**AP Environmental Science**

**2016-17**

**Course Description:** This is a college level course that provides instruction in the following seven areas: earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. It includes methods for analyzing and interpreting information and experimental data, including mathematical calculations. It also teaches students how to identify and analyze environmental problems, to evaluate the ecological and human health risks associated with these problems, and to critically examine various solutions for resolving or preventing them. This will be accomplished through various discussions and investigation including lab and field work.

**I. Topic Outline**

We will go chapter by chapter through the book (sometimes combining a couple of chapters) covering the AP Environmental Science Standards (see file on webpage).

**II. Materials/Resources**

Textbook: Environmental Science for AP\* by Andrew Friedland and Rick Relyea (W.H. Freeman and Co.; New York, 2012)

Graph paper, notebook paper, writing material

3-ring binder

Calculator (not allowed on the test but necessary for some assignments)

Access to internet

Smartphone with the Socrative app (not required but very helpful for quizzes)

**III. Grading**

 All grades are out of 100, but some grades count more than others because of their importance.

 Type of Grade Number of time grade counts

 Tests (Multiple Choice) 3

Tests (Free Response Questions) 2

 Projects 3

Quizzes 2

 Labs/Activities 2

 Homework/Daily work 1

**Quizzes:**

These are checks to make sure that you are keeping up with the material/reading. They will be 10 questions long and the Socrative Student app will be used. They will be multiple choice, T/F, etc. Calculators cannot be used.

**Tests:**

The AP test is 100 multiple choice questions and 4 free response questions. Each section is timed at 1 ½ hours. Guessing does not count against you and is therefore recommended. To help prepare you, tests will be AP-like in number of questions, type of questions, and in time allowed. Calculators cannot be used. Tests will generally follow the conclusion of each chapter, but some chapters might be combined. Two days’ notice of the exact test date will be given. The multiple-choice section will be 50 questions and timed at 45 minutes. On a different day, the Free Response Question (only 1) section will be given and timed at 23 minutes. Each will count as a separate grade (see above). Test corrections can be done on both sections for half-credit bonus, but they must be completed before the next test.

**IV. After-School Opportunities/Obligations/Bonus:**

 **Field Trips:**

There are many learning experiences available in our local community that are outside of our normal day’s reach due to time and budget. Each student should pick one from the following list to attend. Attendance will count as a test grade. Each attendance after that will count at 50 points bonus.

 Water Treatment Plant Field Trip

 Sewage Treatment Plant Field Trip

 Landfill Field Trip

 Transfer Station Field Trip

 Local Farm Field Trip

**Movie Nights:**

Clips of movies and videos will be used in class, but we do not have time to watch entire movies in class. When particularly poignant movies that are especially apropos are available, we will have a movie and popcorn night at the school (or other locations). It will be open to the school community (so friends are welcome). 25 general bonus points will be earned for attendance and proper behavior (not being disruptive and generally paying attention).

 **Saturday Review Sessions:**

The APES (and AP Chemistry) test is always the first AP test. This year, it will be May 1st at 8:00am. Saturday review sessions will be from 9am-12pm and will be offered: February 25th, March 25th, and April 29th. Each session attended will result in 25 bonus points to be added to the tests category.

 **Special Projects:**

 Students will need to form groups of 3-5 to complete the planning (1st trimester), implementation (1st , 2nd, and 3nd trimester), and presenting (3rd trimester) of a community project. It should be something that is in line with a student’s personal and possible career interests. Suggestions are presenting to the city council an ordinance to ban disposable plastic bags; creating videos/radio PSAs/etc for the recycling program in Madisonville; getting a community garden started at a school/apartment complex/nursing home; working with the school to get a solar panel installed. Students will work collaboratively to come up with an action plan, implement the plan, and present on the project. The class will work together to create a grading rubric for each phase. Some projects might also qualify entry into national competitions which is not required but highly recommended.

**VI. Study Aides:**

The following are resources that we will create throughout the year. They will be maintained in Google classroom and graded during the last trimester.

 List of Laws

 List of “Major Players” (authors, books, articles, movies, companies)

 Table of Toxins

 World Maps with labeled “index” (maps will be provided)

**Return this form to Mrs. Bailey by Friday, August 12, 2015 for the one of the *FIRST GRADES* of the year.**

**1) Signing to Recognize Receipt of Syllabus and Agreement with Expectations**

My child, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, has received the syllabus for APES taught by Mrs. Bailey*. We have read the expectations and grading policies*, and we agree to follow the expectations outlined above. As a parent/guardian, I agree to support Mrs. Bailey in any way possible academically and behaviorally.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Student Signature Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature Date

**2) Contact Information**

The best way to contact me (circle one):

home phone work phone cell phone e-mail other

Please explain other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3) Remind101 texting service**

If you would like **to be notified of upcoming tests, receive project reminders**, etc, please sign up for remind 101 text messages. Simply text “@24d52” to 81010. You will receive reminders about due dates and test dates as well as be able to text me with questions.

**4) Additional Information**

Please add anything that you feel Mrs. Bailey should know about your child, how they learn best, or ways that you might be able to volunteer or help support the class or our special projects: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_