Canyon Crest Academy: AP Biology

Level of Difficulty	Estimated Homework	Prerequisites
☐Moderate ☐Difficult ☒Very Difficult	120 minutes per day* *This is a general guideline for planning and scheduling purposes. A student's ability level may affect actual preparation time needed.	<u>Department</u> B or better in Biology and C or better in Chemistry and Successful completion or concurrent enrollment in IM3 or Algebra 2

<u>Course Description</u>

This course focus on inquiry-based learning of essential concepts, and will help them develop the reasoning skills necessary to engage in the science practices used throughout AP Biology. Students will explore these topics through discussions, laboratory investigations, teacher demonstrations, and in-class assignments. This course is aligned with the guidelines described by CollegeBoard.

A highly specialized course for the qualified student whose future includes university attendance with a possible major in the sciences. The course has a focus on cellular ultrastructure, genetics, biochemical processes, biotechnology, comparative anatomy and physiology, mechanisms of evolution, embryonic development and the role of humans with nature.

Big ideas:

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 response to information essential to life processes.
4. Biological systems interact, and these systems and their interactions possess complete properties.

Science practices:

1. The student can use representations and models to communication scientific phenomena and solve scientific problems.
2. The student can use mathematics appropriately.
3. The student can engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course.
4. The student can plan and implement data collection strategies appropriate to a particular scientific question.
5. The student can perform data analysis and evaluation of evidence.
6. The student can work with scientific explanations and theories.

7. The student is able to connect and relate knowledge across various scales, concepts and representations in and across domains.

Grading

The grading system is based on weighted percentages. Each assignment will have a point value and be weighed according to the category it falls under. Individual teachers may make slight modifications on the weighted percentages.

Category	Weight
Homework	10%
Laboratory/Projects	35%
Assessments	25%
FRQs	10%
Final	20%

Links

CCA Science Homepage http://teachers.sduhsd.net/ccscience
CollegeBoard http://www.collegeboard.com
CollegeBoard Description https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-biology-course-and-exam-description.pdf

Supplemental Information

10 credits
Meets UC/CSU subject "d' requirements
Fulfills graduation requirement in life science
Weighted grade