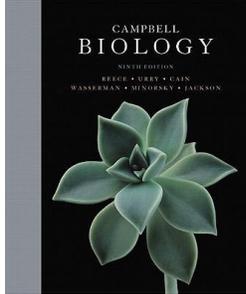


AP BIOLOGY SUMMER ASSIGNMENT 2019-2020



Instructor: Mr. M Migliore
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Email: mmigliore@hamden.org
Office Hours: Monday 2 – 2:45pm &
Tuesday, Wednesday by appointment

Welcome to AP Biology! AP Biology is a course designed to be the equivalent of a college-level introductory biology course. Students entering AP Biology have taken full-year courses in introductory biology and chemistry. The intent of the course is to expose students to higher-level biological principles, concepts, and skills and allow them the opportunity to apply their knowledge to real-life applications. By utilizing the big idea statements, enduring understandings, and science practices to guide biology instruction, it is the goal that students develop an appreciation for the study of life

- a. **PREREQUISITES:** Student must earn an A- in Chemistry 27 and Biology 17, a B- or better in Chemistry 29 and Biology 19, or have permission from the Science Director.

II. Course Framework:

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.

III. Textbook

Campbell, Neil A., and Jane B. Reece. *Biology*. 9th ed. San Francisco: Pearson Benjamin Cummings, 2008

AP Biology Investigative Labs: An Inquiry-Based Approach. New York: The College Board, 2012.

IV. Part 1: Create a Schoology Account

Schoology will be used as our online classroom. You will be able to have class discussions, post assignments, communicate with the class, etc. ***Please email me and I'll send the access code and directions for creating an account.*** Familiarize yourself with the website as it will be a positive learning tool during the school year.

Web Address: www.schoology.com

DUE DATE: Within 24 hours of receiving access code

V. Part 2: Student Information Sheet

Complete the student information sheets by clicking on the Google Form link. This will help me get to know you before the start of the school year.

<https://forms.gle/VyiKE6JvC4YLLszh6>

DUE DATE: Wednesday, June 12th by 12:00 pm

VI. Part 3: Read a Book & Write a Report

Choose a book from the following list. Read the book and write a well thought out and detailed report discussing the key ideas. The report must be in proper MLA format. Any form of plagiarism will result in an automatic 0. See the grading rubric for specific details.

- a. *Your Inner Fish* by Neil Shubin
- b. *Ever Since Darwin* by Stephen Jay Gould
- c. *Why Darwin Matters: The case against Intelligent Design* by Michael Shermer
- d. *The Greatest Show on Earth: The Evidence for Evolution* by Richard Dawkins
- e. *The Making of the Fittest: DNA and the Ultimate Forensic Record of Evolution* by Sean B. Carroll
- f. *Finding Darwin's God* by Ken Miller
- g. *The Language of God* by Francis Collins

DUE DATE: Tuesday, July 23rd by 8:00pm

VII. Part 4: Evolution Misconceptions Pair Project

Working with a partner, I will assign a common misconception from the list on the assignment sheet. Read the directions carefully. You will need to produce a written paper and Google Slide or Prezi presentation. Be prepared to present your project during the first week of school. A grading rubric is available on the class website in the Summer Assignment Folder.

DUE DATE: Tuesday, August 13th by 8:00pm

VIII. **Part 5: “A Year in Review” – What You Should Know from Freshman Biology**

Complete the “Year in Review” Guide. This guide covers all the key topics and vocabulary you need to remember from Biology.

DUE DATE: Monday, August 26th in class

IX. **Part 6: Flow Chart/Concept Map**

Create a flow chart or concept map using the list of words provided on the handout titled *Activity 22.1 How did Darwin View Evolution via Natural Selection?* This is an individual assignment. Be creativity.

DUE DATE: Wednesday, August 28th in class

X. **Part 7: Words to Know (W2K)**

Define the words to know in your own handwriting. A complete list will be available on the class website. The words will be covering Chapters 22 – 26 in the textbook.

DUE DATE: Tuesday, September 3rd in class

This summer assignment will give you a taste of what AP Biology is all about. We will be covering a lot of material in many different ways. You will be taking more personal responsibility for your learning. The summer is a great time to practice being the type of student you want to be during the school year. The best advice I can give you is ***DO NOT WAIT UNTIL THE LAST MINUTE*** to get your work done. Rushed work can be sloppy and full of mistakes. Remember, the summer work will provide me a first impression of your work ethic. Make it a good one. It's a long way to the exam in May and we will be working hard in AP but we will also have a lot of fun. I guarantee you'll be proud of what you accomplish.

I hope you all enjoy the summer and if you have any questions please contact me.

Ready, Set, Go...

Mr. Migliore
AP Biology Teacher
Hamden High School