

AP Biology Syllabus

S. P. Waltrip High School

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Tutorials: Upon request



Course Overview:

The AP Biology course is designed to enable you to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses — a goal of every AP course. This AP Biology course is equivalent to a **two-semester college introductory biology course** and has been endorsed enthusiastically by higher education officials.

The Emphasis on Science Practices

A practice is a way to coordinate knowledge and skills in order to accomplish a goal or task. The science practices enable you to establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Because content, inquiry, and reasoning are equally important in AP Biology, each learning objective combines content with inquiry and reasoning skills described in the science practices. The science practices capture important aspects of the work that scientists engage in, at the level of competence expected of you, an AP Biology student.

Organized around Big Ideas:

The key concepts and related content that define the revised AP Biology course and exam are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems.

1. Big Idea 1: Evolution

The process of evolution drives the diversity and unity of life.

2. Big Idea 2: Cellular Processes: Energy and Communication

Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.

3. Big Idea 3: Genetics and Information Transfer

Living systems store, retrieve, transmit, and respond to information essential to life processes.

4. Big Idea 4: Interactions

Biological systems interact, and these systems and their interactions possess complex properties.

Structure of Course:

This course will move at a **rapid pace** and if you fail to actively participate for even one class period you will be choosing to increase your risk of failure and/or less than ideal performance. Every student at East Early College High School is capable of earning a high score in this course. **Your grades are not given to you, they are earned.** AP Biology is a challenging course; therefore, do not make assumptions about guaranteed success in this course based on past performance. You will need to determine how much time you must devote to this course to achieve the grade you want.

Topics Covered:

Fall 2021

Unit 1: Scientific Methods and Analysis

Unit 1: Biochemistry

Spring 2022

Unit 7: Meiosis, Mendelian & Non Mendelian Genetics

Unit 8: Biotechnology

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Unit 2: Cells and Cell Processes

Unit 3: Cellular Respiration/Photosynthesis

Unit 9: Evolution & Ecology

Unit 10: Plants

Unit 5: DNA/Replication/Cell Cycle
Unit 6: Protein Synthesis/Gene Regulation/Viruses

Unit 11: Body Systems
Unit 12: AP Biology Review

Required Materials:

- 1.5" Binder **-ONLY** for biology
- 1-pack college ruled paper (to start)
- Pencils (extra erasers)
- Pens (various colors)
- 12-Binder dividers (1 per unit)

Grading Scale:

A= 100-89.5
B= 89.4-79.5
C= 79.4-74.5
D= 74.4-69.5
and below

Grading Policy:

Grades are weighted as follows:

EACH SIX WEEKS:

- Assessments (Tests /Major Projects): 60%
- Laboratory/Daily Work/ Quizzes/Homework: 30%
- Participation: 10%

AP EXAM: Each student is required to take the AP Biology exam. **ATTENDANCE IS MANDATORY!**

Mastering Biology: This is an online mandatory requirement in which the students complete various modules to further understand and increase knowledge of the content being presented in class. These must be completed by the designated time and **WILL NOT BE ACCEPTED AFTER THE DUE DATE.**

Cellphones & Electronics: Cellphones are to be muted and stowed away during class time and during passing periods between classes. Earphones, headphones, and earbuds are to be put away during class time and during passing periods between classes as well. These items may be out in class when advised, and during lunch time. Cellphones are to be placed in the cellphone bucket during any quiz or test. Any person violating the policy will have their item confiscated and turned into the office. A fee of \$15 will have to be paid in order to get the item back. If the cellphone is not turned in during any assessment (quiz/test) a referral will be written for the offense and the student will receive a zero for the assessment.

Binder: Your binder is an important tool for organizing information. Each unit will be separated with a divider and is to be brought to class each day. Binders may be graded at least once during the nine weeks period, and there may be several spot checks. Your binder should be organized using the instructions handed out in class.

Daily Agendas and Warm-ups: A daily agenda will be posted on the board when you arrive to class. Warm-ups are daily assignments that may be posted on the Smartboard or provided on the table as you enter each day. You are to write your homework in your agenda at the beginning of each class. When class begins, after you have copied your homework into your agenda, you should immediately begin working on the warm-up activity.

Textbook: HISD has transitioned to all online textbooks for Biology. You will be assigned an e-textbook by HISD and given instructions on how to access it during the first week of school. **You must have internet access to use your e-textbook.** If you do not have reliable internet access you will need to complete assignments at school or discuss home internet options with the main office or your dean.

Labs: When you are involved in a lab, you **MUST** act accordingly. Participating in lab is a privilege, one that can be taken away if the proper procedures are not followed. Specific lab rules and guidelines will be handed out separately, and they

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will be enforced when lab is in session. If you do not follow the rules of the lab then you will not be allowed to participate and will receive a zero for that lab. In order to participate in lab you must make at least an 80% on the safety quiz and turn in a signed safety contract.

Absences: You are expected to attend class every day. If you are absent, it is **your responsibility** to promptly gather the assignments that you missed the next day you return. Specific handouts or class items will be in the AP drawer. I will not remind you of missed assignments, you must take the initiative to find out what you missed. If you miss a test or lab **YOU** must schedule a retest or make-up lab, but keep in mind that the format of the retest or lab is at the teacher's discretion. It is your responsibility to reschedule your missed test/lab in a timely manner (no more than 3 school days after the absence). Any assignments not made up from an absence will result in a **zero**. Please do not disturb the teacher during class to get missed assignments, wait for before class, after class, Tuesday/Thursday advisory, or after-school

Tutorials: I am available to help you better understand information in a small group setting. Tutoring is available after school Tuesday's and Thursday's. Forming a study group with other students, getting tutored by an upper classman, and/or using the internet are also great ways to better understand and learn biology content.

Retakes: The policy for my class is outlined below. Please review it carefully.

- Maximum of 2 retakes per grading cycle for a failing grade.
- Maximum retake score is 70, (score of 70 to 100 = 70).
- The highest grade between the original and the retake is counted (however the grade will not exceed a 70).
- The student, not the parent, must request the retake.
- Students must request the retake within 24 hours of the grade posting and complete the retake within one week of grade posted. I will announce in class when grades have been posted.
- If you have multiple retakes on the same day for other classes, it is your responsibility to reschedule with me in advance.
- No shows counts as a taken retake and cannot be redone.
- Tests are not eligible for retakes but you may do test corrections for every question you missed on the exam.

You may only receive half the credit for every questioned missed on the exam Missing assignments fall under my late policy, not the retake policy

Extra Credit: Additional academic work is given to help improve student grades, but is not given regularly. It is important that students do the best they can the 1st time they do an assignment, quiz, or exam.

Academic Integrity: Cheating, copying, and plagiarizing will not be tolerated in this course. Any student displaying academic dishonesty will face the full consequences of their actions. In like manner, the student will receive a zero on the assignment, parent contact, and dean notification of the incident. There will not be an opportunity to make up the assignment.

Late Work: All assignments are due **ON TIME and will have a grade of "0" until rectified**. Effective January 2018,. Students have **three** school days to submit late work after the due date of the assignment. The maximum deductions will be ten points per day for a total of 30 points maximum deducted from the total. If you are on campus the day an assignment is due, then you are required to turn it in, **even if you miss your biology period**. It is your responsibility to come to me to turn in your work **even if you leave early or arrive late**. Late work must be submitted directly to me, not on my desk, or in my mailbox in the main office.

Student Expectations:

- Student is responsible for reading the chapter (or section assigned) prior to class.
- For every chapter, Outline completed, and the study guide or alternative assignment done as well. Student will be assessed via quizzes which will include the chapter to cover that day as well as all previous chapters. These quizzes typically assess reading comprehension, data analysis, and ability to write out information. Student is responsible for all vocabulary terms in assigned chapters as well as previous chapters.
- Homework\Assignments are due at the beginning of class (no excuses), unless otherwise instructed.

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- Students should study for the course a little every night. Students should not feel the need to study an excessive amount the night before a test.
- Students are expected to come to class prepared (with all materials, already used the restroom, etc.) and **ON TIME**. If the door is closed and the class has started the do now, you are tardy.

□

In-Class Expectations:

1. Students are to come to class prepared with all materials needed.
2. Be productive and participate in class. Participation during lectures, labs, and projects (as well as your attitude) at all times in the classroom play a large role in your grade.
3. Follow the teacher's directions the **FIRST** time they are given. This is extremely important at all times to ensure the most effective and efficient learning possible, and is especially important during laboratory exercises to ensure safety for all persons.
4. Students are to take care of their personal needs (bathroom, etc.) prior to class. Leaving class causes you to miss information. Go before or after class!
5. Getting out of your seat for any reason without permission is prohibited. You must ask to sharpen your pencil, get tape, etc.
6. Students are to respect all persons in the class. Inappropriate comments, bullying, or other things that is uncomfortable for any student(s) are not allowed. If infractions occur your participation grade will decrease, with the possibility of referral to their dean.
7. **Electronics of any sort must be off and stored away during class time. If a phone rings, vibrates, or causes any other distraction the phone will be collected and the student must pay the front office to get it back. If seen during quizzes or exams the student will be classified as cheating. Please see below for cheating consequences.**
8. Students that are tardy and miss an assignment will receive a zero for that assignment. It is your responsibility to get to class on time.
9. Students are late if they are not in their seats working on the "do now" when the door closes for class. There is no need to wander around or chat with others. Come in, get set up, and get to work.
10. Students that are absent are to check the class website for items they have missed and what is due next class. Being absent does not mean you are exempt from the work for the day.
11. Assignments are to be turned in **ON TIME**. You have ample time to complete needed assignments and have no excuse for the assignments not to get finish. Late work will receive a 10 point deduction for each day late up to 3 days. After 3 days the grade will be a zero.
12. Homework is imperative for class and **MUST** be done each night. You will not do well if you are not reading the textbook, watching the assigned videos, and outlining. Quizzes will be frequent over homework to ensure students are completing it.
13. Cheating in any form is unacceptable. Copying homework, photocopying someone's paper, having your phone out during quizzes or exam, etc. are all forms of cheating. If the teacher feels that a student(s) are cheating or has cheated the involved person(s) will receive a zero for the assignment, a call home, and a detention to be served with the teacher. If it occurs more than once a zero will be given again, parents contacted, and a referral to the dean.
14. Students are expected to try their best and put forth the best effort they can. Slacking off or not doing your work will cause your grade to suffer.

Academic Dishonesty

Academic dishonesty takes many forms and can sometimes be confusing for students and parents. Some forms of academic dishonesty include but are not limited to: Plagiarism, falsification of data, providing false information to an instructor including excuses for late work or falsely claiming to have submitted work, any form of cheating in which a student has an unfair advantage on an assessment by using notes or other materials not allowed by the instructor, providing unauthorized assistance or information to others on homework, projects, tests, quizzes, etc., intentionally preventing other students from completing their work, impersonating another student to give them unauthorized

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assistance. This is not a comprehensive list and teacher and administrator discretion will ultimately decide whether a student has committed an offense.

There are many reasons student choose to engage in academic dishonesty. When students have an unfair advantage over other students, this presents a situation in which students who are doing everything right are punished for not cheating when they receive lower scores than those who did cheat. The instructor will constantly try to prevent academic dishonesty so that all students have the opportunity to show what they really know and what assistance is needed. Academic dishonesty will be reported to the administration and action will be taken according to the school's policy.

LAB SAFETY GUIDELINES: There is no place in my class for unsafe use of materials. To guide you in being safe, I am giving you this lab safety contract. It contains guidelines for safe behavior in my class. You must read this contract carefully, have your parents read it and you both must sign it and return it to me (even if you are 18 your parents need to sign!). You will receive an extra copy for you to keep in your binder for reference. *Only after I have your signed copy of this agreement and have passed the safety exam will you be able to participate in any lab activities in this class.* General guidelines

1. Conduct yourself responsibly at all times, including following all written and verbal instructions carefully.
2. Do not touch any equipment or materials before instructed to do so.
3. **NO FOOD IN THE LAB!!!**
4. Never start the lab unless you have received prior approval from me.
5. Always read the lab information provided to you before performing the lab.
6. Keep your work area neat and clean, and stay at your lab desk.
7. Never leave liquid-filled containers uncovered.
8. Know the location and operation of all safety equipment.
9. Do not run, shout, or throw things in the lab.
10. Notify me if an unsafe condition exists in the classroom.
11. Dispose of all chemicals properly. I will instruct you about how to dispose of specific chemicals.
12. Keep your hands away from your face while doing labs. Also, always wash your hands after the clean-up is complete.
13. Rinse out all glassware and leave it to dry in the designated locations.
14. Know what to do if there is a fire drill.
15. Treat preserved biological specimens respectfully
16. Carry sharps appropriately; tips down and away.

Accidents

1. Immediately report **ALL** injuries, no matter how minor, to me. This includes not during lab.
2. Use the eyewash if you are splashed with a chemical. Always assume that the chemicals are hazardous.

Clothing

1. Goggles and aprons must be worn if need. If you wear glasses, you still have to wear goggles.
2. Only close-toed shoes may be worn on lab days.
3. Tie long hair behind your head.
4. No loose clothing or jewelry.

Handling Chemicals

1. Consider all lab chemicals to be hazardous.
2. Double check the label before using a chemical
3. Take only the amount of chemical you will use.
4. Never return unused chemicals to their original container.
5. Never let a chemical near your mouth.
6. Never remove chemicals or other materials from the lab.
7. Always hold chemical bottles with two hands when transporting them.

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8. Never smell chemicals or substances right from the container or jar. Waft to obtain smell.

Handling Glassware

1. Never handle broken glass. If a piece of glassware breaks, notify me immediately and I will dispose of it.
2. Never use chipped glassware.

Heating Substances

1. Use caution when heating something with a hot plate. Do not put empty glassware on the hot plate and always use hot hands when unsure of glass temperature.
2. Never leave a hot plate unattended.
3. Never look into a container that is being heated.

This form is due the NEXT DAY of class. Failure to do so will result in "0" for a participation grade. It is MANDATORY that this form be returned!

LAB Agreement

Name: _____ Period: ____ Date: _____

Student

I, _____, have read and understand the guidelines listed in the Lab Safety Agreement. I promise to follow these guidelines. I understand that failure to follow these or other verbal guidelines may result in removal from the lab, detention, failure and/or dismissal from the course.

Signature

Date

Parent or Guardian

I _____, have read and understand the guidelines listed in the Lab Safety Agreement. I understand that my child is expected to follow these guidelines. I also understand the consequences of my child's failure to abide by these guidelines.

Signature

Date

SYLLABUS Acknowledgment

Students submitting this form on time will earn a grade for the participation.

SCHOOL: S.P. Waltrip
CLASS: Pre-AP Biology
INSTRUCTOR: Mr. Lawrence O,
Garnett
YEAR: 2020-2021

My student and I have read and reviewed this syllabus together we understand the requirements of this course.

Father's Name **e-mail address** **home & cell phone**

Mother's Name **e-mail address** **home & cell phone**

Do you prefer to communicate through telephone or email?

Telephone

E-mail

Is there anything special I can do to ensure the success of your student? (e.g. a seat close to the board, computer assistance, etc.)

Any additional information I need to know?

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