



AP Biology Summer Work Instructions

Hello AP Biology class of 2021-2022!

Since this is an official AP course, there is a set standard of material that we need to cover. Unfortunately, there is too much material and too little time. Because there is so much to do, we move very rapidly. We often cover a chapter every two days. I present the material to you and help to clarify any confusion, but it is up to you to study and learn the material. You must be able to learn independently to do this. So our summer work is just three assignments for you to see how it feels to do independent work. We typically start the year with the ecology unit, so the summer work reflects that.

For all work, I expect your answers to show some depth of thinking, to be well organized and original, and to show logical progression of ideas. I am not looking for right answers here, but a thoroughness of effort and logical thought. Include the questions with your answers. Please type all answers in paragraph form and submit to me (hopefully through OnCampus) on or before the due date. If you anticipate a conflict with a date or internet/email availability, do the work early. Always leave time for computer problems and other difficulties. Do not allow yourself to submit late work. If you have special circumstances you are aware of now, please let me know at lknebel@ves.org.

You can get started whenever you'd like, but I'll put these in OnCampus with a late August due date as soon as next year's schedule is up and running. So check back then and get it submitted! Let me know if you have any issues. We'll go over all this work when the semester begins. Have a great summer!!

Thanks,

Dr. Knebel

Assignment # 1

Watch the film *The Guide: A Biologist in Gorongosa*. I like this film for many many reasons, but I want you to tell me what you take away from it. For example, I really appreciate that this film features E.O. Wilson, who is arguably the most important biologist of my lifetime. He's an elderly man now, but his arguments for biodiversity preservation guide many of the most active scientists today. He is an ant biologist, which may seem like an impossible way to make an impact, but his influence is deep and far-reaching.

When you finish the film (35 min.), please write a 200 word reaction piece. Tell me what strikes you the most about the film, using direct examples. I'm not looking for deep biology here. I just want to see how you work on your own.

<https://www.hhmi.org/biointeractive/guide-biologist-gorongosa>

Assignment #2

Isle Royale is a small island in Lake Superior, Michigan. A simple food chain on the island has been studied for more than 50 years and is one of the most famous studies of predator-prey interaction. Complete the following case study:

<http://sciencecases.lib.buffalo.edu/cs/files/isle.pdf>

Assignment #3

A big part of the AP Biology curriculum is experimental design and data analysis, so it's something we'll work on throughout the year. Some of you are already really great at this and others will need some help, so no worries – we'll make it happen for everyone. So for practice, answer [these questions](#) using the data from the experiment outlined here:

<https://drive.google.com/open?id=1fIRVTWUNdR64NiQV30FkFIUQwdoeuT47>