

AP Biology Syllabus

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Room 135

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Course overview

Welcome to Advanced Placement Biology! AP Biology is both hard and a fun course. It provides students with an opportunity to develop a conceptual framework for modern biology, emphasizing applications of biological knowledge and critical thinking to environmental and social concerns. AP Biology is a high school course designed to be the equivalent of a college introductory course usually taken during the first year at colleges and universities across the nation. **Due to the time constraints of this course, much of the content mastery will take place outside of the classroom.** Students will be required to complete extensive textbook reading assignments and will be held responsible for all material contained within those assignments. Additionally, readings of magazine articles and research journals will be periodically assigned to broaden students' conceptual understanding of topics beyond the scope of the textbook. It is recommended by The College Board that students be prepared to spend a minimum of 1 and $\frac{1}{2}$ hours of study time per 1 hour of time spent in class.

There are three goals of AP Biology: (1) to enable students to develop a real understanding of the principal concepts in biology and (2) to experience science as a process of problem solving and discovery. (3) To prepare the student for the AP exam in May.

AP Biology focuses strongly on 8 major themes that permeate nearly all biological topics and integrates them into a cohesive whole. Students must be able to relate knowledge on a variety of topics to these themes, and make connections between biological concepts at all levels of the Biological Spectrum. Each unit focuses on two or more themes that are particularly relevant to the topic. The eight themes are listed below but will be discussed in more detail with the students as the year progresses.

1. Science as a process
2. Evolution
3. Energy transfer
4. Continuity and Change
5. Relationship of structure to Function
6. Regulation
7. Interdependence in Nature
8. Science, Technology, and Society.

Required Materials:

- Textbook: Campbell, N.A. and Reece, J. B. Biology, 8th ed.,
Note: This is a college-level textbook, hence its size and weight.
Provided by GRACE Christian
- **2 notebooks** devoted solely to AP Biology *
- Daily access to the internet, either at home or school
- Scientific calculator
- Colored pencils
- Hi-liters
- **AP Cliff notes for AP Biology**
- CD-that comes with the text that has excellent animations, activities and lab simulations.

* One notebook should be of a 3-ring style divided into four sections: 1) Lecture notes, 2) quizzes and test, 3) assignments, 4) outside reading articles. The other notebook will be devoted solely to maintaining laboratory information such as lab procedures, analyses and reports. (The laboratory notebook should be maintained as proof of laboratory experience so that colleges and universities may accurately assess whether or not to award college credit for the course.)

Websites:

- <http://www.biology.arizona.edu/>
- http://nobelprize.org/educational_games/medicine/
- http://bio.kimunity.com/ap_biology/

Class Scheduling

- AP Biology is held first period on Monday, Wednesday and Friday. On **Tuesday and Thursday class is for 85 minutes, beginning at 7:20 a.m. and ending 2nd period.**

Student Expectations

- 1) Students should make every effort to attend each and every class. If you should miss class, it is **your responsibility** to obtain any notes missed. **AP labs are difficult to make up don't miss any.**
- 2) You will have homework on most nights even it is not formally assigned. Most of the homework is reading and studying. By reading the book, information presented in class will be more easily understood. Reading a science textbook is not like reading a novel, it requires a slower pace and attention to detail.
- 3) Students should review each night. Expect to spend an hour a night reading, reviewing, and taking notes on textbook material.
- 4) Do not wait until the night before a test to try and learn everything. Cramming for a biology test will not be advantageous and will most certainly not prepare you for your AP Exam.

- 5) Students should ask for help when needed. If you do not understand the topic being discussed ask questions, ask for help, and ask for clarification. I will be happy to help you any time I can.
- 6) Students are expected to learn the vocabulary. Each chapter has numerous vocabulary words that each student will need to learn in order to understand what the instructor is discussing and what questions on quizzes and tests are asking.
- 7) Bring your textbook to class every day.
- 8) There is a required overnight North Carolina marine coastal field trip in April. The cost of the trip has not been finalized.

Assessment

A. Test and Papers: 40%

Test will be given upon completion of each unit of study and/or at the end of individual chapters. Unit test will cover several chapters in the book. Test will usually be a combination of multiple choice and FRQ essays (FRQ- free-response question much like the AP Exam).

B. Quizzes: 25%

Quizzes will regularly be given over reading assignments, either from the book or in preparation for a lab. Vocabulary quizzes will also be given. Any talking during assessments (Test, quizzes, Bell quizzes, etc.) is considered cheating and you will receive a zero for that assessment.

C. Labs: 25%

Regular lab activities are a major part of this course. Most labs will be accompanied by a series of questions requiring students to demonstrate their understanding of the concepts addressed by the lab. Additionally, most labs involve collection and analysis of qualitative data that will also play a role in determining student grades.

D. Homework: 10%

Although homework will be assigned it may, or may not, be graded. Homework is the students' opportunity to test themselves prior to being tested by me.

Late work: You are responsible for turning in all assignments on time. Late work will receive the appropriate grade in accordance to school policy. Any work turned in after the due date that is not an excused absence will receive a zero. All other late work receives a 10% deduction for each day it is late up to a total of three days. For example if you would have received a 93% you now have an 83% after the first day. Two days late you now have a 73%. After the third day it is a zero.

Student Agreement

I _____, have read the syllabus for AP Biology and agree to abide by the rules and consequences set by Dr. Smitley and Grace Christian School. I am aware this is a **college level course and is taught in such a manner**. I acknowledge my responsibilities in undertaking such a rigorous and challenging course.

A student's request for extra credit in an attempt to salvage a grade will be denied.

Student Signature

Date

Student and Parent Course Consent

We have read and understand the expectations for AP Biology and will support Dr. Smitley in his effort to provide an effective learning environment. We also understand that this course is a college level course that will require a significant amount of effort on the part of the student.

Student Signature

Date

Parent Signature

Date