

WELCOME TO AP BIOLOGY!!

w/ Ms. Ristow

Mendel is my chromeboy



AFRICAN PROVERB:

Every morning in Africa, a gazelle wakes up.

It knows it must run faster than the fastest lion or it will be killed.

Every morning a lion wakes up.

It knows it must outrun the slowest gazelle or it will starve to death.

It doesn't matter whether you are a lion or a gazelle.

When the sun comes up you better start ~~running~~

studying for the AP Bio test!!

Here is a list of information for you to go over to be prepared for next year:

I. AP BIOLOGY IS DESIGNED TO BE THE EQUIVALENT OF AN INTRODUCTORY COLLEGE LEVEL BIOLOGY COURSE.

Next spring (Monday, May 13, 2019 @ 8:00am to be exact) you will be taking the AP Biology exam. This exam is graded on a scale of 1-5. A score of 3 or above is considered passing, and will earn you college credit at many Universities.

**I WANT ALL OF YOU TO EARN A 5 ON THIS EXAM.
I WILL SHOW YOU WHAT YOU NEED TO DO TO EARN A 5, AND HOW TO EARN A 5,
BUT I CAN'T DO IT FOR YOU!**

The breadth of material covered in this class is **ENORMOUS**, and our time is limited. This places a great deal of responsibility on **YOU**, the student, beginning **RIGHT NOW!** Because we have so much material to cover, we will never get to it all in class.

Therefore, some topics of biology will be skimmed over, and others will be omitted. **Students will be held accountable to implement their own regimented reading schedule to fill in the gaps!**

Significant demands of both time and effort will be placed on the student. It is probable that AP Biology will be like no other science class you have taken. It is a great challenge, but you will feel a tremendous sense of accomplishment upon the completion of this course.



AP Biology is a true measure of how you will perform in college

2. THE PURPOSE OF THIS CLASS IS TO HELP YOU PASS THE AP EXAM.

I expect every student to sign up for the AP exam.

IF YOU ARE NOT PLANNING ON TAKING THE AP TEST, DO NOT TAKE THIS CLASS!

(See www.apcentral.com for information on the AP Biology exam.)

I spoke with a Student Admissions Counselor at USC...

He was told about 2 students: both had taken the exact same courses and had received the exact same grades throughout their entire high school career. So basically they were identical, except for one thing:

- Student One took AP Biology, and did NOT take the AP exam
- Student Two took AP Biology, took the AP exam, and received a "1" (failing) on it

Which student would he pick for admission to USC?

He said, without a doubt, Student Two... can you guess why?

3. IN ORDER TO SUCCEED, A RECORD OF EXCELLENT ATTENDANCE IS A MUST.

Due to the fast pace nature of this course, if you are one of the frequently absent, I can **99.95% GUARANTEE THAT YOU WILL NOT PASS THIS CLASS!!**

4. **MAKE CERTAIN THAT ALL ASSIGNMENTS ARE COMPLETED ON TIME.** When you are in this classroom, you will be treated as a college student, and should act accordingly.

NO LATE WORK WILL BE ACCEPTED!

5. **THERE IS A LABORATORY COMPONENT REQUIREMENT FOR THIS CLASS.** You will be required to purchase and keep a laboratory notebook (composition books w/graph paper work best).

6. THERE IS ASSIGNED SUMMER HOMEWORK, AND MATERIALS YOU NEED TO GET

Now that we are on block schedule, we have lost 2 weeks of instructional time....

So there will be some necessity on your end to make up for lost time.

MATERIALS YOU NEED TO GET

- **Cliffs Advanced Placement Biology Examination Guide, 4th edition.** Author: Phillip E. Pack, Ph.D. Publisher: Cliff's Notes, Inc. Lincoln, Nebraska. (*Baron's AP Biology, 4th Edition*, Author: Deborah Goldberg is also an acceptable study guide) *This book can be purchased at most local or college bookstores, or from such places as amazon.com or eBay. This book is an excellent resource for most of the AP Biology curriculum.*
- Hard cover composition Lab Book (w/ graph paper)
- Post-it Notes
- A Calculator (see <https://apstudent.collegeboard.org/takingtheexam/exam-policies/calculator-policy> for the list of acceptable calculators)
- (Qty: 8) 100-ish page, single-subject notebooks
- A 3-ring binder (3" or so) – to keep at home – to hold previous material



Summer Assignments

These assignments involves you TEACHING YOURSELF the entire Ecology Unit for your first unit test. These assignments serves three purposes:

1. **TIME SAVER:** Ecology is the easiest unit for students in AP Biology. I spend 2 weeks on the unit when I normally teach it.... There are a few concepts that are beyond a 9th grade biology level. By completing this unit essentially on your own, you will be allowing us to spend more time on the more difficult concepts in AP Biology during the school year.
2. **ABILITY ASSIGNMENT:** You will be tested on the Ecology Unit on our second class meeting. If you are unable to read a textbook and learn the material, you will fail the exam and we will know that you need more help than AP Biology can offer your and you should switch to a less challenging class.
3. **DEDICATION ASSIGNMENT:** Learning the Ecology Unit on your own requires a *significant dedication* on your part. If you are unable to muster up the time, willingness, or excitement to complete the summer homework, you should not be in AP Biology and you should switch to a less challenging course which could have a significantly lighter homework load.

Assignment #1: -Sign up for Remind101: @RistowBio
- Bookmark our website: <https://educatorpages.com/site/Ristow/pages/ap-biology>

Assignment #2: Video Notes – due the 1st day of AP Biology

Watch the videos listed below and take hand-written notes on each of them. The note should be your original work. EACH note sheet will be scored 0 to 5 based on completeness and thoroughness as shown in the rubric below.

Note pages will not be accepted late nor will they be accepted if they are typed.

#	VIDEO CONTENT	LINK
1	The Natural of Science	https://youtu.be/77TFiYWPxoQ
2	The Scientific Method	https://youtu.be/SMGRe824kak
3	CER (Claim- Evidence-Reasoning)	https://youtu.be/5KKsLuRPsvU
4	AP Biology Science Practice 1 Model and Representations	https://youtu.be/v5Nemz_cVew
5	AP Biology Science Practice 2 Using Mathematics Appropriately	https://youtu.be/jgqYISKoXak
6	AP Biology Science Practice 3 Formulate Questions	https://youtu.be/2zB272Ak63A
7	AP Biology Science Practice 4 Data Collection Strategies	https://youtu.be/AzTXnne40wU
8	AP Biology Science Practice 5 Analyze Data and Evaluate Evidence	https://youtu.be/0JqkouOtZA
9	AP Biology Science Practice 6 Scientific Explanations and Theories	https://youtu.be/3gK1xWNM7kk
10	AP Biology Science Practice 7 Connecting Knowledge	https://youtu.be/7l4bcs49JP8

0 No Credit	2 Below expectations	3-4 Complete	5 Exceeds expectations
No notes OR copied from a peer.	Several criteria are missing from entry	All criteria are met, but there's room for improvement within criteria OR one criterion is missing from entry.	All criteria listed below are met or have been exceeded for each entry.

What does work that “exceeds expectations” have?

- ✓ Each video’s notes are on a **different** page.
- ✓ The video’s **title** is written as it appears in the video on the top line of the paper.
- ✓ The notes are **legibly** written.
- ✓ **Highlighting or colors** are used to emphasize key points, new vocabulary, and/or important concepts.
- ✓ **Examples** are documented in some way when given in the video.
- ✓ **Pictures, charts, or graphs** are used to display details provided in the video.
- ✓ A **summary** of the video content is provided at the end of the notes. Please emphasize the summary in some way (title it, star it, highlight it, put a box around it, etc.)

Notes are to be *original work* and are not to be copied from a peer – these serve as a log of what you have learned from the video. Copying them from a peer and not watching the video does you no good. You will receive zero credit if you are found submitting work that is too closely aligned with a classmate’s work.

Assignment#3: SUMMER VOCABULARY LIST

Define all of the following terms in your Ecology Unit notebook (*1 of your 8 single-subject notebooks*)

NOTE: The glossary answer will NOT be sufficient (“below expectations”) for this activity.

To achieve an “exceeds expectations”, it should include:

- **definition** - **diagram or example** - **analogy** - **why you should care**

This should take up MANY MANY MANY MANY pages of your notebook

Abiotic factor	Exponential population growth	Microclimate
Abundance	Food chain	Net primary production
Adaptation	Food web	Niche
Age structure	Global warming	Nitrogen cycle
Biodiversity	Greenhouse effect	Nutrient cycle
Biome	Greenhouse gas	Parasite
Biotic factor	Gross primary productivity	Photoautotroph
Carbon cycle	Habitat	Population
Carrying capacity	Hydrologic cycle	Population growth
Climate change	Immigration	Population size
Community	Imprinting	Pollution
Conservation	Interspecific competition	Predator
Decomposer	Intraspecific competition	Primary consumer
Demography	Introduced species	Quadrat
Density dependent factor	K-selection	Rate of increase
Density independent factor	Keystone species	Resilience
Dispersion	learning	r-selection
Ecology	Logistic population growth	Saprophyte
Emigration	Macroclimate	Survivorship curve

Assignment #4: ECOLOGY NOTES

AFTER YOUR VOCABULARY LISTS, take notes on the Ecology Chapters (Ch 52, 53, and 54)

All of this is to get you ready for the ECOLOGY TEST on the 2nd day of AP BIOLOGY

Detach and return to Ms. Ristow (rm 1102) **BEFORE TUESDAY, MAY 21st**

STUDENT & PARENT PLEDGE TO ENSURE SUCCESS IN AP BIOLOGY

I, _____ (print student name) understand the **extreme** commitment that is AP Biology and, with the support of my parent/guardian, we hereby pledge to:

PARENT INITIAL

STUDENT INITIAL



- _____ - Have read and understood the "Welcome to AP Biology" handout
- _____ - Complete the assigned summer homework before the first day of class
- _____ - Be enrolled in the AP Biology class for the **entire year**, regardless of my grade
- _____ - **Sign up and take the AP Biology exam on May 13th, 2019**
- _____ - Get to my AP Biology class **on time** every day
- _____ - Pay attention during class, which means **turning my cell phone OFF** and **NOT TEXTING** during class
- _____ - Do assigned homework, even though it's **not** worth points (it can get my test **curved**)
- _____ - Understand that my grade is based on **test grades** and **lab reports**, NOT homework
- _____ - **Realize that if I'm taking other AP classes, or am involved in sports, that it is going to be a VERY CHALLENGING YEAR (especially if I want an "A")**
- _____ - Seek out the teacher for help if I am not "getting it"
- _____ - Understand that I am **EXPECTED to spend 1-2 hours EVERY DAY** working on AP Biology homework or studying the material

I don't think I am ready for AP Biology; please withdraw me from the class.
(Maybe next year)

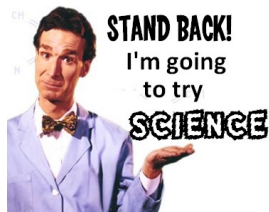


Student Signature

Parent/Guardian Signature

Date

Date



Parent/Guardian Printed Name