

# AP Biology Summer 2025-2026

Mrs. Huntington (formerly Wittke)

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Welcome to AP Biology! Please read the following pages carefully and submit the assignments adhering to the deadlines listed. Please feel free to contact me with any questions.

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## **AP Biology Background**

AP Biology is a college-level biology course. The benefits of taking this class include the following: exposure to rich and rigorous science curriculum, a quality point added to your GPA, the possibility of earning college credit for taking and passing the AP Exam. Some colleges offer between 1-3 semesters of college biology credit for making a 3 or higher on the exam. For information regarding a specific college, check that school's admissions page.

Throughout the course of AP Biology, the content is varied and comprehensive. The students will investigate topics in the areas of Biochemistry, Cells, Cell Signaling, Cell Energetics, Evolution, Ecology, DNA Processes, and Biotechnology. The class format involves lecture, reading, labs, case studies, and research.

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## **Required Skills**

In order to succeed, students have to be self-motivated and willing to utilize problem solving skills. Students will be expected to keep up with the unit calendar and deadlines with very little prompting. In this class, writing is an essential skill. Free Response Questions will be found on every quiz or test. Lab reports and case studies can range from 1-2 pages to 8-10 pages. Vocabulary is also an essential skill. Biology can be like a second language. If vocabulary does not come naturally, students should commit to identifying and learning key terms for each concept topic.

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For additional general course information, make good use of the College Board website.

<https://apstudents.collegeboard.org/courses/ap-biology>

# Summer Tasks 2025-2026

## **1. Email and Communication**

**DUE JULY 15, 2025**

By July 15, please send an email to [huntifa@boe.richmond.k12.ga.us](mailto:huntifa@boe.richmond.k12.ga.us). It would be convenient, but not required, if everyone used their school email address for communications.

In the subject line, put **your name—AP Biology**. (Ex. Rachel Carson—AP Biology)

In the body of the email, answer the following questions. You do not have to repeat the questions. You do not necessarily have to answer in complete sentences.

1. Your name—first and last. Also include the name you prefer to be called (if different from your given name).
2. In what grade will you be during the 2025-2026 academic year?
3. AP classes you have previously taken and your final grade for those courses.
4. Have you taken Anatomy & Physiology or will you be taking that course this year?
5. List of AP classes you will be taking during the 2022-2023 academic year.
6. List your fine arts area(s)
7. All-time favorite DFA show
8. All-time favorite hobby or activity
9. Favorite candy or snack
10. Summarize your family in one sentence
12. Explain in a sentence or two why you have chosen to take AP Biology.
13. Do you have any concerns or curiosities about taking AP Biology?
14. What are your plans after graduation?

***Communication will be via school email or Canvas Inbox (when it becomes available). It is your responsibility to check and respond to messages.***

## **2. Graphing and Data Analysis Packets**

**DUE FRIDAY 8/8/2025**

On the webpage, there will be two packets. One is a reference packet about various different kinds of graphs. The other is a practice packet of graphing, analysis, and questions. You may complete the work in whatever format is convenient for you: printed sheets and handwritten, handwritten on notebook paper and graph paper, typed, or using digital graphs (from Excel or another software program).

## **3. Chemistry Review**

**FOR REFERENCE ONLY**

A primary focus of this course is biology at the molecular level. Therefore, this course is very intensive in (among other topics) cellular structure, organelle functions, and biochemistry. There are some basic chemistry topics that ALL students should be familiar with prior to the beginning of this course. Most of these topics were covered during the chemistry semester of Physical Science that DFA students took in 8<sup>th</sup> grade. All AP Bio students should make sure they are familiar with the following topics and should review on their own using available resources. There are many appropriate resources online, such as Khan Academy, Crash Course, and Bozeman Science. Use whatever makes you most comfortable. Please make sure you're familiar with these topics before school starts. Our second unit covers the Chemistry of Life and Intro to Biochemistry.

### Chemistry Topics:

General atomic structure  
Valence electrons  
Ionic Bonding  
Covalent Bonding

Hydrogen Bonding  
The general properties of water  
pH  
Acids/Bases

**Suggested Khan Academy pages.**

**Attempt the practice units and quizzes (if available).**

[Important Molecules for Biology](#)

[Intro to Macromolecules](#)

[Structure & Function of Macromolecules](#)

[Water and Life](#)

**Amoeba Sisters Videos**

[Properties of Water](#)

[Biomolecules](#)

[Protein Structure & Folding](#)

[Enzymes](#)