

AP BIOLOGY

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MATERIALS (Bring to class every day!)

SEVERAL large 3-ring notebook (~3 inch) **WITH DIVIDERS**

Lined loose leaf paper

4 function calculator (with $\sqrt{\quad}$)

jump drive

Course Description The AP Biology course is a fast paced, challenging, and fun year long biology course designed to be the equivalent of a two-semester introductory college course. Success in this course will depend on your study skills, reading and writing abilities, motivation and maturity. AP BIOLOGY differs significantly from the usual first high school course in biology with respect to the kind of textbook used, range and depth of topics covered, laboratory work done by students, and time and effort required of the students. The textbook used for AP Biology is one used by many college biology majors. Student-designed labs rather than "cookbook" labs are the ultimate goal.

The course will culminate in the taking of the Advanced Placement Biology Examination. After showing themselves to be qualified on the AP Examination, some students, as college freshmen, are permitted to undertake upper-level courses in biology or to register for courses for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory-science course and will be able to undertake other courses to pursue their majors. Many colleges give credit for introductory biology to applicants with a score of 3 if they are non-science majors, but few will accept a score of 3 for credit if the student is a science major. *Many colleges DO NOT accept AP Biology Exam scores for credit for Biology majors.*

AP CREDIT: If one of your goals is to obtain credit for an introductory college biology course, you should contact the colleges you are likely to attend. Find out if they accept AP scores for credit (most, but not all colleges do). The webpage (<http://kr021.k12.sd.us>) has a link to the College Board website that allows students to search for AP credit policies at different universities. Check the website to see the score requirements for your chosen school. *(Some colleges require the submission of your AP BIO LAB NOTEBOOK to receive lab credit, so hold on to your LAB NOTEBOOK after completing the course)*

Course Goals The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The ongoing knowledge explosion in biology makes these goals even more challenging. Primary emphasis in an AP Biology course should be on developing an understanding of concepts rather than memorizing terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns.

PREREQUISITES: Students enrolled in this course should have completed BOTH of the following:

ONE YEAR of Biology (BIO I and Bio II) **AND** ONE YEAR of Chemistry with a "B" or better

Due to the vast amount of information students are expected to learn, I will assume students already have an understanding of topics covered in these prerequisite classes and we will focus on covering NEW information.

Some independent review of prior topics may be required.

BIOLOGY REVIEW: (See above)

If you wish to go back and review concepts from Biology I and Biology II use the following:

BHS BIOLOGY WEBPAGE User Name: biology Password: bhs

AP EXAM: The AP Exam will be administered **Monday May 8, 2017**. The exam is 3 hours long and includes both a 90-minute multiple choice section (63 multiple choice and 6 grid-in questions) and an 80-minute free-response section (6 short and 2 long essay style questions) that begins with a mandatory 10-minute reading period. The multiple-choice section accounts for half of the student's exam grade, and the free-response section accounts for the other half

EXPECTATIONS: Self-motivation, self-discipline and the maturity to handle the work required for a college-level class are the ultimate keys to success. There is a great deal of outside study time required. Those students who are not committed to spending the necessary preparation time each day will find the course very difficult. Each student and parent should not be surprised by course requirements that are in excess of what you would expect from an honors-level course. Also, some students, accustomed to making all A's, may make B's or C's on tests and start to doubt themselves and their decision to enter the course because they forget that they are taking a college level course with standards that are much higher than usual. Students do not have to make A's on every test to do very well on the AP Exam.

HOMEWORK: KEEPING UP WITH THE READING IS VERY IMPORTANT! Read your textbook nightly. Stay up-to-date; Be prepared for a pop-quiz over reading assignments at any time. Homework is assigned nightly. *This is not a class where cramming the day before a test will work! Students should expect to complete a MINIMUM of 5-10 hours of study OUTSIDE of class each week. Students taking multiple AP courses should be aware of the time commitment required by each.* Self-discipline is very important. The vast majority of the students who do not pass the AP Bio exam have an inconsistent record of homework assignments and labs. The most successful students are those who make a daily commitment to their studies. Even if there is no specific homework assignment, students should "**make their own assignments**" to solidify content knowledge (review notes, play a review game, take a practice test, make a graphic organizer, word web, or concept map, watch a video, etc.)

LABS: AP Biology is designed to be a lab based course. Students are required to complete 8 of 13 recommended AP Bio Labs. We will complete these, as well as, additional hands on activities, supplemental labs, and computer simulations. Emphasis will be student-directed rather than "cook book" labs. Some labs may run longer than a single class period and may require additional time outside of class to complete. AP BIOLOGY class has been scheduled 4th hour so that students may extend lab time into lunch period if necessary. Due to the complexity and perishable nature of certain labs/supplies, it will not be possible to make up some labs, If you are absent, alternative data may be supplied for use in completing a lab write up. You will still be responsible for the concepts. *In order to participate in labs, students and parents must sign the LAB SAFETY CONTRACT.*

LATE WORK: Assignments turned in after the due date will drop one letter grade for each day late. Once assignments are graded and returned to class, students can earn up to 50% on missing assignments by completing them IN MY ROOM. Once a unit is completed and tested over, work for that chapter can NOT be turned in for credit.

RESOURCES: Students will be provided with the following:

- BIOLOGY IN FOCUS by Lisa Urry, et. al.
- AP BIOLOGY Student Lab Manual
- AP Biology Test Prep Book by Fred Holtzclaw & Teresa Holtzclaw
- Cliffs for AP Biology
- Genome by Matt Ridley

Students will be given a code to access their textbook online.

ALL BOOKS must be returned at the end of the year.

Students will be charged fees for resources not returned.

ADDITIONAL RESOURCES: Extra resources are available for purchase. PLEASE TALK TO ME BEFORE YOU SPEND MONEY ON other study resources.

SEMESTER GRADE: The BHS grading scale will be followed. GPA calculations at BHS reflect this increased rigor. (a grade of B in an AP course counts as an A in terms of calculating student GPA *but is recorded as a B in the transcript!*) Overall grade for the course will be based on the following:

1st/3rd quarter 50%; 2nd /4th quarter 50%

PARENTS PLEASE NOTE:

15 hours (Five 3 credit classes) is considered a FULL-TIME course load for a COLLEGE student.

College students taking more than 18 hours (6 classes) require a dean signature for an "OVERLOAD".

Students at BHS often take 7 classes including multiple AP level courses, in addition to participating in extracurricular activities. For your student's mental and physical health, please consider this when choosing helping them choose courses for their junior and senior year.

MULTIPLE AP CLASSES: Budgeting your time to complete homework, learn content, and prepare for AP Exams is essential to success. Students taking multiple AP classes should be aware of the coursework expectations. Look at the AP testing schedule and plan your prep time accordingly. Remember, if you are taking "other AP exams", you may miss class time when we will be reviewing the week before the AP Bio Exam.

2017 AP EXAM SCHEDULE

May 1 AP Chemistry-AM	May 2 Physics I- PM	May 3 AP English Lit & Comp AP Physics II-PM	May 4 AP Calculus	May 5 AP US History
May 8 AP BIO AP Physics C Mechanics- PM	May 9 AP Gov't & Politics	May 10 AP English- Lang & Comp	May 11 AP Statistics-PM	May 12 AP Human Geography AP Micro Econ-PM

EXTRA HELP: There is no such thing as a "dumb" question! I am available for extra help before school, lunch, and after school. Please let me know ahead of time if you plan to come for help. Come prepared with specific questions, problems, or labs. Please do not wait until you are swamped and in over your head before you come for help! Other "outside of class time" review sessions may be held prior to the AP Exam in May. If you have any questions or concerns about the course or the contents of this letter, please contact me.

SEE YOURSELF AND CLASSMATES AS TEACHERS

Everyone knows something. "Study buddies" and "Study groups" are encouraged. In the past some classes have set up a Facebook group to help each other answer questions, discuss topics, or organize and communicate study sessions.

YOU REMEMBER:

10% of what you learn from reading.

50% of what you learn when engaged in a group discussion.

90% of what you learn when you teach someone else