AP Biology

Summer 2021- Spring 2022 Introduction and Summer Assignment

Welcome to AP Biology. A summer assignment is required to conform to the AP Biology schedule for completion of the course. For 2022, the AP exam for Biology is anticipated to be during the second week in May so it will be critical for students to complete the summer assignment. It is anticipated that the assignment can be completed in two weeks with approximately one hour of work per day (Monday-Friday).

Part I - Introduction to AP Biology

General Procedures

Sign into AP Biology Classroom. The classroom code is mz4euba.

Course Structure

Homework

The AP Biology course is designed as a flipped classroom. For the summer assignment Kahn Academy videos are posted on Google Classroom. During the school year, students will be assigned videos to watch on AP Central. Completion of the videos will count as a class participation grade (1 pt for each video) Note that videos can be watched as many times as needed in order to learn the information. Students may find it useful to start and stop the video to complete notes. Key points in each video should be documented in notes to support your studying.

Work on your note taking skills. Watch the video on <u>note taking</u> by Dartmouth College. While the video discusses note taking using paper, it can be readily adapted to electronic writing.

In addition, for the summer assignment, a progress check of concepts is provided in the form of free response questions (FRQs) that students are required to answer for a class participation grade (5 pts). Thoughtful consideration is required to prepare an acceptable written response using complete sentences. Partial phrases are not sufficient as answers to FRQs. During the school year, progress checks also include a set of multiple choice questions on AP Classroom to check your understanding of the content of each unit.

Classwork and Laboratory Activities

Class time in school is spent applying the information presented in the videos and completing laboratory activities. Classwork includes case studies, worksheets and model development, and practice writing to support AP free response questions (classwork, 10% of grade). Projects and laboratory activities will support the Big Ideas of AP Biology (30% of grade). Content covered in the homework videos will not be repeated as lectures in class.

Quizzes and Tests

Quizzes and tests count 60% of your grade (15% and 45%, respectively). There are no retakes on quizzes and tests so be sure to prepare for them. This is a college level course.

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Part II - Summer Assignment

We are starting with Unit 8 for the summer assignment because the material does not rely on molecular (Unit 1) or cellular (Unit 2) biology which are better addressed with teacher support. We will complete those topics and follow the AP schedule when we return to school.

Unit 8 - Ecology

The Unit on Ecology will not be repeated in the classroom. You should complete the summer assignment including the videos, practice quizzes (2), and a practice test for the unit before in-person school starts in September. The assignments provided on Google Classroom are summarized on page 3.

After finishing the topics, complete the practice guizzes and test.

In Google Classroom, mark the assignments complete as you finish them. Completion of the assignments will count as two class participation grades of 8 pts and 6 pts for topics 8.1 through 8.4 and topics 8.5 through 8.7, respectively. The assignments are due on the first day of school. Late assignments will not be graded.

Unit 8 Quiz

Once you have completed the assignments, complete the Unit 8 quiz posted on Classroom. You may complete the quiz as many times as you want, your highest score will count as a 20 pt quiz grade.

Pre-Lab assignment

Watch the video on the chi square test to prepare for the lab that we will complete in class when we return to school.

First week of class - What to expect

During the first week of class in school we will complete labs on the Chi Square test and case studies related to ecology. At the end of one week of classes there will be an in class test on the Ecology unit.

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Summer assignment topics and timetable.

Assignment	Day(s)	Time (min)	Topic
8.1	1& 2	80	Responses to the environment
8.2	3 & 4	70	Energy flow through ecosystems
8.3	5	40	Population ecology
8.4	5	Included	Effect of density of populations
Practice Quiz 8.1	6	40 Total Time Part I 230 minutes	Review/Practice Quiz 8.1
8.5	7 & 8	80	Community ecology
8.6	9	40	Biodiversity
8.7	10	50	Disruptions to ecosystems
Practice Quiz 8.2	11	40 Total Time Part II 210 minutes	Review/Practice Quiz 8.2
Practice Test	12	40	Practice Test
FRQs	13	40	Progress Check FRQs
Quiz 8	14	40	Quiz 8 (Due 9/3/2021)
Prelab Lab 1	15	15	Chi-square statistic (Complete by 9/8/2021)
TOTAL	15	575 (~10 hrs)	