## Advanced Placement Environmental Science (APES)

"You are capable of more than you know. Choose a goal that seems right for you and strive to be the best, however hard the path. Aim high. Behave honorably. Prepare to be alone at times, and to endure failure. Persist! The world needs all you can give." E. O. Wilson (1929-2021)

Dear Future APES student,

I'm so glad you have chosen to take AP Environmental Science for next year! This is a full year course that is the equivalent of an introductory level environmental science college course. Remember,  $AP \neq easy$ . This is an honors-level, advanced placement course, so you can expect a fair amount of work. Of course, the more engaged you are with the material, the "easier" it will be.

This course includes several outdoor lab activities to provide you with an authentic, undergraduate-level field-based experience. You will get outside and study portions of our campus that you may have never noticed before! Amity is so fortunate to be in the vicinity of wetlands and forests, rendering it a fantastic location for field study. In order to prepare you for the AP exam, I must finish the material in our textbook by the end of April. That means we will move quickly and you must keep up with the work. To start you off, here is your summer assignment.

**Important reminder**: Your submitted written responses must be your own. Do not collaborate with other students for these assignments. You will have future opportunities to do so, but this needs to be individually generated so that I can measure your level of introductory content knowledge, critical thinking and problem solving. All work is to be submitted via Google Classroom.

- I. Read Garrett Hardin's controversial essay "<u>Tragedy of the Commons</u>" and watch The Lorax (1972 version- old school ⊙ ...your folks may want to watch with you):

  <a href="https://www.youtube.com/watch?v=FSSrYnc1yQs">https://www.youtube.com/watch?v=FSSrYnc1yQs</a>. Compose thoughtful and thorough responses to the four prompts below and submit your assignment via Google Classroom by **Friday**, **September 2, 2022**.
- 1. The Lorax is a good illustration of the Tragedy of the Commons as written by Garrett Hardin. Explain the idea behind that essay, and relate it to the television special. What are the commons in the world of the Lorax?
- 2. What is the Law of Unintended Consequences? Give one example of an unintended consequence that arose from clear-cutting the Truffula trees.
- 3. This story is a great example of unsustainability. What does sustainability mean to you? What could the Once-ler have done differently with the Truffula forest that would have been more sustainable?
- 4. Describe an example of a resource that the human population is currently using at an unsustainable rate. What is, or could be, an unintended consequence of this?
  - II. Read Chapter one and two from the APES textbook. Create a notes outline of both chapters. Take notes in any way that you prefer. Stuck on how to do this? Check out different note-taking formats presented in this link from UNC <a href="https://learningcenter.unc.edu/tips-and-tools/effective-note-taking-in-class/">https://learningcenter.unc.edu/tips-and-tools/effective-note-taking-in-class/</a>. Focus on the most salient pieces of information from each chapter instead of writing down every single word. Be sure to include major vocab terms, especially ones you are unfamiliar with. (I included a

<u>vocabulary list</u> for your reference). Submit your notes in Google Classroom by **Friday**, **September 2**. We will quickly review this material in class after school begins. You are <u>not</u> required to complete the practice quizzes and review questions at the end of the chapters but it is always a good idea if you do.

- III. The AP exam has math-based questions. Look at the handout "APES Math and Equation Review" and submit the "Summer Review of Basic Mathematical Skills" via Google Classroom by Friday, September 2. Show your work to receive full credit! If you choose to handwrite the solutions, please take a photo and upload it to Google Classroom...Otherwise a typed copy is fine.
- IV. Flat Lorax- (APES version of Flat Stanley)- This is an ongoing project that you will start this summer! Cut out and color in a Lorax and include your first name and last initial on the front. Carry your Flat Lorax with you everywhere. You could keep it in your wallet or in your phone case. You never know when an opportunity to take a picture will come up. Read the project instructions and submit at least two Flat Lorax slides by Friday, September 2.

## V. Choose #1 <u>or</u> #2

- 1. Go outside and take a hike...even a short nature walk will suffice! AllTrails is my go-to app for finding places to explore wherever I am. Be sure to take a friend and bring your cellphone, bug spray, sunscreen, plenty of water and snacks...and of course, let your parents/guardians know (or even bring them along). If you venture out, take a picture at both the starting and ending points of the trail next to some type of marker, along with any interesting spots or findings along the way (animal tracks, cool rock formations, invasive plants, etc.). iNaturalist is another great app and this will help you identify plants and animals. Submit your photos and a brief summary of your hike in Google Classroom by Friday, September 2. This is a great Flat Lorax opportunity!
- 2. Join a Citizen Science initiative! Visit <a href="https://scistarter.org/">https://scistarter.org/</a> and find a project that you are interested in. There are TONS to choose from and many can be conducted remotely and fairly quickly! I like iNaturalist, Globe at Night, Stream selfie...other suggestions can be found here:

  <a href="https://www.experientiallearningdepot.com/experiential-learning-blog/20-citizen-science-projects-for-stude">https://www.experientiallearningdepot.com/experiential-learning-blog/20-citizen-science-projects-for-stude nts-of-all-ages</a> Submit a brief summary of your chosen initiative and describe the data you collected in Google Classroom by Friday, September 2.
- VI. Finally, visit, review and bookmark the <u>AP Central</u> website at <a href="https://myap.collegeboard.org/login">https://myap.collegeboard.org/login</a>. This is the organization that sets the standards for AP courses. We will adhere to the standards set by AP so that your work will best prepare you for the AP exam. I will send out class codes for you to join our APES class as soon as I receive them.

## Everyone:

• Be able to recognize poison ivy. This will be your first "quiz" when we return to school. Don't touch the stuff:

Have a great summer! See you in August.

Sincerely,

Mrs. Nork

