**AP Biology**

**Course Guidelines and Syllabus**

**2018-2019**

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| Course: AP Biology | Phone: Text the message @dg7h6c6 to the number 81010. |
| Extra assistance: Study/ review sessions will be conducted on an as needed basis by prior arrangement by the student with the teacher. Study groups, peer tutoring and instructor debriefs will be scheduled throughout the semester before and after school. Study group is highly recommended.  |

**General AP Biology Information:** Advanced Placement, or AP, Biology is designed to prepare students for the AP Biology examination given each Spring by the College Board. The AP Biology exam is given in May to over 160,000 students. Students are assigned a grade of 1, 2, 3, 4, or 5, with a 3 or higher considered “passing.” Most of the exam is based on the course content, but higher-order thinking skills are required to successfully complete a majority of the test. About 25% of the exam involves laboratory-based questions which may include the demonstration of an understanding of experimental design, graphing and analyzing data, prediction, etc. We will work on developing these skills throughout the semester.

**Class Overview:** The course is designed to be equivalent to a two-semester college level course. Because of the depth of the curriculum in AP Biology, students are expected to take responsibility for their own learning under the guidance of the instructor.

Students enrolled in AP Biology must be prepared to do the following:

* Attend class regularly. (See make-up policy below.)
* Study and read outside of class. This will include weekends and holidays.
* Complete all assignments. Reading and personalizing material is critical for your success in this course. The textbook is only a resource. Course of study is not chapter driven but largely based on concepts. Study guides, test review questions will not be provided. You must take notes and follow the College Board objectives for each unit.
* Bring all required materials to class. (See below).
* Ask questions and be communicative about areas of need.

This course is a survey of current biology theories and ideas. The eight major themes from the AP Biology Course Description (science as a process; evolution; energy transfer; continuity and change; relationship of structure to function; regulation; interdependence in nature; and science, technology and society) are stressed throughout the course. In particular, evidence of evolution is employed as a unifying theme across topics.

AP Biology is a college course taught in high school. Therefore, it is a very demanding course because a college will expect you to have had a course equivalent to their introductory level biology course. If you do not intend to major in a science, you may find that the college of your choice will accept a 3 on the exam for credit. Most will accept only a 4 or 5 for credit for a science major.

The most difficult challenge of any AP course is the requirement that students remain consistent throughout the year. In a regular course, a bright student may let his or her effort slide from time to time but make up for it with a big push just before the test. Other students may take good notes and pay attention in class, but never open their textbook to read the assigned chapters. These behaviors threaten even the brightest student’s chances of passing the very difficult AP exam.

**AP Biology at Osborne** **High School:** The AP Biology exam covers all of the material typically included in TWO semesters of college biology. Because we are on the block schedule, here at Osborne, we must cover this same amount of information in one semester. Additionally, the college classes are accompanied by separate lab components; labs are not taken out of class time but attended separately – usually one three-hour lab each week. What does this mean? It means that in one year of college biology, students receive 168 hours of instructional time. Our situation is not quite ideal; if we have a full 90 minute class period available to us every single day of the semester (which we all know does not happen), then we only have 135 total hours in which to cover the content of AP Biology. Additionally, the AP exam is only offered in May. Students taking the course in the fall must continue to review the material for months after completing the course in order to be successful on the exam. Students taking the course in the spring actually lose a week of instructional time, since the exam is given a couple of weeks before the end of the semester. Neither of the situations is optimal. All of these circumstances combine to make our AP Biology class particularly challenging.

Twenty-five percent of instructional time is dedicated to student-directed, inquiry-based lab investigations and activities, which are conducted to deepen conceptual understandings and provide opportunities for students to practice science (**CR7)**. There will be at least two laboratory experiences per big idea selected from the list below from the AP Biology Investigative Lab Manual: An inquiry-based approach (2012). **(CR6)**

Students will maintain a laboratory notebook and a portfolio throughout the course. In addition to the laboratory notebook, students will communicate to others in formats such as group presentations, PowerPoint presentations, poster sessions, and written reports. Communication tools are not only for the laboratory experiences, but represent examples of the collaboration, reflection, and articulation seen in the course as a whole. Students will use this collection of their work over time and reflect on the changes they can see in the quality or substance of their work through the year as they prepare to move into college courses and research experiences in the future. A key feature in the portfolio will be the requirement for student self-reflection in terms of the science practice skills that they have developed throughout the year. **(CR8)**

**Your Personal AP Biology Experience:** The challenges described in the last paragraph do NOT mean that you will have a miserable experience this semester. This class is for those students who are both bright and motivated, with a love for biology, and were selected to be a member of this class, but success will not be easy. This success will require you to commit to each of the following guidelines:

1. Read the assigned chapters from your textbook, the Campbell Biology - AP Edition (High School), 11e (Urry et al) *(****CR1)***. Time will not permit me to cover all of the material in the book, but you are responsible for all of this content on the AP exam. I understand that many of you have enjoyed academic success during your high school career without reading your textbooks, simply taking very good notes and paying attention in class. This will not be enough for you to succeed in this class. The average AP course requires 7 hours per week of preparation time; our circumstances will require you to spend approximately 10 hours per week (outside of class) reading and studying.
2. Attend class. Attendance is extremely important in AP Biology. Material is covered very quickly and in much more detail than in your lower-level biology courses. Excessive absences for whatever reason – illness, athletic competitions, doctor’s appointments, etc. – will jeopardize your chances of success in the course. If absences have been a problem for you in the past and you expect them to continue to be a problem, you need to reconsider taking an AP course. It is especially important to be present for the labs, since you may be asked about any of them on the AP exam. If you miss a lab, you will be required to obtain the data from a group member and then analyze, interpret, and reach your own conclusions from that data. Additionally, you will be required to read and write a summary of a scientific article related to that lab as a make up assignment for the lab experiment that you missed.
3. “Study Groups.” Because of time constraints, there may be some material that we do not cover. There will also be no class time allocated for review. In order for you to maximize your success in this class, you can make an appointment with me for help. Since the AP exam is offered in the spring, these review sessions will likely become more frequent in January to May. Attending these sessions will definitely better prepare you for your AP exam.
4. Don’t procrastinate. Because this class is intended to be very much like a college class, we will only have seven tests during the semester. This means that each test will cover an extremely large amount of material – too much material for you to learn and understand the night before the test. I am available before and after school for you to ask me questions as they arise. I will not, however, be available to help you 15 minutes before the test. If every student shows up on the morning of the test, I cannot possibly help all of you. Study the material as we cover it so that your questions/ confusions can be answered and cleared up effectively.
5. Have an open mind and a positive attitude. While this will not be an easy class, it can certainly be a fun one. What you get out of this class is directly proportional to what you put into it. Make it worthwhile!

**Materials:** Students will need the following items:

1. Composition Book (Lab Journal)
2. 3-ring binder with pockets (for notes and other materials)
3. Scientific calculator
4. No. 2 pencils, black ball-point pens, set of color pencils
5. Current textbooks
	1. Campbell Biology - AP Edition (High School), 11e (Urry et al) (**CR1)**
6. Access to the Internet, either at home or at school, and a current email address

**Assignments/ Make-ups:** All assignments are due by the unit test. Anything that is submitted after the unit test will have a 30% reduction in score. All missing/makeup work must be completed by the Friday before final exams.

**Grading scale:** Each student’s grade will be based on the following allocation of points:

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| --- | --- |
| Graded Items | Percentage |
| 1. Major Tests/ Quizzes | 40% |
| 2. Laboratory Reports | 25% |
| 3. Homework/ Class work/ Participation | 20% |
| 4. Final Exam | 15% |

The AP Exam scores are not received until early July. These scores are therefore not used as a part of a student’s average in the course.

**Plagiarism Notice**

The signatures below indicate that I understand that plagiarism is the un-credited use of another author’s words or ideas. It is a form of stealing that should not be tolerated. Any assignment containing any plagiarized work will receive ZERO points. Plagiarized work includes any work copied from a published document, an internet site or any other individual. Not only will I receive a zero on the entire assignment that contains plagiarized work, I will also receive a discipline referral on my record.

(Student’s signature)

(Parent’s/ Guardian’s signature)

Parents,

Sign below indicating that you have discussed all of this information with your student and understand the procedures of this class. I will communicate often via email, so please include an email address you check regularly.

Parent/Guardian Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_

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