

**CURRICULUM MAP
ADVANCED PLACEMENT BIOLOGY**

August/September	October	November	December
<p>A. Chemistry of Life 7%</p> <p>Water</p> <p>Organic molecules in organisms</p> <p>Free energy changes</p> <p>Enzymes</p>	<p>B. Cells 10%</p> <p>Prokaryotic and eukaryotic cells</p> <p>Membranes</p> <p>Subcellular organization</p> <p>Cell cycle and its regulation</p>	<p>C. Cellular Energetics 8%</p> <p>Coupled reactions</p> <p>Fermentation and cellular respiration</p> <p>Photosynthesis</p>	<p>II. Heredity and Evolution 25%</p> <p>A. Heredity 8%</p> <p>Meiosis and gametogenesis</p> <p>Eukaryotic chromosomes</p> <p>Inheritance patterns</p>
January	February	March/April	May
<p>B. Molecular Genetics 9%</p> <p>RNA and DNA structure and function</p> <p>Gene regulation</p> <p>Mutation</p> <p>Viral structure and replication</p> <p>Nucleic acid technology and applications</p> <p>Credit – 1.0</p> <p>Prerequisites – Biology and Active Physics</p> <p>Single-block</p> <p>Full Year</p>	<p>C. Evolutionary Biology 8%</p> <p>Early evolution of life</p> <p>Evidence for evolution</p> <p>Mechanisms of evolution</p>	<p>III. Organisms and Populations 50%</p> <p>A. Diversity of Organisms 8%</p> <p>Evolutionary patterns</p> <p>Survey of the diversity of life</p> <p>Phylogenetic classification</p> <p>Evolutionary relationships</p> <p>B. Structure and Function of Plants and Animals 32%</p> <p>Reproduction, growth, and development</p> <p>Structural, physiological, and behavioral adaptations</p> <p>Response to the environment</p>	<p>C. Ecology 10%</p> <p>Population dynamics</p> <p>Communities and ecosystems</p> <p>Global issues</p> <p>Aquatic Ecology and Forestry</p>

11/18/05