

# AP Biology

## Summer 2017 Assignment

In order to cover the required material for the Advanced Placement Biology course, it is essential that summer reading cover some of the concepts that are difficult to discuss in much depth during the regular term. The assigned chapters have been selected because they lend themselves to self-paced instruction.

Text: Biology, 8<sup>th</sup> AP edition by Campbell-Reece

Chapter 52 – Introduction to Ecology

Chapter 53 – Population Ecology

Chapter 54 – Community Ecology

Chapter 55 – Ecosystems

- Read the chapters listed above.
- For each chapter, make notes in **outline** form **OR** complete the **guided reading** assignment from the class website. (*You can omit the Self Quiz on each guided reading.*) Outlines should include sufficient supporting details and should not just be a list of vocabulary terms. (A general guideline for note-taking is 2 notebook pages of notes for every 10 pages of textbook.)
- All reading guides/chapter outlines are due the first day of class – **Tues, August 29<sup>th</sup>. (100 points)**
- You will have a test on this material within the first 2 weeks of school.

You can access the guided reading documents on my AP Bio class website at <http://winwardbiology.weebly.com/>.

If you have any questions this summer, you can e-mail me at [allison.winward@ksd.org](mailto:allison.winward@ksd.org). I will try to check my e-mail messages at least twice a week.

See you in August!

Mrs Winward ☺

## HOW TO OUTLINE A CHAPTER

Outlining is like summarizing the main points and supporting details of the chapter in an organized form using roman numerals, letters, and numbers. An easy way to start is to pick out the subheadings in the chapter, then add important details under the subheadings. Use this to get started...

### Chapter 52 An Intro to Ecology

- I. Ecology is the scientific study of the interactions between organisms and their environments.
  - A. Ecology studies many areas of biology, as well as chemistry, physics, geology, and meteorology.
  - B. Environment includes abiotic and biotic factors.
    1. Abiotic – temp, light, water, nutrients, etc.
    2. Biotic – all organisms that interact.
  
- II. Basic ecology provides a scientific context for evaluating environmental issues.
  - A. We need to understand ecology to be aware of current environmental issues.
  - B. We also need to consider ethics, economics, and politics in making decisions about our environment.
  
- III. Ecological research
  - A. Study of ecology is divided into 4 levels.
    1. Organismal – study of individual organisms.
    2. Population – group of individuals of same species living in same area.
    3. Community – all organisms of different species living in an area.
    4. Ecosystem – communities and abiotic factors.
  - B. Ecology involves describing and observing, but also experimentation and models.
  - C. Ecology is linked to evolutionary biology as long-term changes affect ongoing interactions with the environment.
  
- IV. Climate and other abiotic factors.  
Etc.....