



## Mrs. Jackson's AP Biology Summer Assignment

### AP Biology Course Description:

Advanced Placement Biology is designed to offer students a solid foundation in college level introductory biology based on the belief that many students are ready for college work while still in high school. This course is aligned to the College Board AP Biology Curriculum Framework and is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

Upon completion of the course students should be able to have the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Students who earn a qualifying score on the AP Biology Exam are typically eligible to receive college credit and placement in an advanced science courses in college; **please note** that this varies by university, so please investigate the AP Exam scores the colleges to which you are applying accept.

Also, because this course is extremely rigorous it is recommended that you have had an A in Biology, Chemistry, and all math courses up to this point. This course will require a good amount of work to be completed outside of the classroom, so time management is of the utmost importance.

### Summer Assignments:

AP Biology is a vigorous, yet manageable and rewarding class. To meet the demands of the curriculum it is necessary for you to complete some work before you come back in August. The College Board Objectives outline for AP Biology is broad and deep. We have the months of August-April to complete the curriculum. The AP testing is in May.

Thus, we must dive into our learning during the summer months.

There are three parts to your summer assignment. The first two may be completed at any point. The third part will be on Canvas and available two weeks before school begins. **All assignments will be due the THIRD class meeting day.**

## **Part 1: Introductory Letter- Requested ASAP**

We will engage in a great deal of collaborative learning. It is important that you now, as a young adult getting ready to enter college, work on email communication. I expect that you might struggle throughout the year, and I hope that you will keep an open line of communication with me. You will write a letter of introduction to Mrs. Jackson at [pjackson@madison-schools1.com](mailto:pjackson@madison-schools1.com). Please remember you are likely writing a letter that's making your first impression on a new teacher, so check for grammar/spelling and appropriate phrasing before sending. Please include the following:

- Subject Line: AP Biology 2022-2023 and your name (example: AP Biology 2022-2023: Jill Smith)
- Body: Greeting (Hello, Dear Mrs. Jackson, etc)
  
- Introduce yourself:
  - a. What's your name?
  - b. Do you have a nickname that you go by?
  - c. What grade are you in?
  
- Courses:
  - a. What science classes have you taken so far, and who was your teacher for them? What was your final grade for the courses?
  - b. How many AP classes have you taken before this year? How many have you passed with a 3 or higher?
  - c. What subject area(s) are you most interested in continuing in college?
  - d. Is there anything that you've especially liked or disliked about your earlier biology classes?
  
- Yourself:
  - a. What do you like to do (hobbies, sports, music, interests, etc.)?
  - b. Tell me about your family (siblings? Who do you live with? How would you describe them?)
  - c. Do you have a job or plan on getting a job next year? What kind?
  
- Learning:
  - a. What are your personal strengths when it comes to learning new material?
  - b. What causes you to struggle in a course? How do you address that challenge?
  - c. What is the most effective way you've found to study for a test?
  - d. How would you describe yourself as a learner?
  - e. How would you describe yourself as a team or group member?
  
- AP Bio:
  - a. What are you looking forward to most in AP Biology?
  - b. Do you have any concerns coming into AP Biology this year?
  - c. Why are you taking AP Biology? What do you hope to accomplish/gain from this course?
  
- Picture:
  - a. Please attach a picture of yourself where your face is clearly seen (hopefully doing something you love or one of your favorite activities!)
  
- Closing, your name

## **Part #2: Vocabulary Photography Component**

Listed on your AP Biology Vocabulary List is over one hundred important terms in the AP Biology curriculum. You must select 50 of these terms to use in your summer work. *For the first 25 words, select from the first two sections of the listed terms.* These will be due in Canvas on the 3rd day of class (100 points). *For the second 25 terms (100 points) select from the remaining listed terms.* They will be due exactly five weeks from the first day of class. Read the due dates at least three times so that there are no excuses or confusion as to when the words are due. *You will end up submitting two SEPARATE google/PowerPoint slides presentations, with information on 25 vocabulary words for each presentation.*

**Don't stress over this if you follow directions, you will get an "A".**

- A) You will need to take an ORIGINAL PICTURE of an example of the vocabulary term or one that can be related to the term. A different picture for each term. A picture can't be used more than once. Do not take pictures of pictures. You may draw pictures out. For the picture to be original, *you must place an item that you own like a picture of yourself, cell phone, ring, or your own face etc... beside that of the picture.* It should also include the date that the picture was taken. Use your pictures to create a Google slide or PowerPoint presentation.
- B) Under the word (FIT) describe how your picture fits the definition of the vocabulary term and
- C) Under the word (Definition) write the definition of the term, the function and use of that item in nature.
- D) You may choose any of the words below for your 50 pictures (however, the first 25 words MUST be from the first two topics-Scientific Process and Biochemistry, on the vocabulary list you should have also received during the meeting). Please be sure to keep up with this list as it will come in handy all year long.

## **Part 3: Statistics and Biochemistry Review**

This part of the summer assignment will not open until July 18<sup>th</sup>. The reason for this is because I want this as fresh on your minds as possible. Please keep in mind we do not have near enough time to cover everything that needs to be covered during the year so you will be expected to be proficient in some topics based on work done outside of the classroom. Two of those topics are statistics and biochemistry.

I will add you to a summer AP Biology Course on Canvas. There you will be able to access the Module for the third and final part of your summer assignment. I will also send out a follow up email to you from your introductory letters to remind you that the course has been published and your assignment is now available.

### **Suggestions:**

Please do not wait until the last minute to complete these assignments as you will have other assignments given to you during the first days of school. I do not want you to get behind from the start.

As always, if you have any questions, please email me. I plan to check my emails at least once every Wednesday morning during the summer so be patient if you send it, but I will respond.

Can't wait to get to know all of you next year,

Mrs. Jackson