Advanced Placement Biology Syllabus

RCTCM, Room 123D
Mrs. Juanita Walden
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Welcome to AP Biology! This course is extremely rigorous which means that much of the content learning is your responsibility. More class time will be devoted to application of that content. Our goal is to prepare you for the AP Exam in May while enjoying and critically analyzing as much biology as possible through collaboration. You will possibly work harder than you ever have but be rewarded by the process.

Course Overview

AP Biology is equivalent to two majors-level collegiate biology courses. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interactions. **(from College Board)**

The course focuses on the Big Ideas in biology and their connections. The curriculum provides a basis for students to develop strong conceptual understanding in biology and the opportunity to integrate that knowledge through inquiry-based activities and laboratory investigations. There is less memorization and more content depth. **Critical thinking skills are *extremely* important for developing understanding.** To master concepts, students will learn through a variety of methods including labs, science practice activities, videos, case studies, POGILS, and scientific journals. There is an emphasis on **analysis of data and statistics** to help us make sense of our investigation and to develop scientific arguments.

Prerequisite

It is recommended that students have successfully completed high school courses in biology and chemistry.

AP Biology Course Content (from College Board)

The course 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.
The following are Big Ideas:

- **Big Idea 1: Evolution (EVO)**: The process of evolution drives the diversity and unity of life.
- **Big Idea 2: Energetics (ENE)**: Biological systems use energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
- **Big Idea 3: Information Storage and Transmission (IST)**: Living systems store, retrieve, transmit, and respond to information essential to life processes.
- **Big Idea 4: Systems Interactions (SYI)**: Biological systems interact, and these systems and their interactions exhibit complex properties.

We will follow the College Board AP Biology Course and Exam Description (CED)
https://apcentral.collegeboard.org/media/pdf/ap-biology-course-and-exam-description-effective-fall-2025.pdf
The CED is your best study guide for the AP Exam. It details everything you need to know.

Semester 1	Semester 2
Unit 1: Chemistry of Life (Intro to Science Practices and Statistics integrated into unit)	Unit 5: Heredity
Unit 2: Cell Structure and Function	Unit 6: Gene Expression and Regulation
Unit 3: Cellular Energetics	Unit 7: Natural Selection
Unit 4: Cell Communication and Cell Cycle	Unit 8: Ecology
Semester Cumulative Exam	(**AP Bio Exam Mon, May 4, 2026 - morning exam)**

Science Practices (from College Board) – Integrated throughout the course
Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Biology students. The six science practices include:

1. **Concept Explanation**: Explain biological concepts, processes and models presented in written format.
2. **Visual Representations**: Analyze visual representations of biological concepts and processes.
3. **Questions and Methods**: Determine scientific questions and methods.
4. **Representing and Describing Data**: Represent and describe data.
5. **Statistical Tests and Data Analysis**: Perform statistical tests and mathematical calculations to analyze and interpret data.
6. **Argumentation**: Develop and justify scientific arguments using evidence.

Lab Requirement (from College Board)
This course requires that at least 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

AP Exam College Credit
Colleges vary in what score they will accept for credit. A score of 3 or better is passing.

AP Biology Exam - The AP Biology Exam will be administered on **Monday, May 4, 2026 (morning)**. The exam consists of the following:

Section I
Multiple choice - 60 Questions (1 Hour, 30 minutes) - 50% of Exam Score

- Discrete Questions
- Questions in sets

Section II
Free Response Questions (FRQs) - 6 questions (1 Hour, 30 Minutes) - 50% of Exam Score

- Question 1: Interpreting and Evaluating Experimental Results (8-10 pts)
- Question 2: Interpreting and Evaluating Experimental Results with Graphing (8-10 pts)
- Question 3: Scientific Investigation (4 pts)
- Question 4: Conceptual Analysis (4 pts)
- Question 5: Analyze Model or Visual Representation (4 pts)
- Question 6: Analyze Data (4 pts)

At the end of each unit, an exam will be given, which is a combination of multiple choice and free response FRQ). There will be a comprehensive final exam at the end of each semester.

Grading: Formative work will be day-to-day assessments that will help us work towards mastering the CED. Summative assessments are used to evaluate student learning at the end of an instructional period. Your AP Biology grade will be calculated using the following percentages.

Assignments (Classwork, Homework, most Labs, Quizzes, Computer Work/Simulations) 40 %
Assessments (Unit Tests, Projects, Lab Reports/Posters 60 %

Late Work
Students are expected to submit assignments on time. Multiple incidents of late work may result in teacher student-parent conferences to examine and correct the student's work habits through an academic contract. Late work will be reduced by 5% per school day for a 25% maximum reduction (five school days). Late work submitted after the fifth school day will only be accepted at the teacher's discretion. Completing work in a timely manner during the learning unit is essential for academic success. Students are given ample time to complete their work both in and outside of class. Additionally, students and parents may contact me if they have questions about the work or need assistance meeting the due dates.

Supplies Needed: Scientific Calculator, 3-ring Binder, Notebook Paper, Colored Pencils, Highlighters, Note Cards, Composition Notebook, Pens (Exam Essays MUST be written in blue/black pen like on the AP Exam), Pencils, handheld pencil sharpener & earbuds/headphones

Textbook: AP Edition, Campbell Biology 12 Edition. Pearson. We will also use AP Classroom which is essential to success!!!

Remind Code: text @waldenap2 to 81010

Tutoring
If you need extra help, please attend my Wednesday tutoring sessions after school from 3:30-4:30pm. Let me know on Tuesday if you plan on attending for that Wednesday**.**

This is a college-level course. Behavior should not be an issue.

Be Respectful

- Be on Task
- Follow Directions
- Use Appropriate Language
- Listen Attentively
- Care for Textbooks, Equipment, and Technology

Disciplinary Policy
1st Offense- Verbal Warning
2nd Offense-Refocus Station
3rd offense-Parental Contact
4th Offense-Parent/Teacher Conference
5th Offense- Administrative Referral

Steps 1-4 may be eliminated if the student's behavior is severe enough to require disciplinary action by any administrator. In this case the student will be immediately sent from the class to the office, or the front office will be contacted and asked to send someone to escort the student from the class to an administrator.

RCSS Cell Phone Policy

No Cell Phones During Instructional Time: Students cannot use cell phones, smartwatches, headphones, or other electronic communication devices during the instructional day. This includes class periods, changes, study halls, and other structured or non-structured instructional activities.

Devices Must Be Out of Sight: All electronic devices must be stored out of view during the instructional day. This applies to all areas of the school, including common areas, hallways, restrooms, and locker rooms.

Emergency Communication: In emergencies, students may use the main office to make necessary calls. Parents and guardians can also contact their children by calling the school's main office, where staff can relay urgent messages. Our anonymous Safety Tip Line is also available to share concerns about student or school safety at (706) 828-1077.

This syllabus is subject to change.

AP BIOLOGY PARENT/STUDENT AGREEMENT 2025-2026

The purpose of the AP Biology Parent/Student Contract is to provide information to parents and students and to facilitate students' success in an academically challenging course. Please read carefully the list of expectations below and then sign the form at the bottom confirming your commitment to AP Biology.

1. I recognize that successful participation in AP Biology requires me to:
    a. Demonstrate increased student independence
    b. Check infinite campus, AP Classroom, weekly agendas, and Canvas regularly.
    c. Take on a high degree of responsibility
    d. Meet higher standards than other high school classes because it is a college-level course.
    e. Review prerequisite knowledge, especially if I elected to take the course without the suggested College Board requirements.
2. I understand that AP Biology is the equivalent of a college level majors biology course and therefore, requires the same amount of work as a college level majors biology course (homework nightly).
3. I understand that between labs, lectures and reviews, **it is difficult to make up a missed class or most of the labs**. It is, therefore, essential to attend every class/lab and be prepared to participate. If absent, I will contact Mrs. Walden for missed work and to schedule make-ups.
4. I understand that to cover everything that may appear on the AP Biology Exam, this course must proceed at a rapid pace. Therefore, if I am unclear about any topic that has been covered in previous classes (Biology and Chemistry) it is my responsibility to seek help outside of class to keep pace.
5. I recognize that the material covered in AP Biology is extremely challenging. I also recognize that while my grade in this course and the score I receive on the AP exam matter, the amount and quality of knowledge I take from this class to college is most important.
6. I understand that additional opportunities may be provided to help prepare for the AP Exam. It is up to me to take advantage of those opportunities to help to review and prepare for the AP Biology exam on **Monday, May 4, 2026, during the morning session.**
7. I understand that Mrs. Walden's tutoring day is Wednesdays after school from 3:30-4:30pm.

I have read the above agreement and the class syllabus for AP Biology and confirm my commitment to this class.

Student name _____**(printed)**

Student signature_____

Parent signature_____

- **Join Remind: text @waldenap2 to 81010**