding of the environmental concepts covered in the course units, as well as your ability to design research studies to solve environmental problems. Calculators are permitted for use in all sections of the exam.
* The exam is **2hrs 40mins.**

**Section 1 (80 minutes)** consists of 80 multiple choice questions and  includes individual, single questions as well as sets of questions that refer to the same diagram or data presentation; these may include data tables, charts, graphs, models, representations, and text-based sources. This section will be 60% of your score.

**Section 2 (70 minutes)** will consists of 3 free-response questions. There will be 1 question in which you’ll design an investigation and 2 questions which will ask you to analyze an environmental problem and propose a solution, one of which will require doing calculations

**Classroom Procedures**

* **DO NOW!**: As soon as students enter the room they are to begin working on the DO NOW assignment. This is a **TIMED** assignment and is worth a daily grade.
* **Tardies:** Tardy is defined as not being in your seat working on your DO NOW when the bell rings. Students who are tardy to class must sign in at the tardy station and it will be noted in Skyward. Parents will be notified at the 3rd tardy. At 4 tardies the student will receive detention. After 4 tardies, the student will be referred to the administrator. Tardies can also negatively affect the student’s participation grade on the **TIMED DO NOW** at the beginning of the class.
* **Make-Up work & Absences:** Make-up work is only given to students who have **EXCUSED** absences ONLY! **Make-up work is not for students who chose not to do or turn in assignments**. Make-up work is NOT to be discussed during class time. Students may log in to **Schoology** to access and retrieve missing assignments at any time. Absent students have **3 days** to receive and return make-up work to the teacher after they have returned to school. Students must have an **excused** absence in order to receive make-up work.
* **Late Work:** Late work will be accepted with a 10% reduction in grade for each day the assignment is late up to 5 days. After 5 days, the assignment will no longer be accepted and the student will receive a “0” for the assignment.
* **The Science Lab:** Students can ONLY participate in the science lab if they have returned a signed safety contract and they must receive at least 100% on their safety exam. **Students cannot participate in laboratory until these requirements are met.**
* **Restroom Procedure:** Students are HIGHLY ENCOURAGED to go to the restroom **BEFORE** they come to class. They may use the restroom if there is an emergency. However, restroom breaks are not allowed the first and last 10 minutes of class.
* **Cell Phone Usage:** Cell phones are not permitted to be on campus, as per the State of Texas and FBISD.

**Classroom Rules**

* **BE RESPECTFUL** to your teacher, your peers, yourself, and the classroom property.
* **BE PREPARED** with your materials for this class EVERYDAY.
* **BE ON TIME** to class EVERYDAY.
* **NO FOOD OR DRINKS** are to be brought to or eaten in the classroom.
* **NO ELECTRONIC DEVICES ARE TO BE SEEN OR USED IN THE CLASSROOM WITHOUT THE TEACHER’S PERMISSION**. After the previous warning any devices still seen will be immediately confiscated and given to the appropriate administrator. This includes cell phones, mp3 players, headphones, iPODs, iPADs, and tablets.

**Evaluation/ Grading**

* Evaluation of this course will consist of tests, laboratory reports, homework, quizzes, chapter reviews, online assignments, and projects.
* Quizzes will usually be short-answer and fill-in-the-bank. Tests will be multiple choice and essay. **Any missed major tests will result in a make-up exam that will be in essay form and must be completed within the allowable time frame of returning to school.** Students must make-up exams afterschool.
* The State Board of Education has set 70 as a minimum passing grade. When letter grades are recorded, the following conversions are used: 100-90 = A, 89-80 = B, 79-70 = C, 69-below = F

Students cannot make less than a 70 in the class. There is no make-up course for AP Biology.

* **Grading Scale** is as follows:

Daily Grades (classwork, homework, quizzes) 50%

Major Grades (exams, labs, projects) 50%

**Attendance:**

Students must be in attendance a minimum of 90 percent of the days after enrollment in the course.

*In the event that grading or attendance guidelines conflict with FBISD district policy, the district policy will be followed.*

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**(RETURN ONLY THIS SECTION OF THE SYLLABUS TO DR. FARNER)**

**Dr. Farner’s AP Environmental Science Syllabus Acknowledgement**

We, the undersigned, have read the syllabus above. We are aware of the student requirements, the course outline, and the classroom procedures for this class. We understand and will comply with the expectations set forth in this syllabus.

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Student Name **(Please Print)** Student Signature Date

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Parent/Guardian Signature Name (Please Print) Parent/ Guardian Signature Date

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Parent Contact Home Number Parent Work Number

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Parent Contact E-mail