AP Biology Summer Assignment 2016

"Nothing in biology makes sense except in the light of evolution."

Theodosius Dobzhansky

Evolution is the overarching theme of biology, and we will begin the class with this topic. This summer, in order to inspire interest in evolution and prepare you for our discussions, you will be reading *Survival of the Sickest: The Surprising Connections Between Disease and Longevity* written by Dr. Sharon Moalem. In addition to reading the book, you will complete a Reader's-Writer's Log and answering two concluding questions. This should be neatly handwritten on notebook paper and **turned in on the first day of class.** No late work will be accepted.

During Reading

Reader's-Writer's Log Instructions

What you write in this log should be what you want to preserve/remember as a reader. Written entries are your thoughts, reactions, interpretations, and questions to what you are reading. Your comments may also be in response to the author's process as a writer, and your process as a reader, writer, and learner. Be truthful, thoughtful, and thorough. Write about what you like or dislike, and what seems confusing or unusual. Make predictions, relate personal experiences, and relate this work to others you have read. DO NOT SUMMARIZE THE PLOT. Include <u>two of the following for each chapter of the book</u>. Make sure you provide thorough explanations for each and <u>record page numbers of quotes and questions</u>.

- Quote Quote a passage from the chapter that you think is interesting or is new information for you. What did you like about the quote? Why did you find it interesting? Why do you want to save it?
- Experiences or memories Does the chapter remind you of anything? Do you have personal experience with what is discussed in the chapter? How does it make you feel?
- Questions What confuses you? What don't you understand? Why did the author do something a particular way?
- Evaluations What makes this chapter an effective or ineffective piece of writing?

After Reading

- The author hopes that you will come away from this book with an appreciation of three things:
 - a. Life is in a constant state of creation
 - b. Nothing in our world exists in isolation
 - c. Our relationship with disease is often much more complex than we may have previously realized.

On a personal note, what would you add to his list?

2. "Nothing in biology makes sense except in the light of evolution." How does the book, *Survival of the Sickest*, support this quote by Theodosius Dobzhansky, a noted evolutionary biologist?

Part II – Essay

AP Biology is not only mentally challenging, but very demanding of your time. As a student in an AP class, you are expected to take responsibility for your own learning. This means that *you will need to decide* how much time outside of class is necessary for you to be prepared for daily class activities, labs, and unit exams. A general rule for college classes is to expect to put in 3 hours of time outside of class for every 1 hour class period. As a high school student taking a college level class, you should expect to spend a significant amount of time outside of class on homework, class preparation, and studying.

After considering these expectations, write a 1 page essay (12 point, Times New Roman font, double spaced) explaining to me the following:

- Why did you choose to take AP Biology?
- As a student, what qualities do you currently have that will make you successful in AP Biology?
- As a student, what qualities do you need to improve upon to be successful in this class?