AP Biology

Pottsville Area High School

Mrs. Koneschusky

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AP BIOLOGY SUMMER ASSIGNMENT

Welcome to AP biology, a course created by outstanding professors from colleges and universities across the United States. The content of this course primarily focuses on four "big ideas" which are listed below.

1. **The process of evolution drives the diversity and unity of life.**
2. **Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.**
3. **Living systems store, retrieve, transmit and respond to information essential to life processes.**
4. **Biological systems interact, and these systems and their interactions possess complex properties.**

Text / Resources:

Reece, Jane et al., *Campbell Biology*, 9th Edition. Benjamin Cummings, 2011.

Please visit room 303 pick up a textbook before ***Tuesday, June 8, 2021.***

AP Biology Investigative Labs: An Inquiry Based Approach.

Holtzclaw, F., *AP Test Prep Series: Biology*, 8th Edition. Pearson Benjamin Cummings, 2008.

https://classroom.google.com/c/MzAzOTE4MTk5ODgx?cjc=bum2dfo

Enroll in the course at the link above before ***Tuesday, June 8, 2021*** *using the following code:* bum2dfo

To enroll after this date means you may miss important deadlines or course announcements.

How will the assignment be graded?

Completion and correctness of the assigned materials will contribute to the overall grade of the AP Biology summer assignment. In addition, an assessment based on assigned summer topics found in unit 1 of the text will be administered to the class upon return to regularly scheduled class in the fall term. For a complete listing of point values, please refer to the outline of assignments provided. Additionally, please refer to the PAHS Student Handbook or visit the course Google Classroom page for information regarding the district Academic Honesty Policy.

Due to the amount and complexity of the content we will cover in this class, each student enrolled will complete this summer assignment in an effort to review knowledge gained in previous science classes and introduce new concepts which will be reviewed in detail beginning in the fall term. The following is a list of topics and assignments to complete before the beginning of fall term using Google Classroom. There is no penalty for completing work early.

Chapter 1 Assignments	Points	Due Date
Chapter 1 Discussion	10	6/18/2021
Nanobacteria Case Study	20	6/18/2021
Chapter 1 Quiz	20	6/18/2021
Chapter 2 Assignments	Points	Due Date
Bonding Webquest	20	6/25/2021
Chapter 2 Quiz	20	6/25/2021
Chapter 2 Discussion	10	6/25/2021
Chapter 3 Assignments	Points	Due Date
Chapter 3 Discussion	10	7/9/2021
Biological Buffers Case Study	20	7/9/2021
Chapter 3 Quiz	20	7/9/2021
Chapter 4 Assignments	Points	Due Date
Chapter 4 Discussion	10	7/16/2021
Chapter 4 Quiz	10	7/16/2021
Wood Alcohol Case Study	15	7/16/2021
Chapter 5 Assignments	Points	Due Date
Hypercholesterolemia Case Study	15	7/23/2021
Chapter 5 Discussion	10	7/23/2021
Chapter 5 Quiz	20	7/23/2021
Enzyme Formal Laboratory Report	Points	Due Date
APA Formatting	5	
Formal Lab Report	67	8/6/2021

Total Possible Points 302

Discussion Rubric

Criteria	Grading Scale		
Initial Post Knowledge and Understanding of Content	**2** Provides a substantive and well-supported post by citing and refereeing information and concepts presented with insightful information that indicates depth and engagement in topic.	**1** Provides a limited an/or insufficiently supported post that may be based primarily on professional experiences and/or lacks information or citation of concepts.	**0** Does not provide a post.
Replies Contribution to the Online Learning Community	**2** Responds appropriately to one or more students with insightful information that enriches discussion and demonstrates strong engagement.	**1** Responds appropriately to one student with information but lacks sufficient insight to engage peers.	**0** Does not reply to peers.
Linking Content to Major Biological Concepts	**2** Establishes strong reflective connections that link content to major biological concepts.	**1** Makes reflective comments that do not clearly link content to biological concepts.	**0** Does not provide a post.
Conventions Writing with adherence to APA format	**2** Demonstrates strong control of gramma, mechanics, spelling, usage and sentence formation; citations are included following APA guidelines.	**1** Demonstrates limited control of grammar, mechanics, spelling, usage and sentence formation with multiple errors, and/or citations may be included but do not adhere to APA guidelines.	**0** Does not provide a post.
Timeliness	**2** Submits initial post and peer responses on time.	**1** Submits initial post on time but does not provide peer responses.	**0** Does not provide a post.
			Total pts: 10

Enzyme Lab Report Point Breakdown

Submit your assignment by the designated due date.

Title Page – 2

Abstract – 5

Introduction – 10

Materials – 10

Methods – 15

**Record materials and methods as though you were completing the activity in person rather than a simulation. Be sure to include all steps and be specific enough that someone in my general biology class could repeat the experiment by reading your words.*

Results – 10

**Follow formatting for headings on tables and figures as well as captions or descriptors.*

Discussion – 15

Formatting – 5