



ADVANCED PLACEMENT BIOLOGY

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2024/2025



Campbell Biology, AP 12th Edition

AP Biology Investigative Labs: An Inquiry-Based Approach. The College Board, 2019



Course materials, announcements, and other important resources and information can be found on the Advanced Placement Biology 2024/2025 Google Classroom.



- One 3-inch binder with ten tab dividers
- Scientific or graphing calculator
- CVUSD issued Google account



Electronic devices, when not utilized as a teacher-directed learning tool, are strictly prohibited in class. Cell phones must be kept off and in sight for the entirety of the period on exam days. Failure to do so will result in a score of zero on the exam.



Advanced Placement Biology is the equivalent of a two-semester college introductory biology course for biology majors and is designed to prepare students for the AP Biology Exam. Students should have successfully completed high school courses in biology and chemistry. Emphasis is on experiencing science as an exploratory process, the development of critical thinking skills, and integration of biological knowledge and science practices through inquiry-based activities and laboratory investigations.

As outlined in the College Board AP Biology Curriculum Framework, this course is structured around the four Big Ideas and their respective Enduring Understandings, Essential Knowledges, and Learning Objectives. The Big Ideas, shown below, encompass the core scientific principles, theories, and processes governing living organisms and biological systems. Appreciation for the study of life and an understanding of unifying principles within a diversified biological world are fostered through student-made connections between the 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 utilize free 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 possess complex properties.



Essential components of the course include inquiry-based laboratory work and the use of the seven science practices in both laboratory and non-laboratory activities. Laboratory activities will make up at least 25% of instructional time. A minimum of two laboratory activities in each big idea will be conducted. Students are responsible for keeping and maintaining a record of all laboratory investigations. Students will also communicate their laboratory results through formal reports, group presentations, poster sessions, and summaries of literature and scientific investigations.

Due to the immense time involved in laboratory setup and the perishable nature of many of the laboratory materials, students will be expected to make up laboratory activities within one day. It is impossible to make up a laboratory activity after that.



Being that this is a college-level course, students should expect a workload equal to what would be encountered at a four-year university. The typical college formula is that students will spend roughly 3 hours of their own time per hour spent in class. The expectation is that you will do your very best, focused, effort on all in-class and take-home activities.

Due to the large volume of course content and limited class time, emphasis will be placed on practicing the process of biology during class. The dissemination of basic content knowledge is primarily handled through the readings and resources contained within the Pre-Discussion Assignments, textbook, review questions, guided notes, and Questions to Consider. As such, you are required to interface, engage, and interact with course material before class. It is expected that you will have done this, and the style of the discussion and scheduled class activities are based on this assumption.

There will be situations and content on exams that will not be specifically discussed in class prior to their appearance on exams. This is very different than many other types of courses you might have taken. A good rule of thumb is that any content covered in the Pre-Discussion Assignment, textbook, guided notes, review questions, and Questions to Consider could appear on an exam, regardless of whether or not we have discussed it specifically in class. Reading and reviewing the aforementioned materials outside of regular class time is absolutely crucial to your success in the course and on the AP Biology examination.

Course examinations are modeled after the AP Biology examination and are cumulative, 2-day long assessments consisting of 30 multiple choice questions and 3 free response questions. These examinations occur monthly, on or around the last school days of each month. A simulated full-length AP Biology exam will occur in the spring and will serve as the course final examination.

Quizzes, both announced and unannounced, will occur weekly. Three of these quizzes will be dropped at the end of each semester. As such, there will be no makeups offered for missed quizzes, regardless of reason for absence.



During class, students participate in content discussions and demonstrations, perform laboratory activities, and are presented with a large volume of information in order to comprehend the complexities of the living world. Students with poor attendance will find it difficult to keep up with the pace of the course.

- All make-up assignments, exams, and laboratories are prohibited for un-cleared absences, tardies, or trancies. As such, make up assignments will only be graded for those students who have a cleared absence or tardy, as shown by a cleared admit from the attendance office.
- In the event of an absence, students are responsible for communicating with and obtaining missed assignments from the instructor *immediately* upon their return.
- All assignments are due at the beginning of the student's respective class period. Any assignment not turned in at the beginning of the period is considered late. Absolutely no late assignments are accepted. In the event of an absence, send the assignment to the instructor electronically or have a parent or friend turn in the assignment before or at the beginning of the student's respective class period.
- If a student has an impending or planned absence or if their absence is over an extended period of time, inform the instructor and submit a request with the attendance office for assignments to be sent home.
- If a student knows of an impending absence, they may take any assessments or turn in any assignments 1-3 days *before* the assessment is given to or the assignment is collected from the rest of the class. *Otherwise, students will have the opportunity to make up no more than one exam each semester if they have an excused absence. Assessment make ups will occur in class on the first day of the student's return or at teacher's discretion. All make up exams given, regardless of the reason for absence, may differ from the original exam.*



All students taking the course are expected to register and sit for the AP Biology examination on May 5, 2025. The AP Biology examination will assess both your ability to think like a scientist and your understanding of the course content. It is a three-hour long test consisting of 60 multiple-choice questions, 2 long free response questions, and 4 short free response questions. It is scored on a scale of 1 to 5, with a score of 3 or higher considered as a qualifying score. Exam preparation and practice tests will be integrated into each unit. Additionally, there will be optional review sessions held before the AP Biology Exam that students are strongly urged to attend. *Please note, the deadline to order AP exams is November 15, 2024.*



Grades can be accessed online via the student and/or parent Aeries Portal. Aeries Portal access can be obtained in the office. Overall grades will be weighted as follows:

Assessments – Summative (e.g. examinations, performance assessments, etc.)	50%
Assessments – Formative (e.g. quizzes, etc.)	20%
Laboratory (e.g. laboratory activities, projects, Data Blitz presentations, etc.)	15%
Assignments (e.g. classwork, homework, discussion, etc.)	10%
FRQs (e.g. FRQ Fridays)	5%

Grading Scale

A+	96.5% and above	B+	86.5 – 89.9%	C+	76.5 – 79.9%	D+	66.5 – 69.9%	F	59.9% and below
A	93.5 – 96.4%	B	83.5 – 86.4%	C	73.5 – 76.4%	D	63.5 – 66.4%		
A-	90.0 – 93.4%	B-	80.0 – 83.4%	C-	70.0 – 73.4%	D-	60.0 – 63.4%		

Note: As there are multiple opportunities for students to earn points, NO curving of grades or ‘rounding up’ will occur.

All students begin each semester with a “Satisfactory” mark in citizenship and work habits. Students must show the characteristics of an “Outstanding” to earn that mark. Students whose cell phones are confiscated or who are tardy three times in a semester will automatically receive a “Needs Improvement” mark for their citizenship grade. Students whose cell phones are confiscated or who are tardy five times or more in a semester will automatically receive an “Unsatisfactory” mark for their citizenship grade. Students with one missing assignment will automatically receive a “Needs Improvement” mark for their work habits grade. Students with more than one missing assignment will automatically receive an “Unsatisfactory” mark for their work habits grade.



You are encouraged to work with your peers to study course content. As such, some assignments will have evidence of collaboration. I expect that much of the group work that you do will be similar across members of the same group. Outside of this, all other work done in this class is expected to be original. Any violation of this is unacceptable, will not be tolerated, and will result in the following repercussions: (1) an automatic zero on the assignment in question, (2) an “Unsatisfactory” mark for both citizenship and work habits grades, (3) referral to administration, (4) notification of parents/guardians, and (5) the inability to ever receive a letter of recommendation from me for all parties involved. These repercussions also apply to violations of academic integrity on all assessments in this class.



Signing of this page serves as an acknowledgment that both student and parent/guardian have read and understand the Advanced Placement Biology class expectations as outlined above. In addition, signature of this page indicates familiarization with the Ruben S. Ayala High School policies found in the school handbook.

Student Name (Print) & Date

Student Signature

Parent/Guardian Name (Print) & Date

Parent/Guardian Signature