

Advanced Placement Biology

SUMMER ASSIGNMENT 2019-2020

TEXTBOOK USED: Biology, 8th edition. Campbell, Reece, Urry, Cain, Wasserman, Minorsky, & Jackson

1. **Plant a Seed**; Put dirt in a cup, put a seed in the dirt, add water, put it in the sun...try to keep it alive. Keep a journal. Collect data as a scientist, put down **ALL** the relevant information. If it dies, plant another. Bring your plant in the **first day of school**. This takes at least 6 weeks so start this before July 10th. If you are traveling and can't grow a plant, then please keep a photo journal and bring that the first day of school. The journal should include at least 10 plants that you observe.

2. **Read Chapters 52.4, 53 – 55, 56.1, & 56.4** in the textbook; You will need to get a book from the book depository and take notes in a different notebook than your plant journal on the ecology chapters in the book. You will continue to use this notebook for your readings throughout the rest of the year. We will have a vocabulary quiz from these chapters on 9/6/19. Your notes and vocabulary notebook will also be due the **first day of school (9/6/19)**. If you would prefer to do the study guides for these chapters, you can print them from my website: jenniwilkening.weebly.com

3. **REQUIRED SUMMER READING: due 9/3/19**;

You must read one of these books over the summer. Write an essay about what major biological concept(s) are dealt within each book. Include some examples of how the major concept is addressed in the book. Explain why it is an important concept for us to know about and understand. What did you like about the book? What did you dislike? Each essay should be 500- 750 words. Start at the top of the first page. Include your name, the title of the book, and the author's name.

- Abraham Lincoln's DNA by Philip Reilly available for check out from the book depository
- The Hot Zone by Richard Preston available for check out from the book depository
- The Beak of the Finch by Jonathon Weiner from AADL
- Silent Spring by Rachel Carson available from AADL
- Your Inner Fish by Neil Shubin available from AADL
- The Gene: An Intimate History by Siddhartha Mukherjee available from AADL

The AP Biology course is designed to be the equivalent to 2 semesters of a college introductory biology course usually taken by biology/ science majors during their first year. AP Biology includes those topics regularly covered in a college biology course for majors and differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. College biology majors also use the textbooks used for AP Biology and the labs done by AP Biology students are equivalent to, or the same as, those done by college students. Therefore, the expectations are the same for AP Biology students as college biology majors. There will not be traditional homework assignments. You are expected to read the textbook every night and take notes on each chapter. This is in addition to any notes taken during class.

Classes will consist of inquiry-based labs, lectures, videos, case studies, presentations and cooperative group work. There may not be make-up lab sessions for every lab, so it is extremely important that you attend class regularly. There will also be quizzes and exams. Additionally, there are assignments done outside of class during each marking period that cover material not covered in class. The level of expectation for this type of course is very high. Only students who are truly committed to high standards of excellence and commitment will succeed in AP Biology.

This course is taught in the anticipation of having students take the Advanced Placement Exam in Biology and do well. In addition, we will take several field trips during the year, including visits to the University of Michigan Natural History Museum, the Toledo Zoo, and ecological studies in Pioneer Woods and Prairie.

COURSE REQUIREMENTS:

- Lab Practical (in place of a final exam—semester 2)
- Chapter Overview Reading assignments
- Tuesday Peer Review Research Share
- Fun Fruit Friday

In order to be successful in AP Biology, you must have a very strong background in chemistry and biology, and be able to work cooperatively in a group. You should have received A's or B's in all science classes you have taken. You must also be willing to ask for help. I will be more than happy to work with you because my job is to help you be successful.

Have a great summer, and see you in September.

Mrs. Wilkening

Questions?

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