

AP Biology

Westside High School

2024 - 2025

Course Overview:

In AP Biology, the emphasis is on students making connections between the big ideas within the AP Biology Curriculum Framework. This course is the equivalent of an introductory college-level biology course, and it is designed to prepare students for the AP Biology Exam.

My philosophy is to actively engage students in the process of science through class assignments and discussions which inform their laboratory experiences. For example, students practice their critical thinking and problem solving abilities by anticipating experimental set ups in group discussions, journal readings and hands-on labs. Emphasis is also given to article readings in order to expose students to present day technologies and procedures to familiarize them to limitations of testable hypotheses in order to develop better designed experimental investigations.

Lab techniques are learned through hands-on labs which make up at least 40% of instructional time-when it is safe to do so. Labs emphasize development and testing of the hypothesis, collection, analysis and presentation of data, as well as discussion of results to discover unanswered questions about the particular topics addressed. A minimum of two labs in each big idea will be conducted. Students are required to report on all laboratory investigations. The student-directed and inquiry-based laboratory investigations used throughout the course enable students to develop their critical thinking and analysis skills through the lens of Biology.

Materials:

OpenStax AP Biology online textbook (details will be given in class and on the Canvas)

AP Classroom (details will be given in class and on the Canvas)

A binder to keep Unit Packet in

Notebook for bell ringers and general notes

Your HISD laptop, fully charged.

Writing materials (pencils, pens and highlighters).

Course Grading Distribution:

Unit tests and Projects: 70%

Homework, Quizzes & Labs: 30%

AP Biology Exam:

It is expected that all students who are enrolled in AP Biology take the AP exam at the end of the course. The exam is scheduled to be taken on May 5th, 2025

Summary of Course Topics:

Semester 1:

Nature of Science

Natural Selection

Chemistry of Life

Cell Structure and Function

Cellular Energetics

Semester 2:

Cell Communication and Cell Cycle

Heredity

Gene Expression and Regulation

Ecology

Review

Homework:

I expect students to complete about 30 mins to 1 hour of homework per class for AP Biology. Most of the daily assignments will require the textbook, although outside reading, videos, lab reports, and projects can also be assigned. There is A LOT of information in Biology, and the pace is fast! Do yourself a favor and keep up with the homework so that you don't become overwhelmed later on. Homework will not be graded on a daily basis but is essential to spend time on in order to be successful in Biology.

Late Work:

Late work will not be accepted. Exceptions can be made due to a personal injury, illness or family emergency

Tutorials and Office Hours:

Tutorials will take place on Mondays and Tuesdays during lunch. All students must have a pass or a message from the teacher specifying that they are permitted to attend tutorials on that specific day and time. General questions can be asked via Teams for a faster response or via email for a response by the next business day.

Academic Honesty:

Academic honesty is an integral component of a student's education. All graded academic exercises, including homework, quizzes, tests, essays, research papers and projects, are expected to be conducted individually and completed as the student's original work unless otherwise instructed. Copying and pasting directly from the Internet also counts as cheating! The consequences of not adhering to this policy are a zero as the final grade for the assignment, a "P" in conduct for that marking period, and administrative referral. Cell phones are prohibited on your person during a quiz or a test given for this course.

I am very much looking forward to an interesting and fun year teaching you. Please make the most of what we have together and learn as much as you can!

Sincerely,

Casey Biswell M.S.

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