

## AP Biology Summer Assignment and Requirements 2019-2020

**WELCOME TO AP BIOLOGY!** We hope you are looking forward to an exciting semester. There will be 3 classes of AP Bio next fall: 2 sections will be taught by me (Mrs. Phillips) and one section will be taught by Mr. Walstead. Both of us share the same methodology, therefore this assignment is required by both teachers. Since this is a college level course (typically taught in 2 semesters) and we must complete it in only one semester, it will be fast paced and challenging, as well as demanding a great deal of time both in and out of the classroom. Our classes will primarily operate as 'flipped classrooms'. This essentially means that class time is devoted to activities and labs that require mastering both application and analytical skills. This means you must view 'lecture' videos, as well as reading and studying Power Points, Prezi presentations and chapters from your book, while at home. In addition, these assignments & viewings must be done 'ahead' and PRIOR to the class activities to be successful in the class. For more information, please be sure to review the class syllabus from last year on my blog at [www.phillipsscience.com](http://www.phillipsscience.com). If you're up to the challenge (and we hope you are!), get started by completing the assignment (explained below) before the beginning of the school year. This assignment is due the **first day of school** and will count as your first grade. All answers for the assignments must be handwritten, and your work must **ALWAYS** be your own!

1- There will also be a QUIZ the first week of school, likely the 3<sup>rd</sup> day of class over the 'Intro to Statistics' summer assignment, as well as Chapters 1-3 from the new Campbell 'Biology' 11<sup>th</sup> edition online text. Since that online text may not be available to you until school begins, there are 2 other options for those who want to get started early.

A) The above chapters are comparable to Chapters 1-4 from the 8<sup>th</sup> edition Campbell Biology text that we used previously for many years. If you are reading this before school is out for summer break, and you want to get a head start, I have about 20 copies of the 8<sup>th</sup> edition available to check out for the summer.

B) Another option is this excellent free online text to use:

<https://openstax.org/details/books/biology-ap-courses>

The above chapters (from the Campbell 11<sup>th</sup> edition) are comparable to both Chapter 1 and Chapter 2 (only sections 2.1 and 2.2 are on the 1<sup>st</sup> quiz)

2- The Campbell 11<sup>th</sup> chapters 1-3 are concepts that were covered in first year biology and chemistry classes: Themes of Biology; Scientific Inquiry; Chemical Context of Life; Water and Life. It is advised that you review these concepts over the summer. Questions for these chapters will be given the first day of school and will also be accessible on my blog before school starts. They will be due on the 3<sup>rd</sup> day of school (the day of the quiz).

3- There is a possibility that both Mr. Walstead and I will have our class codes for the Campbell 11<sup>th</sup> edition during Wildcat Daze, when you receive your schedules. You can check with us then and see if the codes are available. If not, you will receive them on the 1<sup>st</sup> day of class.

**In addition to the Summer Assignment, here are several other things that are recommended:**

1- I **HIGHLY** recommend that you purchase the latest version of the 'AP Biology Test Prep Series' paperback book by Pearson Education, as I only have ONE class set for all classes and you will not be permitted to take them home. **Make sure the edition is 2013 or newer.** You can find them on Amazon, as well as several other places.

2- Go to my blog ([www.phillipsscience.com](http://www.phillipsscience.com)) and click on AP Biology (it may still say '2018-19', but I will change that sometime over the summer). Get familiar with the site and look over the requirements for each unit. I will post the Remind link for 2019-2020 during pre-planning at the end of July.

3- Go to [www.collegeboard.org](http://www.collegeboard.org) & **register for an account**. Go over the 'Course Descriptors', 'Formulas Sheet' (yes, there is math in this course), etc. for AP Biology and get very familiar with the standards and requirements.

4- You must purchase (at least) **2 'composition notebooks'** (google it and refer to 'Images' to see a picture of the type of notebook required) for this course, along with a **large 3 ring binder** (2+ inches). One composition notebook

will be for lab data and problem solving (as well as a few virtual assignments). Another comp notebook is for the "Henrietta Lacks" book assignment (explained in #4, below). Graph paper is also required, along with pencils, black pens, a red pen. A highlighter is recommended.

**The Summer Assignment is as follows:**

1. **Introduction to Statistics- [click here](#) (you may have to download it from my blog for the links to work):** The College Board AP Biology Exam requires that you are proficient in data & statistical analysis. The Exam and Standards were revised in 2013 and there are many questions integrated with statistics, as well as other mathematical equations. You should look over the [AP Biology Formula Sheet](#) on the College Board website (there is also a link on my blog). It is most challenging to master the depth of biology content required for this course in one semester (it is the equivalent of a 2 semester college course), hence it is essential to get started on understanding and applying some of the mathematical concepts and equations prior to the start of the course. This assignment is due on the **FIRST DAY** of the semester. This material will also be on the first quiz, given the first week of the semester. (\*NOTE- If you cannot access the statistics assignment from the above link, it is on my blog).

**Recommended (but not required) to start over the summer:**

2. Questions for Chapters 1-3 (11<sup>th</sup> edition) will be given to you on the 1<sup>st</sup> day of class and will be **due the 3<sup>rd</sup> day of class (quiz day)**. They will also be accessible on my blog before school begins, if you would like to get a head start. There will be no class time for reviewing the information from these chapters, but you must be able to apply these concepts throughout the course (ex- hydrogen bonding, polarity, specific heat of water, natural selection, etc.).

3. Some of you may want to begin the semester book project: *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. This book is extremely relevant to our course, so we will explore it further. **The first installment of questions is due on Friday, August 16, which is the 2<sup>nd</sup> full week of school.** Some of you may want to get a 'head start' on this. You must follow the appropriate guidelines **EXACTLY**, as outlined in the [link on my blog](#). All installments will be averaged as a **test grade** and each installment (there are 4) is due monthly (schedule TBA). A hard copy of the guidelines may also be available in the plastic bin outside my door during the last few days of this school year. **FYI:** I have around 12 copies of the book (first come, first serve) if you would like to stop by my room (515) before the current school year is over and check one out. The paperback is available for purchase on Amazon, as well as other sites. Even if you decide to wait and start the book once school starts in the fall, you **NEED TO ATTAIN A COPY PRIOR TO THE 1<sup>st</sup> DAY OF SCHOOL** in order to complete the 1<sup>st</sup> installment on time.

4. I will periodically check my school email between the end of May until pre-planning in July, but likely no more than once every week or so. Therefore, if you have any questions, it would be in your best interest to complete the 'Summer Assignment' earlier in the summer, rather than later, as it may be a week or more before I get back with you.

We hope you enjoy the summer and really are looking forward to having you in class next year!

Mrs. Phillips and Mr. Walstead