

# AP Biology Syllabus

## Capital High School

Instructor: Sarah Urban Email: [surban@helenaschools.org](mailto:surban@helenaschools.org) Phone: 324-2606 Room 233

Advanced Placement Biology is a year-long introductory college level survey course in Biology designed to prepare students for the College Board Advanced Placement examination that is given in early May. It will allow students to pursue in-depth analyses of biological concepts and gain an appreciation for the amazing workings of the living world.

AP Biology represents the equivalent of a college level introductory biology course. Students can expect to be challenged by the material, and in turn will be expected to keep pace with a demanding schedule of reading assignments, laboratory investigations, and out-of-class assignments. All students are expected to take the AP Exam.

**As a college level course, students should expect to spend a minimum of one hour a day in this course to be successful. Students are expected to engage during both in person and remote learning! I only have 84 minutes a week with your student to start the year! Dedication outside of the classroom is essential!!!**

**The Complete Course and Exam Description and Course Content can be found at the following link:**

<https://apcentral.collegeboard.org/pdf/ap-biology-course-and-exam-description-0.pdf?course=ap-biology>

In preparation for this test, students will be exposed to similar assessments throughout the course and will be required to complete both take home and in-class answers to free response questions for each unit of study. The course is organized around four Big Ideas in Biology: Evolution, Cellular Processes, Information Transfer and Biological Interactions. For each big idea, enduring understandings will be presented. Students will be assessed on the learning objectives and science practices, which comprise the essential knowledge in the curriculum framework. Students will be provided with the curriculum framework to allow for self-assessment of learning as you move through the course. Much of the laboratory work will be inquiry-based and involve student directed investigations. Topics investigated will include: Evolution, Diffusion and Osmosis, Photosynthesis, Cellular Respiration, Mitosis and Meiosis, Molecular Biology, Animal Behavior, Plant Physiology, Enzyme Activity, and Energy Dynamics.

### **Units of Study and Approximate Timeline:**

#### **Fall Semester**

Intro Unit –Introduction to Biology and Evolution  
Unit 1 – Chemistry of Life  
Unit 2 – Cell Structure and Function  
Unit 3 – Cellular Energetics  
Unit 4 – Cell Communication and Cell Cycle

#### **Spring Semester**

Unit 5 - Heredity  
Unit 6 – Gene Expression & Regulation  
Unit 7 – Natural Selection  
Unit 8 - Ecology  
Final Unit – Exam Preparation

**Textbooks: *Biology, Campbell & Reece, 2011 9e, Benjamin Cummings Publisher***

### **Student Evaluation:**

- Grades will be determined using a total point system and are broken down to include the following categories and APPROXIMATE percentage breakdown: Unit Exams and Quizzes (50%), Labs (30%), and Homework (20%). To determine your grade at any time during the marking period, add up all of the points you have earned on tests, quizzes, labs, and homework assignments. Divide this number by the total possible number of points. Grades will also be posted online and updated each week.
- Each unit will be assessed with a Unit Exam using the same format as the AP Exam. There will be multiple-choice questions, both short free response questions, and longer free response questions and mathematical grid-in questions. (This may change if we are required to complete online assessments).
- Conceptual understanding will also be assessed using quizzes and quick check for understandings.
- Laboratory assessments will follow several different formats: mini poster presentations, formal lab reports, experimental design outlines for student-designed experiments and laboratory practical exams and will reflect the AP Biology science practices.
- Homework grades are given for completed guided reading notes.
- Late assignments will be deducted 10% a day for the first two days. Assignments will not be accepted more than two days late unless communicated with the teacher. Please communicate in advance if you have a special situation.
- All written work is due at the beginning of class unless otherwise noted.

### **Make Up Policy:**

- Attendance is extremely important in AP level classes, especially on lab days. I expect all students to be present for class unless it is physically impossible for you to attend. Assignments that were due the date of absence are due the next class meeting. Students are responsible for requesting missed assignments and to complete them according to the class policies. I will follow school policy for make-up work. However, please make up work quickly. Lab materials will can be time sensitive and will be cleaned up promptly.

### **Academic Honesty:**

- All students are expected to follow the Capital High School handbook policies. It will be strictly enforced in AP Biology.

### **Key to Success:**

- I am excited to teach AP Biology. It is my hope that you will love learning AP Biology. It is a challenging, exciting, interesting and difficult class. You can expect me to support you in whatever way I can. In return, please work hard, be committed, and seek help when needed!
- Advocate for yourself! Ask questions, come to online office hours, complete optional assignments. COMMUNICATE!!!! Let me know how I can help you!!!
- Let's have a fantastic year!

## AP Biology

This has been my test correction policy in the past. However, the questions I use on tests are for in class use only and cannot be taken outside of the classroom or posted on the internet. This policy may change this year if online assessments are needed.

### Test Correction Policy

The philosophy behind allowing students to complete test correction is to provide an opportunity for learning. By revisiting an assessment, students can see mistakes that were made when answering test questions, and to understand the reason for the correct answer. A bonus in this process is the opportunity to increase the score on the test. In the past, students who spend time on test corrections find that they continue to learn and also increase their test-taking skills throughout the year. This policy is designed to help you learn how to take the AP test and improve your test scores!

- Test corrections are allowed for the unit test.
- Any student scoring below 70% is **required** to complete test corrections.
- Any student scoring above 70% is **encouraged** to complete test corrections to enhance understanding of concepts assessed on unit tests.
- Test corrections must be completed within one week of the date the test was taken.
- Test corrections must be completed in room 233. No tests may leave room 233 under any circumstances.
- For each incorrect answer, students will write the correct answer and a brief summary of where the correct information can be found. (i.e. textbook page number, reference to lab instructions, or other resource)
- Each corrected question will earn  $\frac{1}{2}$  credit. These points will be added to the original test score.

Example 1: Student A scored 20/30 on the multiple-choice section. This is 66%. This student is required to complete test corrections because the score is below 70%. 10 questions were corrected;  $10 \times .5 = 5$ . The new score is now 25 - 25/30 is 83%. This student improved the score from a D+ to a B and increased understanding of 10 questions.

Example 2: Student B scored 25/30 on the multiple-choice sections. This is 83%. This student is encouraged to complete test correction because the score is above 70%. 5 questions were corrected;  $5 \times .5 = 2.5$  which I will round up to 4. 28/30 is 93%. This student improved the score from a B- to an A- and increased understanding of 5 questions.

- Any special circumstances regarding test performance should be discussed with Mrs. Urban privately.

This policy will be reviewed as the year progresses. Students will be notified if the policy changes.

