

AP Biology Summer Assignment

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Hello incoming AP Biology students!

It is with great pleasure that we present to you the very first assignment of your AP Biology course. Please follow the directions below to create an edX account so that you may begin your summer assignment.

1. Go to <https://www.edx.org/course/apr-biology-part-1-cell-ricex-advbio-1x-0>
2. Create account & enroll (AP® Biology - Part 1: The Cell). Be sure to record your username/password
3. This is an archived course. All content will be free. DO NOT purchase any materials for this course/summer assignment.

edX: AP® Biology - Part 1: The Cell

This is the first course in a comprehensive series designed to prepare you for the AP Biology exam, focusing on the cell, its structure, and functions. This course is **6 weeks long** (6th week is a review) and you are expected to work 2-4 hours per week. It is a FREE course developed by Rice University to help prepare high school AP Biology students for the AP exam and for college-level biology. You will be presented with the content via video lectures, lab activities, understanding check MC questions, and homework MC questions. All answers are provided in the course. You are responsible for taking notes on these videos and answering the questions in your dedicated AP Biology notebook.

What you'll learn

- Prepare for the AP Biology Exam • Learn about Biochemistry, Cell Processes and Cell Communication
- See how biological systems interact with each other
- See how biological systems utilize free energy to maintain dynamic homeostasis • Participate in inquiry-based lab investigations and discussions

This summer assignment consists of 3 parts:	
Part 1: Multiple Choice Test	100 points
Part 2: 5 Reflections – 1 for each week –Google doc	100 points
Part 3: Graded Notebook Check with video notes**	100 points

****All notes must be taken in a single subject-bound notebook reserved only for our AP Biology class.****

Part 1: Multiple Choice Test

You will be given a MC test the week you get back to school on all the content covered in this course. Prepare for this exam by **watching all video lectures** and by **answering the questions provided**. Give each question your best effort and then once you've attempted all of them on the page, make sure you check your answers by clicking the "show answer" button. You need to make sure you UNDERSTAND the ones you got wrong. Do not just move on without full comprehension of the concept being covered.

Part 2: Reflections

You will create a **google doc** titled **“Your full name – Summer Assignment Reflections.”**
Share this doc with both of us (by email) as soon as you start. Set it to “view only”

Although the course is 6 weeks long, the last week is a review. Therefore, you will be expected to write a reflection for the first **5 weeks only**. Please refer to the rubric for further direction regarding specific expectations. Your reflections will be graded according to the rubric. (found below)

Reflections consist of 3 parts:

- 1) How does the content covered this week build on what you learned in honors biology? Be specific. Tell us what you knew before from honors, and what you learned that was new/how that material was extended beyond your honors level of understanding.
 - 2) What concept did you struggle with most this “week”? How did you address it?
 - 3) Define and give examples of **5 (at minimum) vocabulary terms** you struggled with in this section. (If there are more than 5 define and give examples of all)
- As you navigate through your summer assignment, you may find the instructor using the following direction terms. I have defined each below for ease of understanding.

Some key **DIRECTION** terms on the AP Biology Exam are listed below:

1. **Compare:** show the similarities between two events, periods, ideas, theories, or the like (Some people use compare to mean showing differences as well as similarities, so be careful.)
2. **Contrast:** show the differences between two or more events, periods, ideas, or theories
3. **Define:** state the meaning of a word or phrase. Example: define science
4. **Describe:** give the characteristics/ detailed account of something. Ex: Describe functions of the ATP/ADP system
5. **Discuss:** give the pros/cons on an issue, event, process, theory or techniques.
6. **Enumerate:** List a number of reasons or attributes of something. Ex: Enumerate the stages of mitosis.
7. **Evaluate:** make a judgment or give an opinion, or supply reasons why something is as it is.
Ex: Evaluate the effects of Jenner’s experiments with cowpox.
8. **Explain:** support or qualify a given generalization with specific facts & ideas. Ex: Explain what is meant by the “scientific method.”
9. **Interpret:** analyze critically or explain something not clear.
10. **Prove or show:** the truth of a statement, explain the reasons for events turning out as they did, or speculate on what might be the effects of certain causes. Ex: show with diagrams how the eye is like a camera
11. **Analyze:** show relationships between events; explain
12. **Design:** create an experiment and convey its ideas
13. **Predict:** tell what you expect to happen when conditions change
14. **Justify:** explain why a response is reasonable

Reflection Rubric				
Category	Exceeds Standards (A+, A, A-)	Meets Standards (B+, B, B-)	Approaching Standards (C+, C, C-)	Below Standards (D+ or lower)

<p>Part 1: Connection</p> <p>4 points/ reflection</p> <p>20 points total</p>	<p>All responses clearly identify bio content from the previous year & summarize how this material relates to the edX course. Specific examples that illustrate the relevance of last year's material to the new content are used.</p>	<p>Most responses clearly identify bio content from the previous year & summarize how this material relates to the edX course. Specific examples are typically direct with some examples being tangential.</p>	<p>Some responses clearly identify bio content from previous year & summarize how this material relates to the edX course. Some examples are indirect and/or are missing.</p>	<p>Less than half of the responses clearly identify bio content from previous year & summarize how this material relates to the edX course. Most examples are indirect and/or are missing.</p>
<p>Part 2: Problem & Solution</p> <p>2 points/ reflection</p> <p>10 points total</p>	<p>Difficult concept is clearly identified. Explanation as to why the student found it difficult is distinctly and articulately stated. Specific example(s) of how the student took steps to resolve it is (are) provided and practical.</p>	<p>Difficult concept is identified. Explanation as to why the student found it difficult is stated. Specific example(s) of how the student took steps to resolve it is (are) provided.</p>	<p>Difficult concept is identified. Explanation as to why the student found it difficult is somewhat stated but not explicit. Specific example(s) of how the student took steps to resolve it is (are) incomplete and/or impractical.</p>	<p>Difficult concept is partially identified or missing. Explanation as to why the student found it difficult is incomplete/missing. Specific example(s) of how the student took steps to resolve it is (are) incomplete and/or missing.</p>
<p>Part 3: Vocabulary Terms/ Definitions</p> <p>4 points/ reflection</p> <p>20 points total</p>	<p>At least five different vocabulary terms are defined and correct / cohesive examples/ definitions are given of each.</p>	<p>At least five different vocabulary terms are defined and correct examples/ definitions are given of each.</p>	<p>Some vocabulary terms are defined. Examples are close analogies but not entirely correct.</p>	<p>Student did not complete this section.</p>

Due Dates/Submission Information:

Although I will have access to view your progress on your google docs this summer, the final copies of each reflection are to be submitted into turnitin via blackbaud the week we return to school. (I will send announcements on when the submission goes live)

Anything about 20% similarity will be counted as a plagiarized assignment and will be graded according to OLP policy.

EACH MISSING PART will be marked down 20% each day it is late.

Parts of Assignment	Points Earned/Points Possible
MC Test	/100
Reflection 1	/20

Reflection 2	/20
Reflection 3	/20
Reflection 4	/20
Reflection 5	/20
Notebook Check	/100
FINAL GRADE: _____ / 300	