2019-2020 AP Biology Syllabus

Student Hours: 7:30 to 8:00am and after school until 4:15. Thursdays after school until 5:30.

What this course is about...
AP Biology is a college-level introduction to the biological sciences. Students grow their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. The AP Biology course is equivalent to a two-semester college introductory biology course for biology majors. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

My goals for the course...

● Apply the College Board “Science Practices” throughout the year through scientific investigation including class activities and experimental labs.
● To learn the college level biology content associated with the AP biology framework. This content will be given to you as learning objectives each week.
● To help you become comfortable with the idea that science is a verb. We do science, we are not casual observers.
● To encourage and practice being a scientifically literate and logical thinker that requires evidence to help accept ideas or formulate arguments.
● To help you navigate the complex wilderness of learning something new and help you understand that mistakes are expected, setbacks often happen, and we can work to close gaps in your learning.
● To build a connection between the science we are learning about and experimentation we will perform in the lab.
● To build a connection between the science we are learning about and your everyday life and biological future.

Textbook

● AP Test Prep Series: AP Biology. Holtzclaw and Holtzclaw. Replacement cost ~ $20.00

Communication

You may always stop by my room during student hours or email me at either email address. I normally stop responding to emails at 7PM. Assignments will be posted to Google Classroom. Grades can be found on Infinite Campus. If you have outside of school concerns about access to the internet, please see me privately.

Food and Drink in Class

I do not mind students drinking water or non-sugary drinks in class as long as I do not see it as a problem. Small snacks are fine but please do not bring breakfast or a large lunch to class. If you have an issue I need to know about, please let me know. We have a traditional problem with ants in my classroom. They are most active in the fall and early winter. Please avoid leaving crumbs or pieces of snacks or the ants will literally arrive by the thousands. I mean, that’s cool to watch but...
Behavior and Group Work Norms

The biggest learning modifier identified by education scientists is trust in the classroom. If you trust me and each other, more learning occurs. In our class we will allow individuals to have ideas and allow for ourselves and each other to be wrong. In groups we will think about and respect each other so that our objectives get completed through collaboration. To help, I am adding 5 norms that I would like us to follow this year.

1. Pausing
   a. Pausing before responding or asking a question allows time for thinking.
   b. Listening attentively to others’ ideas and allows time for thought after asking a question or making a response
   c. Waiting until others have finished before entering the conversation.

2. Paraphrasing
   a. Paraphrasing assists members of the group to hear and understand each other as they formulate decisions. Try using a paraphrase starter that is comfortable for you: “So...” or “As you are...” or “You’re thinking...” and following the starter with a paraphrase.

3. Placing ideas on the table and pulling them off
   a. Ideas are the heart of a meaningful dialogue. Label the intention of your comments. For example, you might say, “Here is one idea...” or “One thought I have is...” or “Here is a possible approach...”.

4. Paying attention to self and others
   a. Meaningful dialogue is facilitated when each group member is conscious of self and of others and is aware of not only what she/he is saying, but also how it is said and how others are responding.

5. Presuming positive intentions
   a. Assuming that others’ intentions are positive promotes and facilitates meaningful dialogue and eliminates unintentional put-downs.

My Classroom Rules

The rules are congruent with those laid out in your student handbook. Fundamentally, those rules boil down to four:

1. Respect everyone and everything in this school.
2. You are here to learn. Effort is required.
3. You are expected to do your own work.
4. You may not interfere with anyone else’s right to follow Rules 1, 2 and 3.

Late Work Policy

Late work is not a problem unless it is habitual. If you are turning in more than one late assignment in the semester we will have a talk about how to remedy this. I will accept late work during the week it is due because the work is important to your learning and I want it completed. However, for any late assignment there will be a 20% discount. Labs should not be late considering the revision policy.

Bathroom Biology Breaks

It is a basic human right to be able to get rid of bodily waste, or at least that is how I see it. It is not, however a right to leave class because of boredom, snacks, or meet-ups. When you go to take a biology break, I expect you to be in the appropriate location. If you are habitually taking biology breaks we will have a talk about your needs. No phones during biology breaks. Leave them on the tray near the pass. No biology breaks during first 10 or last 10 minutes of class.

Phones and Headphones

- Headphones and phones should not be visible during class. No phones on your desk. Turn off notifications.
- If you need your phone, I will let you know when you can access it.
- No phones leave the room during biology breaks.
Course Requirements

Home Learning
- The Home Learning document is a resource guide for studying for the week. It is a one-stop-shop for what you need to learn, sources of information, and practice questions.
- The Home Learning comes out each Saturday morning and should be completed by the following Friday.
- It is important to spend time on the Home Learning during the week outside of class.

Quizzes
- You will have short check for understanding using a Google form or piece of paper at least 4 days a week. These are not graded but help me determine how much you are learning as we are exposed to new concepts. These are completed during the first 5 minutes of class. I will review the quiz shortly afterwards.
- You will have 5 quizzes on Fridays throughout the semester. These are graded quizzes and are cumulative within the current unit of instruction. These 5 quizzes can be retaken once each after you have reviewed your initial quiz and determined your learning gaps.
- Free Response Fridays. You will have 4 of these during the semester. They are not graded and are meant to help you practice and improve on your free response writing skills. You will have 10-20 minutes to complete the question and then a personal and class analysis will follow.
- Lab Quizzes - Discussed below

Tests
- You will have 3 tests each semester on the last school day of each month. All tests are cumulative back to the beginning of the year. Effort will be made to construct tests based on 60% new/ 40% old material breakdown.
- Test recovery is open to everyone who does test corrections. Test corrections are a lot of work. They are designed to help you identify your weaknesses and close your learning gaps. If you do test corrections and meet with me to discuss them, I will apply the College Board AP curve to your test. This score will replace your old score in the gradebook.

Labs and Experimentation
We will perform 12 lab experiments this year. Six of these labs will require formal CERA reporting (WU). All others will require you to pass a lab quiz (Q). During the lab quiz you will work alone to answer specific questions using collected class lab data (provided). Each CERA report will have an initial deadline, revision and final deadline. Written feedback will be given after the initial deadline and students will have a week to revise. Here is the tentative list.

<table>
<thead>
<tr>
<th>#</th>
<th>Lab Topic</th>
<th>WU/Q</th>
<th>#</th>
<th>Lab Topic</th>
<th>WU/Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intro Science Practices</td>
<td>WU</td>
<td>7</td>
<td>Cell Division</td>
<td>Q</td>
</tr>
<tr>
<td>2</td>
<td>Phylogeny</td>
<td>WU</td>
<td>8</td>
<td>Inheritance</td>
<td>WU</td>
</tr>
<tr>
<td>3</td>
<td>Membranes</td>
<td>Q</td>
<td>9</td>
<td>Behavior</td>
<td>Q</td>
</tr>
<tr>
<td>4</td>
<td>Osmosis</td>
<td>Q</td>
<td>10</td>
<td>Operons</td>
<td>Q</td>
</tr>
<tr>
<td>5</td>
<td>Enzymes</td>
<td>Q</td>
<td>11</td>
<td>Regulation</td>
<td>WU</td>
</tr>
<tr>
<td>6</td>
<td>Energy</td>
<td>WU</td>
<td>12</td>
<td>Transpiration</td>
<td>WU</td>
</tr>
</tbody>
</table>
Your Final Exam and the AP Exam

- The fall final will be composed of previous AP test questions. It will count for 15% of your overall grade.
- The spring final will be the practice AP exam. This will be held from 4-7pm on April 28. Please make arrangements to be there. The final exam counts for 15% of your overall grade.
- The AP biology exam is May 11 at 8am. Everyone is expected to take it but if your circumstances warrant you not taking it, please communicate this to me before spring break.

Course Weights

- Summative (40%)
  - Cumulative monthly tests (3 per semester)
  - CERA lab reporting (3 per semester)
- Formative (40%)
  - Classwork
  - Quizzes
  - Lab Quizzes
- Final Exam (20%)
  - Fall - Final Exam
  - Spring - AP Practice Exam
- Progress Reporting
  - Non-graded markers such as safety contract, etc.
- Homework
  - Non-graded tracking of weekly practice questions

Course Pacing

Unit 0 - Science Practices: August 12 to August 23

Unit 1 - Evolution: August 26 to October 7
- Test 1: September 30

Unit 2 - Matter: October 8 to November 20
- Test 2: October 31

Unit 3 - Energy: November 1 to January 10
- Test 3: November 22

Unit 4 - Information: January 13 to February 21
- Test 4: January 31

Unit 5 - Regulation: February 24 to March 12
- Test 5: February 28

Unit 6 - Communication: March 16 to March 31
- Test 6: March 31

Unit 7 - Ecology: April 1 to April 30
- Final Exam: April 28

Exam Review: May 1 to May 8

Homework

- Completion of assignments not finished in class. (sometimes graded but always checked)
- Practice problems assigned during the week. (Not graded, but essential to your learning. Tracked on IC)

Study Groups and Collaborative Work

- Study groups are great ways to study. I encourage you to form or join one if that suits your needs.
- Collaborative work will happen quite often. In the case where you collaborate and then turn in your own work product, I expect your work product to be your own work. Exchanging ideas is fine, copying a group-mate's work is not.
Fulton County Honor Code Policy
As a community that values academic honesty and seeks to provide the highest levels of learning for students, the Centennial administration, faculty, parents, and students do not tolerate cheating.

As stated in Fulton County Board of Education Policy, cheating includes:

- Copying or borrowing from another source and submitting it as one’s own work – including plagiarizing sources from the internet
- Seeking or accepting unauthorized assistance from anyone on tests, projects, or other assignments
- Providing or receiving test questions in advance without permission
- Working collaboratively with other students when individual work is expected – including homework
- Other offenses as determined by administration

Consequences for copying or providing answers on an assignment which should have been completed by an individual student:

- First offense – zero on the assignment; teacher requires assignment completion for 70%; assignments not redone will remain a zero
- Second offense – zero on the assignment; parent notification; teacher requires assignment completion for 50%; assignments not redone will remain a zero
- Third and further offenses – zero on the assignment; parent notification; disciplinary referral to administrator; teacher requires assignment completion for 50%; assignments not redone will remain a zero

Consequences for plagiarism on a research paper or project; receiving or giving answers during a test or quiz:

- First offense – zero on the paper, project, or test; parent notification; teacher requires the original or an alternate assignment to be completed for 50%; time allowed will be half the original time assigned; assignments not redone will remain a zero
- Second and further offenses – zero on the paper, project, or test; parent notification; disciplinary referral to administrator; dismissal from leadership positions; exclusion or dismissal from honor societies; teacher requires the original or an alternate assignment to be completed for 50%; time allowed will be half the original time allowed; assignments not redone will remain a zero

The following violations shall result in immediate administrative referral and exclusion or expulsion from all honor societies: cheating on a final exam; altering or forging grades, gradebooks, progress reports, report cards, or academic records; fabricating data or signatures; theft of a test or other school resources. Students who commit an honor code violation could also lose leadership positions in clubs or organizations.

Consequences will be applied if cheating occurs on any work submitted by a Centennial student in an event, competition, or contest in which he represents the school system. Additional possible consequences may include exclusion from interscholastic activities and extracurricular activities, as determined by the administrator.

Surface Etiquette:
Students must:

- Come to class with their surfaces fully charged, with the charger and stylus.
- Only use Surface for class work/notes.
- Teacher can monitor the surface randomly.
- You CANNOT record or take pictures of anyone or anything in the classroom without expressed permission.

Student Code of Conduct & Discipline Handbook P. 36 Technology Offenses 18 A,B,C,D,E

- Technology/computer misuse (inappropriate internet use, disabling, etc.)/computer/tampering/trespass/hacking/altering hard drives.
- Refusal to comply with school rules or reasonable directions or commands of school staff regarding use of technology and/or visual recording devices without permission.
- Consequence Range: Local interventions up to 10 days OSS.

STUDENT AND PARENT DIGITAL SIGNATURE FORM