

AP Biology@ HSPVA

Course Syllabus 2018–2019

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Class Website: <http://destinationdiluglio.weebly.com/ap-biology.html>

Course Overview:

In AP Biology, the emphasis is on students making connections between the big ideas within the AP Biology Curriculum Framework. This course is the equivalent of an introductory college-level biology course, and it is designed to help students become better thinkers and to prepare students for college Biology and the AP Biology Exam.

My philosophy is to actively engage students in the process of science through class assignments and discussions which inform their laboratory experiences. For example, students practice their critical thinking and problem solving abilities by anticipating experimental set ups in group discussions, journal readings and hands-on labs. Emphasis is also given to article readings in order to expose students to present day technologies and procedures to familiarize them to limitations of testable hypotheses in order to develop better designed experimental investigations.

Lab techniques are learned through hands-on labs which make up at least 40% of instructional time. Labs emphasize development and testing of the hypothesis, collection, analysis and presentation of data, as well as discussion of results to discover unanswered questions about the particular topics addressed. A minimum of two labs in each big idea will be conducted. Students are required to report on all laboratory investigations. The student-directed and inquiry-based laboratory investigations used throughout the course enable students to develop their critical thinking and analysis skills through the lens of Biology.

Materials:

HISD issued laptop is required in class every day, charged

AP Biology online textbook: Biology in Focus (access will be given in class)

Student Lab Notebook

Your Inner Fish by Neil Shubin (Semester 1)

Genome: The Autobiography of a Species in 23 Chapters by Matt Ridley (Semester 2)

Academic Honesty:

Academic honesty is an integral component of a student's education. All graded academic exercises, including homework, quizzes, tests, essays, research papers and projects, are expected

to be conducted individually and completed as the student's original work unless otherwise instructed. The consequences of not adhering to this policy are a zero as the final grade for the assignment, a "P" in conduct for that marking period, and administrative referral. Cell phones are prohibited on your person during a quiz or a test given for this course.

AP Biology Big Ideas.

Big Idea 1: The process of **evolution** drives the **diversity** and **unity** of life.

Big Idea 2: Biological **systems** utilize free **energy** and **molecular building blocks** to **grow**, to **reproduce** and to maintain dynamic **homeostasis**.

Big Idea 3: Living **systems store, retrieve, transmit** and **respond** to **information** essential to life **processes**.

Big Idea 4: Biological **systems interact**, and these systems and their interactions possess complex **properties**.

Summary of Course Topics.

Semester 1:

Scientific Methods/Animal Behavior

Evolution

Ecology

Biochemistry

Cells and Cell Processes

Semester 2:

Molecular Genetics

Mendelian Genetics

Plants/Photosynthesis

Organismal Physiology

Review

Course Grading Distribution.

Unit tests: 50%

Classwork, labs, projects, homework, quizzes: 50%

Mid-term and Final Exams: 25% of the semester grade

Labs and Projects.

Labs and projects are intended to support the development of higher-order thinking skills, research skills and logical reasoning. Labs and projects require independent work (early stage collaboration is encouraged, so long as the end results are **YOUR OWN** work) that will enrich your understanding or appreciation for the concept area. Labs and projects are time consuming and will require significant work out of class. Given the volume of work, students need to plan ahead and balance these assignments with other work from this and other classes. Labs and projects must always include a complete bibliography.

AP Biology Exam:

It is expected that all students who are enrolled in AP Biology take the AP exam at the end of the course. If an AP Biology student does not take the AP Biology Exam OR sleep through the majority of the test, then they will be required to take a three and a half hour final exam given by the instructor in order to receive credit for the class. **The exam date is Monday, May 13th, 2019 at 8:00 AM.**

Accessing Gradespeed:

All students are expected to have access to Gradespeed and to check it in order to stay informed of their progress in the class.

Standards Based Grading (*IMPORTANT! PLEASE READ*)

I use a grading system called standards based grading (SBG). While SBG will feel very different (and probably confusing) at first, my hope is that it will result in helping you learn Biology better. This method of grading has also been shown to help teachers, students, and parents identify which concepts students understand really well, and which concepts they have not yet mastered and need to work on a little longer.

What is Standards Based Grading?

Standards based grading is a philosophy that uses a student's demonstrated skills and knowledge as the basis for the grade earned in the class. Assessments can be quizzes, tests, lab reports, or other assignments. Students will be given a concept checklist at the beginning of each unit. The document for Unit 1 has already been handed out and can also be found at the class website provided at the top of the syllabus.

What will SBG look like in the Biology classroom?

Assessments will be made primarily through unit exams (about two per grading period) that will incorporate 4-7 concepts. The dates for these assessments can be found on my class web page. Here is what will be different about the quizzes and tests: there will be no entry in Gradespeed that will record the grade for "Quiz 1" or "Test 1." Instead, each quiz or test will be broken out into each of the concepts that students need to show me that they understand. Each objective, such as "students will know and be able to identify the following terms in a scientific experiment: *hypothesis, independent variable, dependent variable, constant variable, experimental control, data*" will receive its own grade in Gradespeed that shows mastery of the concept.

Students will be assessed in a variety of ways, but mostly through exams that will contain both multiple choice and free response questions (frqs) for each objective, and lab reports. Again, each assessment may have multiple grades associated with it, as each concept assessed is graded separately.

Homework.

I expect students to complete about two hours of homework per class for AP Biology. Most of the daily assignments will require the textbook, although outside reading, videos, lab reports, and projects can also be assigned. There is A LOT of information in Biology, and the pace is fast! Do yourself a favor and keep up with the homework so that you don't become overwhelmed later on. THIS IS EXPECIALLY TRUE FOR AP BIOLOGY! Homework will not be graded on a daily basis, but is essential to spend time on in order to be successful in Biology.

Late work policy.

I expect all students in an AP class to be able to complete all assignments on time. If work is not turned in by the deadline date and time (when class begins or by teacher discretion) a 50% deduction from the original grade will occur. Failure to turn in work by the beginning of the next class meeting will result in a grade of zero even when the student is absent from school. If absent the day of a major exam or project, you are required to contact the teacher by the day you return to school. Makeup work can be done by appointment with the teacher. If you are absent for quizzes, lab exercises, or any class work, it is your responsibility to arrange make up within three calendar days upon your return or you will receive a zero.

Classwork or in class assignments are all turned in at the end of the class or at teacher discretion. If you want time to complete it outside of class, you must ask for an advocacy pass and attend advocacy to complete the assignment.

How can I improve my grade?

If you are not happy with your grade on a specific concept, then you can schedule a time to come in and show me that you completed additional work in this area (*i.e.*: reading and taking notes from the textbook, attending a tutorial, working on practice problems, studying from flash cards, etc...). Once evidence is shown of additional preparation for an objective, you can **reassess on the objective during a requested lunch or after school tutorial. If you reassess on a concept, then your recorded grade will be the average grade of the two assessments.** You can reassess up to TWO weeks after the test has been given or the end of the grading period,

whichever comes first. There will be **no extra credit** in Biology—the only way to improve your grade is to give evidence of the concepts that you have not yet mastered.

Make up work.

Make up work is your responsibility. If you know that you will miss class due to school activities, be sure to get any assignments before you leave. If absent, you can check the assignment list posted on the class website to see what you have missed. Ask me for any documents required after class, or you can download them from my website. Make up work must be turned in within **THREE SCHOOL DAYS** of the original due date. Missed assessments must be taken during tutorial time or during a pre-scheduled time before or after school.

How can a grade go down?

I believe strongly that long-term knowledge is more desirable than simply being able to “pass a quiz.” If you begin to regress in a particular concept, your score will drop to reflect this as well. All quizzes and tests will be cumulative—I will always let you know which past objectives might appear on any given quiz or test. My sincere hope is that you will grow to recognize that learning (and consequently, grades) is something over which you have a great deal of power.

I realize that a major shift in grading will be uncomfortable at first, but I truly believe that by the end of the year you will feel as though this shift has made your grade a more meaningful representation of your knowledge of Biology.

Sincerely,

Nicole DiLuglio

**ATTENTION HSPVA AP BIOLOGY STUDENTS AND PARENTS!!
Yes, we have read the Biology Syllabus and Safety Contract together!**

*Please sign when you have had an opportunity to look through my (Ms. DiLuglio's) syllabus, standards-based grading policy, and the safety contract together. They can be found at: <http://destinationdiluglio.weebly.com/ap-biology.html>
Thanks also for being involved with your child's education. With your help we will have an outstanding school year!*

Please check the boxes to indicate that you have read the:

- Biology syllabus
- Standards Based Grading policy
- Student Safety Contract

Student name: _____

Student signature: _____ Date: _____

Parent/Guardian signature:

_____ Date: _____

*****IMPORTANT!*****

I FIRMLY BELIEVE THAT STUDENTS, TEACHERS, AND PARENTS ARE ALL ON THE SAME TEAM! PLEASE LET ME KNOW THE BEST WAY TO COMMUNICATE WITH YOU.

Please contact me (parent/guardian) via (select 1-2 options):

- email (preferred): _____
- cell phone: _____
- work phone: _____
- home phone: _____
- text: _____

**Also: If you are willing to volunteer in the classroom or be a guest speaker concerning a biology related topic, please check here and I will contact you regarding your interest and availability.
Thanks so much!**

area of interest/expertise: _____

