

AP Biology

2024/



Attendance



Course Outline

<i>Unit</i>	<i>Sub-Topics</i>	<i>Biology in Focus Chapters</i>
Intro to AP Biology	Summer	

<i>Unit</i>	<i>Sub-Topics</i>	<i>Biology in Focus Chapters</i>
5 – Heredity	Meiosis Inheritance Patterns (Mendelian Genetics) Non-Mendelian Genetics Genetic Disorders	10 - 12
Labs:	Mitosis and Meiosis Modeling with beads Genetics of <i>Drosophila</i>	
6 – Gene Expression and Regulation	DNA and RNA structure and function DNA replication Protein Synthesis Mutation Gene Regulation and Expression DNA Technology	13 – 15 24.3
Labs:	POGIL – Gene Expression Bacterial Transformation Gel Electrophoresis	
7 – Evolutionary Biology	History of evolutionary theories (Lamarck & Darwin) Natural Selection Evidence of Evolution Population Genetics Hardy-Weinberg Equilibrium Mechanisms of evolution Speciation (geographic and reproductive barriers) Origin of Life Phylogenetic Trees	19 – 23 24.1
Labs:	POGIL – Phylogenetic Trees Population Genetics (Hardy-Weinberg Lab)	
8 – Ecology	Response to the environment Ecosystems and Energy Flow Nutrient cycles Population Ecology Community Ecology Human Impact and environmental disruptions	31.2 31.4 32.3 40.3 – 40.6 41 - 43
Labs:	Animal Behavior – taxis vs kinesis Transpiration Lab	
