

AP Biology  
Summer Assignment  
Anclote High School  
2015-201

Welcome to AP Biology! This course is designed to be the equivalent of a two-semester introductory biology course usually taken in the first year of college. It will be a rewarding experience, but as with most things that are, it will also be very challenging. Throughout the course, you will become familiar with major recurring ideas that persist throughout all topics and material.

The 4 Big Ideas are:

- 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.

### **What are you required to do?**

#### **Part #1**

First, I would like to know who you are & how to get a hold of you so your first assignment is to send me an email.

Yup....that's it!

Your first AP Biology grade will be sending me an email...if only all of the grades were this easy! Here is what I would like you to email me at [cholloma@pasco.k12.fl.us](mailto:cholloma@pasco.k12.fl.us)

**before the START of this school year:**

Subject Line: AP Biology 14-15

Body:

- Your full name (& nickname that you go by if you have one)
- Who was your last science teacher? What class?  
What grade did you earn?
- What other science classes have you taken?
- Why are you taking AP Biology? What do you hope to accomplish/gain?
- What do you like to do (hobbies, sports, music, interests)?
- Tell me a little about your family (Mom, Dad, Guardian, Siblings, Pets,  
how long you've lived in the area.)
- What are you most anxious about in AP Biology?

Don't worry! There is no right or wrong answer....be honest so that I can figure out the best way to help you!

## **Part #2** Case Study

Printout the case study *Nanobacteria: Are They or Aren't They Alive*.

There are five parts that must be completed. We will be debating the conclusion the first week of classes.

## **Part #3** Know your basic chemistry

On the FIRST day you will be quizzed on many of the elements important to biological functions. You will be responsible for knowing the name, symbol, atomic number and atomic mass (without the use of a periodic table) for:

Carbon, Hydrogen, Oxygen, Nitrogen, Phosphorus, Sulfur, Sodium, Potassium, Calcium and Magnesium

## **Part #3**...AP Central

You should also peruse the AP Central website and read the course description to learn about the topics we will cover in AP Biology. There is also a description of the format of the AP Biology Exam.

### AP Central

- Go to <http://apcentral.collegeboard.com>
- Under AP courses and exams on the left choose course home pages
  - Go to the biology home page
  - Read over the full course description
- Under AP courses and exams on the left choose exam information
  - Go to Biology
  - Here you can review some information on the types of questions on the exams and some of the questions that have been asked in the past

## **Part #4** Class Supplies

For this class you will need the following:

3 ring binder

loose leaf paper

colored pencils

lab notebook – may use a composition notebook or something similar (but no spirals!!!)