Pre-AP Biology Syllabus 

# Course Overview

Instructor:

Mrs. Haven Gammill

**Instructor Education:**

B.S. in Biological Sciences

M.S.E. with an emphasis in Biology

School Email:

haven.gammill@jonesboroschools.net

Classroom Website

havengammill.weebly.com

Classroom Location:

Room B205

Biology is the study of living organisms, their origins, how they survive, reproduce, change over time, and interact with each other and their environments. The Pre-AP Biology curriculum is an introductory course taught in two semesters of high school. The primary objective of the course is to provide students with a fundamental understanding of modern biology and scientific processes, building a foundation for success in the college level AP courses to follow. Pre-AP Biology is recommended for high-achieving students and for students who have a particular interest in biology and the natural sciences, including students who are traditionally underrepresented in AP courses. Students will be ultimately responsible for their learning; therefore, they should be organized, prepared, and motivated to learn every day. The Pre-AP Biology curriculum differs from the regular Biology curriculum in meaningful ways. The Pre-AP course places a higher priority on developing critical thinking skills by examining real world problems. The Pre-AP curriculum examines topics with more depth and includes more advanced resource materials and laboratory experiments/techniques.

#  Course Topics

(The order in which the topics are taught could be modified!)

Topic #0: Introductory Unit

Topic #2: Structure & Function

Unit 2.1 Biochemistry

Unit 2.2 DNA

Unit 2.3 Cells

Unit 2.4 Systems Feedback

Topic #4: Genetic Variations in Organisms

Unit 4.1 Cell Reproduction & Development

Unit 4.2 Protein Synthesis

Unit 4.3 Mendel & Meiosis

Topic #5: Evolution by Natural Selection

Topic #3: Biodiversity & Population Dynamics

Topic #1: Cycling of Matter & Energy

Topic #6: Life & Earth’s Systems

Topic #7: Human Impacts on Earth’s System

# Required Course Materials

* One Binder or Folder (To keep up with all notes, classwork, diagrams, etc.)
* Loose-leaf notebook paper
* Pencils
* Pens (Blue or Black Ink ONLY!!)

**Additional Needs of the Classroom**

\*\*These materials are NOT required, but any of them would be greatly appreciated if they were purchased for the classroom!\*\*

* Kleenex
* Clorox Wipes
* Markers or Colored Pencils

**Methods and Teaching Strategies**

Instruction throughout this course will vary based on the topics. Instruction will involve: lectures, handouts, reading assignments, class discussions, demonstrations, TED Talks, virtual demonstrations/videos, written assignments (in-class and homework assignments), laboratory experiments, and formal/informal lab reports.

**Exams**

Exams will be over material we cover in class, supplemental material you are asked to read, and material covered in handouts, labs, or other activities. The test will range from multiple choice to essay questions. Quizzes may be given at any time covering assigned readings, previous lectures, homework, or lab procedures. Comprehensive final exams will be given each semester. Students should study daily to be prepared for exams and quizzes. The teacher reserves the right to administer a different make-up exam and/or quiz.

**Labs**

Laboratory experimentation and exploration are a part of this course. It is vital that the students follow all laboratory procedures and safety rules/guidelines. Failure to comply with behavior expectations can result in removal from the lab activities. A safety contract will be sent home and filled out by the student and the parent/guardian. These documents will be kept on file and are needed before a student can participate in any labs. Students are expected to write formal lab reports in the format provided by the teacher. Labs missed due to excused absences need to be made up in/on an agreed upon time with the teacher. Students can NOT borrow data or results from classmates. It is the responsibility of the student to be sure these labs are made up. The make-up lab will be scheduled at the teacher’s convenience. Failure to make up labs will result in a zero for that grade.

**Homework**

Pre-AP Biology is a rigorous course; therefore, students will have homework (of various types) at different times to complete. Students will receive plenty of supplemental materials to help them be successful throughout this course.

**Homework/Make-Up Work Policy**

Students are to turn in all required work on the due date at the specified time. This class will follow the School Policy Handbook, the Academy Policies, and/or the Science Department Policies when it comes to late work. Due to google classroom and my class website being updated regularly, students will have no excuse to not know about a due date. A student will only receive make-up work if he/she had an excused absence. It is the students’ responsibility to ask the teacher what he/she missed on his/her OWN time! Do not come in as the bell is ringing asking for make-up work!

**Grading Scale**

All students will be rewarded the grade he/she EARNS. The instructor does not “give out” grades. The grades will be determined using a total point system. Grades will be rounded up at or above the .5 mark. For example, an 89.4% is a “B”; however, an 89.5% is an “A”.

A: 90-100%

B: 80-89%

C: 70-79%

D: 60-69%

F: 59% & below

**Classroom Rules**

1. Be in your seat ready to work **BEFORE** the tardy bell rings!! Take care of your business (bathroom, locker, etc.) BEFORE you come to class!
2. Put AWAY cell phones!! You will NOT need your cell phones for academic use, so they should be completely out of sight during class!
3. Put AWAY all headphones, music players, etc. You are not allowed to have your headphones in while you are in class, unless you are instructed that it is okay!
4. RESPECT!! This includes ALL forms of respect; respect yourself, respect your teacher, respect your classmates, respect your surroundings, respect all lab equipment, etc.!
5. Work ONLY on BIOLOGY while in my classroom; once you have completed your biology assignments you may work on assignments for other classes!
6. Don’t close up early, I will dismiss you from class!
7. Leave the classroom in the same condition as it was when you walked in! This means push your chairs up under the desk when leaving, put all books and/or equipment back where you got them from, and clean up your space by wiping up any liquids or messy materials and throwing away all trash!
8. Check Google Classroom, your school e-mail, and our class website REGULARLY to stay up-to-date!!
9. Follow ALL school policies and procedures!!!

**Study Techniques**

The most common problem students that are new to high school Pre-AP courses is that their study skills are not adequate for the rigor of these courses. Studying for these classes involves more than just “cramming the night before a test.” The following are suggestions to improve your grade in Pre-AP Biology and other high school courses.

1. Prepare for class before coming to class by reading over the sections of your text that will be covered in that lecture.
2. Read over your notes shortly after you have written them. (Suggestion: It also helps to rewrite your notes and organize them in a manner that works best for you!!)
3. Make and use a vocabulary list as you go.
4. Complete ALL worksheets, study questions, note guides, etc. (Suggestion: Complete these on your own! Try answering what you can without an additional aid first, then use your notes and textbook for those questions that you could not figure out!)
5. Keep your hand-outs, board notes, publisher notes, study guides, diagrams, etc. organized in your class binder.
6. Always read assigned material and make sure you outline ALL the main ideas (not just a single item in a section).
7. Pay attention and don’t daydream in class.
8. Study frequently and in small doses. Cramming does not foster long term understanding that will stick with you!!!
9. Set up a study group and study with friends/classmates on a regular basis.
10. Understand figures and diagrams from the lectures and your text. If you do not understand them, ASK! (Suggestion: Coloring figures and diagrams can help you understand and remember them better!)
11. If you are having trouble with the material, get help EARLY. Do not wait until TEST DAY!!!