

HULL HIGH SCHOOL  
STUDENT COURSE EXPECTATIONS  
2018 – 2019

COURSE TITLE: ADVANCED PLACEMENT BIOLOGY

CREDITS: 9

INSTRUCTOR: Mr. Donohue

**Textbook:** Reece, Urry, Cain, Wasserman, Minorsky and Jackson, *Campbell Biology* (9<sup>th</sup> ed. AP), Pearson Education, Inc., 2011. Cost: \$154.00

**Course Overview:** The goal of the AP Biology course is to provide students to a course which is equivalent to a two-semester introductory college biology course. Students in this course will develop a conceptual framework for modern biology, and an appreciation of science as a process. This is a rigorous, college level course, with an emphasis on understanding concepts, developing scientific inquiry, and application of biological knowledge. On Monday, May 13, 2019, students in this course must take the Advanced Placement Examination in Biology. Students who do not take this examination will receive honors credit in lieu of advanced placement credit. The student fee for taking this examination, which is administered and corrected by the College Board, is \$94.00. Fee reductions are available for students who are financially eligible. Please see your guidance counselor for assistance with fee reduction.

**Course Objectives:** Throughout the course, students will relate their learning to a set of four “big ideas”, which are:

1. The process of evolution drives the diversity and unity of life.
2. Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
3. Living systems store, retrieve, transmit and respond to information essential to life processes.
4. Biological systems interact, and these systems and their interactions possess complex properties.

The big ideas serve as overarching concepts, in which a set of enduring understandings and learning objectives are categorized and interrelated. This set of big ideas, enduring understandings, and learning objectives will be covered in detail throughout the course.

**Course Content:** This course will closely follow the topic outline from the AP Biology course description published by the College Board. The course content has been divided as follows by the College Board:

## **Topic of Course**

- I. **Molecules and Cells** . 25%
  - A. Chemistry of Life. 7%
  - B. Cells. 10%
  - C. Cellular Energetics. 8%
- II. **Heredity and Evolution** . 25%
  - A. Heredity. 8%
  - B. Molecular Genetics . 9%
  - C. Evolutionary Biology. 8%
- III. **Organisms and Populations** . 50%
  - A. Diversity of Organisms . 8%
  - B. Structure and Function of Plants and Animals . 32%
  - C. Ecology . 10%

**Required Reading:** Students will be required to complete readings from the text, current events articles and case studies, and additional supplemental readings as required.

**Required Writing:** The Science department will fulfill a critical component of the Hull High School writing initiative through the writing of formal laboratory reports and laboratory abstracts. Each science course will require a total of two formal written laboratory reports per year. Laboratory abstracts will be written for experiments, which do not require a written laboratory report. Hull High School Written Laboratory Reports will be typed, written in the third person, and contain the following components: Title, Abstract, Introduction, Materials, Methods, Results (which includes written results, data tables, and graphs), Discussion, and Literature Cited / References. Laboratory abstracts will be typed, written in the third person, and consist of a summary of the purpose, summary of the methods, summary of the results, and summary of the conclusion.

## **Course Evaluation Criteria:**

The grading scale will follow the policy outlined in the student handbook. Students will be graded on the number of points earned vs. total points available.

Tests/Quizzes – Tests will be announced, quizzes will not. Tests will be given at the end of units/chapters, and quizzes will be given to check conceptual understanding or as a follow-up assignment to homework. Tests and quizzes will be worth up to 100 points. Although there is no set proportion of percentages for each grading category, the majority of the student grade will be based on quiz and test performance.

Lab Reports, group and individual projects – Lab reports may be formal lab reports as described above, abbreviated lab reports, or abstract only. Rubrics will be used for lab reports, group projects, and presentations, and will be handed out with the assignment. Lab reports, group and individual projects will be worth up to 100 points.

Homework assignments – Written homework will be given mainly as review questions, study guides, and vocabulary lists. Homework will be worth 10 points each.

## **Course Policies**

**Lab Safety** – Students will follow all safety rules as defined in the safety contract provided the first week of classes. Unsafe practice by a student will result in that student being removed from the lab, pending a parent meeting with the instructor and school administration. Zero points will be earned for missed labs due to unsafe practices. Ask questions if you don't know so you can learn proper procedures. Immediately report any accident, breakage, or spill to the instructor.

**Attendance** – Although the school has a separate attendance policy, it is very important that all students make every effort to be in class every day. Due to the rapid pace of the course, and the amount of material being covered, it will be very easy for students to fall behind after even one absence. When absences are unavoidable, students must contact the instructor immediately when an absence is anticipated, or upon returning to school, to get makeup work and set up a schedule for making up missing work. Any missed lab activities will be made up after school. Failing to make up work within the allowed time limits will result in the student receiving a zero for any missing work.

**Academic Honesty** – Students are responsible for completing their own work, including tests, class work, labs, and homework. Any student who is caught cheating will receive a zero for that assignment, and will be referred to administration. Please carefully read the section in the student handbook on academic integrity. Students will be held to these standards.

**Class Preparation** - Bring the text, your binder, pen/pencil, and agenda book every day, unless otherwise told by the instructor. Students who come to class unprepared will lose points from their final average.

**Homework** - Homework will be assigned on a regular basis. It is expected that students will devote one hour per night for homework in AP Biology. Much of the homework will be assigned reading from the textbook and reviewing material from class. It is important to note that students will be expected to use homework time as a time to review previously covered material, to review notes and materials from class, and to acquire new knowledge independently. Homework is due at the beginning of class on the specified due date. No late homework will be accepted.

**Classroom rules** - Be on time. Be respectful and courteous to fellow students and the instructor, and use appropriate language at all times. Be responsible for your learning and be a positive contributor to the class.

**Extra help** - After school. Please arrange for a time with the instructor before or after school. Students who are having trouble understanding concepts, or who are having trouble keeping up, should immediately schedule time after school to get extra help.

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**Student/Parent Acknowledgment**

Your signature indicates that you understand the terms of these expectation sheets and know what is expected of you for the successful completion of this course. Please keep these sheets in your notebook and refer to them whenever you have any questions concerning the course.

Student Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Your signature indicates that you have had the opportunity to read these expectation sheets and discuss the expectations with your son or daughter. I thank you for your cooperation, and please do not hesitate to contact me at the high school by email at [jdonohue@town.hull.ma.us](mailto:jdonohue@town.hull.ma.us), or 925-3000 should you have any questions or concerns about your child's progress or if you would like to make an appointment with me.

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

Parent Email: \_\_\_\_\_

Best parent phone to call: \_\_\_\_\_