

SYLLABUS - AP BIOLOGY 1, 2

Course: Advanced Placement Biology
Subject Teacher: Ed Gough
Room 13

Course Number: 6191-6192
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DESCRIPTION OF COURSE

The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course, usually taken by biology majors during their first year. It is based on four Big Ideas, which are outlined below. This course differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the type of laboratory work done by students, and the time and effort required of students. Students will be prepared to earn college credit for the course after taking the AP Biology exam in May.

OBJECTIVES AND METHODS OF STUDY

A. Text Activities

- Note-taking: Notes can be in any style. Be sure to include diagrams and flowcharts in your notes. Sketch and draw models for the concepts as you work through the materials. Focus on creating a useful study tool, rather than filling up pages with words.
- Independent reading, online activities, and preparation for labs is an integral part of this course.
- Do the online videos and the readings before the class so you'll come to class ready to discuss them and with any questions about what you need help with.
- Study guides/materials will be posted in Canvas before the first study group of the month.

B. Semester Projects

- Details regarding projects will be provided during class and directions will be provided in Canvas.

C. Laboratory Activities

- The lab experience is an important part of the course and is **mandatory**. You are expected to participate in every lab. As this is an AP class, many of the labs cannot be completed at another time. If you are absent on a lab day, you may not be able to make up the lab due to the nature of the materials. When possible, you can use your lab group's data to complete the task for 50% credit.

D. Assessments

- Unit Assessments will be given in class. Students who do not take the assessments on the scheduled date will be penalized unless they have a legitimate reason, and it is communicated in advance.
- Student mastery of concepts will be expressed and gauged in a variety of ways in accordance with the [College Board standards](#). These will include written tests, performance assessments, and group assessments.

TOPICS

ALL CONTENT FOR THE COURSE CAN BE FOUND ON [AP BIOLOGY COLLEGE BOARD WEBSITE](https://apcentral.collegeboard.org/courses/ap-biology). THIS IS A COURSE TO PREPARE STUDENTS FOR THE AP BIOLOGY EXAM IN MAY

AP Biology Big Ideas

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

Semester 1 and 2 Monthly Content		
Semester 1 Month	Concept/Chapters	Chapters
1	<u>Unit 1: Chemistry of Life</u>	1, 2, 3, 4, 5
2	<u>Unit 2: Cell Structure and Function</u>	6, 7, 27, 28
3	<u>Unit 3: Cell Energetics</u>	8, 9, 10
4	<u>Unit 4: Cell Communication and Cell Cycle</u>	11, 12
5	<u>Unit 4: Cell Communication and Cell Cycle</u>	11, 12
Semester 2 Month		
6	<u>Unit 5: Heredity</u>	13, 14, 15
7	<u>Unit 6 : Gene Expression</u>	16, 17, 18, 20
8	<u>Unit 7: Natural Selection</u>	22, 23, 24, 25, 26
9	<u>Unit 8: Ecology</u>	52, 53, 54, 55
10	<u>Independent Project and AP Biology Test</u>	

RESOURCES



- Text: Biology, Campbell, 10th ed.
- Pearson Mastering Biology, online materials
- Mr. Gough's Online Materials and Website on [Canvas](#)
- College Board [AP Classroom website](#)
- Weekly Lab and Study Sessions

EVALUATION CRITERIA AND METHODS

1. Attendance credit for each month and all assignments will be based on submission of monthly work by due dates listed on the monthly cover sheet.
2. Academic grades will be based on the quality and quantity of work submitted on-time, according to directions and expectations above.
3. Work must be turned in by the DUE DATE. Labs and other work may be due earlier than the last day of the month. It is your responsibility to know the DUE DATE! All dates are clearly posted in **Canvas** and on the cover sheets.
4. Prior approval : If there is any reason for work or tests to be submitted after the deadline, you must contact me PRIOR to the assigned due date. Please contact me at least 3 days ahead of time if any alternate arrangements need to be made.
5. Without prior approval from the teacher, work submitted after the due date cannot earn full credit. **Late work may be penalized up to 20% for work up to one (1) month late. Any work older than one month will not be accepted.**
6. The in-class testing window for AP Biology is indicated on the monthly coversheets. Tests are designed to take about 1 hour and will be subject to College Board recommended timings. Please take the test as scheduled unless you have an important reason for not doing as we cover a lot of material in a very short time.
7. Students will be tested monthly according to the College Board Unit Guide. All exams will be conducted online and given during class time. **Retests are available for any student earning less than 70%. Retests can be taken during the week following the exam in office hours. Retests will improve scores to a maximum of 75% credit. These are only available for credit during semester 1.**
8. All science courses include a mandatory lab component. The lab experience is an essential part of the course, and is mandatory. You are expected to participate in every lab. As this is an AP class, many of the labs cannot be completed at another time. If you are absent on a lab day, you may not be able to make up the lab due to the nature of the materials. When possible, you can use your lab group's data to complete the task for 50% credit.
9. Academic grades will be based on the quality and quantity of work submitted on time, according to directions and expectations above.
10. If you need help or have any questions, come to Office Hours. Office Hours will be **Tuesdays and Thursdays from 10:00 - 12:00.**



11. In keeping with SDUSD procedure #5121 the following grades will be used:

- "A" = Superior achievement.
- "B" = Above average achievement.
- "C" = Satisfactory achievement.
- "D" = Below average achievement.
- "F" = Failure (credit not granted).
- "I" = Incomplete.
- "IP" = In Progress.
- "NC" = No Credit

Citizenship Grades: Grades will be determined per school policy. Information can be found [here](#).

Last bit of info...Do not hesitate to email me with any questions. I normally respond within a few hours, but not over the weekend or holiday breaks. Good communication is the best way to enjoy a rewarding and successful school year, and I hope to hear from you when you need help or have questions.

ACADEMIC HONESTY

In all academic work, the ideas and contributions of others must be appropriately acknowledged and work that is presented as original must be, in fact, original. Copying work created by an AI-content generator (such as ChatGPT) and turning it in without proper attribution or authorization is a form of academic dishonesty and the student will not receive credit for the work. If you are unsure about whether something may be plagiarism or academic dishonesty, please contact your teacher to discuss the issue.

SCHOOLWIDE LEARNER OUTCOMES/STUDENT PROFILE

- Collaborative Communicators
- Emotionally Intelligent Thinkers
- Problem-Solving Innovators
- Socially Aware Agents of Change
- Critically-Thinking Digital Citizens

