AP Biology Summer Assignment 2014-2015

Murrieta Mesa High School

Ms. Schultz - Renaissance Hall Room 155

Email: gschultz@murrieta.k12.ca.us

Website: https://mvusd.haikulearning.com/gschultz/apbiology/cms_page/view - once school starts I will add everyone to the class roster and we will start using Haiku for online quizzes. For now you can access the information without logging on. All the assignments referred to here are available on the Haiku site.

Welcome to AP Biology! You have taken on a rigorous course in which you will learn a considerable amount about how life functions on many levels, from a molecular perspective up to global relationships between ecosystems. Due to the amount of material we need to cover in preparation for the AP exam in May, you will be required to do some independent study over the summer. The assignment will cover an introduction to scientific processes (chapter 1), a review of chemistry (chapter 2-3), and an introduction to carbon structure (chapter 4). We will have a test over chapters 1-4 the first week of school after PRIDE activities are over.

<u>Late assignments will NOT be accepted</u>. In order to keep up with the pace of the class and be prepared for labs, lectures, quizzes, and tests, you must stay updated with all your assignments.

Contracts - DUE FIRST DAY OF SCHOOL

> Review the syllabus, student contract, and safety contract. Sign the class contract and bring with you on the first day of school. Check the class website occasionally over the summer for information about the upcoming year.

Assignment #1: Letter of Introduction – DUE AUGUST 1 via email

Write a brief letter of introduction to me. Include the following information: DUE June 30. Letters are to be emailed to me at ap.bio.mesa@gmail.com and should be written within the body of the email, not attached as a document. In the subject line write 'Introduction – (last name_first initial)'. Letters are to be written in a formal style with proper salutation, correct language, grammar, and spelling (no text abbreviations!), and a proper closing.

- Are you a junior or senior? What other science courses have you taken, who was your teacher. What was your favorite part of the class and your least favorite part.
- > Why you are taking AP Biology and what are your expectations regarding the course (amount of time study time, difficulty of content, lab experiences, etc...)? What are you looking forward to and what are you anxious about?
- What other AP courses are you taking this year?
- What activities/hobbies/interests do you have (at school as well as outside of school)
- What your plans are for after high school
- ➤ Anything interesting about yourself you would like to share with me ³

Assignment #2:

This year we will be reading both scientific articles and non—fiction books on biological topics. Some are required and others will be optional. The first book to start reading is <u>Microcosm: E. Coli and the New Science of Life</u>, by Carl Zimmer. I will post the formal reading assignment on Haiku and you will have until mid-semester on this book. For now, just find a copy and start reading when you have time. More details will come when school starts.

The following assignments are due in packet format on the first day of school. Print up the cover sheet and attach all assignments in the correct order. Some video notes will have a guided outline for you to complete. If there is no video guided posted, take outline notes on your own.

Assignment #3: Chemistry Review and Introduction to Organic Chemistry - DUE FIRST DAY OF SCHOOL

- 1. Chapter 1 Introduction to themes:
 - a. Complete the reading guide
 - b. Watch the science practices video and complete the notes
- 2. <u>Chapter 2 Chemical context of life:</u>
 - a. Complete the reading guide for CH 2
 - b. Watch the chemistry review videos and complete the notes
- 3. Chapter 3 Water and the environment:
 - a. Watch Bozeman videos complete notes
 - b. Complete the reading guide for CH 3
- 4. Chapter 4 Carbon:
 - a. Watch Bozeman video complete notes
 - b. Complete the reading guide CH 4

Assignment #4:

An important aspect of any college level science course is learning to read and write scientific articles. Scientific articles can be very dense with information and difficult to understand. To practice, you will be reading two articles over the summer.

- 1. First go to the following website: http://croteaubio.wordpress.com/links/how-to-read-and-understand-a-scientific-paper/. This is a very good breakdown of how to read complicated science papers.
- 2. For the first two articles, complete the guided reading form to help you get used to working through the complexities. These are one page papers, written in an abbreviated version of a scientific paper. Annotate as you are reading, pay close attention to concepts and terms that are new to you (there will be a lot of unfamiliar concepts and vocabulary remember these are post-graduate and professional papers you are reading it should not and will not be easy!).
 - a. Article 1 'Does the Presence of Poisonous Coral Snakes Affect Predation Rates on Their Mimics, Kingsnakes'
 - b. Article 2 What Creates 'Devils Gardens' in the Rain Forest?'
- 3. For the third article, use the format discussed in the 'How to Read and Understand a Scientific Paper' blog.

 This is a typical research paper with the traditional sections and will more open ended format for your notes.
- 4. Be prepared to discuss the articles in class. You will be turning in your responses and notes.
- 5. All article responses are due the first day of class in August.

*** Note: Start on your assignments early, you have 2 months to complete them and the worst thing you can do is procrastinate! Everything is due on the first day of class in August – Late work will not be accepted. We will have a test over Chapters 1-4 on the second day of class.