

Delve: AP Biology

Overview

This course is designed to be a hands-on exploration of the biological sciences that will reinforce concepts covered in the AP Biology exam. We will meet every Sunday from 10 AM to 3 PM during the academic year.

Review of the Class Syllabus

The class is divided into units of Biochemistry, Cell Biology, Molecular Biology, Genetics, Organisms, and Ecology [see the syllabus for more details]. In general, we are starting off with the small-scale science of molecules and building up to organ systems and ecosystems.

Class Policies

We will assign reading from Campbell and Reece (Biology, 7th ed.) every week, which will preview the topics to be covered the next week. Homework will be assigned every week and due the following week. We highly encourage you to do with homework—it will help you review what you have learned! We will also administer quizzes after each unit. We will give you feedback on your homework and quizzes, but no formal grades are given. Attendance is very important and you should email either Mimi or me if you expect to miss class. Feel free to talk to us or email us if you have questions.

Our Expectations

You should keep up with the material, put in an earnest effort to read, and do the assigned work. You should come to class and be ready to participate in class. We want you to focus and try your best, so please do not distract yourself and others.

Your expectations

You can always expect us to answer your questions and respond to your emails. You should be able to give feedback on the class, change the pace of the class, or review things again if they are not clear. You should know how you are doing in this class and feel confident in your preparation with the material.

Big Ideas

The AP Biology exam is defined by the following key concepts:

1. The process of evolution drives the diversity and unity of life.
2. Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
3. Living systems store, retrieve, transmit, and respond to information essential to living processes.
4. Biological systems interact, and these systems and their interactions possess complex properties.

We will explore these concepts in-depth in our classes by mainly using case studies, laboratory experiments, and in-class demos.

Overview of the AP Biology exam

This year, the College Board is changing the AP Biology exam. The exam consists of two sections, each weighted equally. Section I consists of 63 multiple choice questions and 6 grid-in questions. You will be given 90 minutes to complete Section I. Section II consists of 2 long free-response questions and 4 short free-response questions. You will be given a 10 minute reading period to look over the free-response questions and 80 minutes to complete them. I highly recommend that you use the reading period to look over each question and outline your response. The College Board recommends that you spend about 20 minutes on each long free-response question and 6 minutes on each short free-response question. For more detailed information about the AP exam, you can look at the College Board course and exam description at

http://apcentral.collegeboard.com/apc/public/repository/AP_BiologyCED_Effective_Fall_2012_lkd.pdf