

AP Biology

Course Overview

AP Biology is a second year of high school biology. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The first semester includes the topics of (1) Molecules and Cells, and (2) Heredity and Evolution. The second semester includes the topics (3) Organisms and Populations. This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Students who successfully understand the concepts covered during the year will be prepared to take the AP Biology Examination. See College Board website for course outline.

Prerequisites

Students must complete (a) Biology and (b) Chemistry P, ChemCom or Chemistry AP; Grade of A or B recommended. On UC/CSU Approved Course List: d

Time studying \neq learning

Some students accustomed to scoring high marks on tests may score lower and start to doubt themselves, their teacher, and the course because they forget that they are taking a college level course with standards that are higher. Just doing the notes/labs/homework does not mean that one understands the material. The only way we know whether or not students truly understand the concepts and can apply them to new situations is the score on the test. A true understanding of the concepts is necessary... not just the memorization of some facts. That is often the difference with an AP class.

Tests

Chapters are covered quickly with tests almost every week. Tests are multiple choice with ~20 questions, some of which are high level requiring you to “take the next step” and apply the information you learned to a situation that you have not seen before. The final exams are cumulative. Tests make up the *vast* majority of your grade.

Homework

Students report spending approximately 4 hours/week on average working on homework including notes, study guides, lab reports, reading the text and learning the concepts covered– the majority of the time is spent actually learning/understanding the material. Realize that this is an average; therefore, many students must spend *much* more time studying to get the same result.

Successful Students

We have observed that successful students have the following characteristics:

- Successfully completed prerequisite courses
- Good attendance
- Attentive/focused during class; actively engaged in discussion, note taking, etc.
- Ask questions to clarify understanding; discuss/explain topics with classmates
- Self-motivated
- Independent learners; willing to spend time learning outside of class
- Able to make connections between concepts covered throughout the year
- Responsible for making up missed work/tests; communicate directly with teacher
- Good test taking skills
- Strong critical thinkers able to grasp abstract concepts