AP BIOLOGY

Cell Division

Essential Question

How is our understanding of evolution influenced by our knowledge of genetics?

How does the cell cycle aid in the conservation of genetic information?

Why and in what ways do cells communicate with one another?

How does the diversity of a species affect inheritance?

Understandings

*Students will understand that:*

Knowledge:

*Students will know:*

Skills:

*Students will be able to:*

Curriculum Standards - 2019 College Board Course & Exam Description

Describe the events that occur in the cell cycle.

Explain how mitosis results in the transmission of chromosomes from one generation to the next.

Describe the role of checkpoints in regulating the cell cycle.

Explain how meiosis results in the transmission of chromosomes from one generation to the next.

Describe the effects of disruptions to the cell cycle on the cell or organism.

Describe similarities and/ or differences between the phases and outcomes of mitosis and meiosis.

Explain how the process of meiosis generates genetic diversity.

Mission Integration

(*Note: could be combined with performance task/design thinking culminating assessment)*

Performance Task or Design Thinking Culminating Assessment

Other Evidence (formative assessments, summative assessments)

*what homework and other out of class experiences are needed to equip students?*

Topic Overview

*Order of topics presented (Calendar)*

Learning Plan

*Learning Activities - What experiential or inductive learning will help students to explore the big ideas and questions to achieve desired understandings? for their expected performances?*

Resources