

# AP Biology Syllabus 2009-2010

<u>Biology Timeline</u>		<u>Topic</u>
<b>1st Quarter</b>		<b>I. Molecules and Cells (19 days)</b>
9/1-14	Ch. 1-5	<b>A. Chemistry of Life (5 days )</b> 1. Water 2. Organic molecules in organisms 3. Free energy changes 4. Enzymes
9/16-10/6	Ch. 7, 8, 11, 12	<b>B. Cells (8 days)</b> 1. Prokaryotic and eukaryotic cells 2. Membranes 3. Subcellular organization 4. Cell cycle and its regulation
10/8-26	Ch. 6, 9, 10	<b>C. Cellular Energetics (6 days)</b> 1. Coupled reactions 2. Fermentation and cellular respiration 3. Photosynthesis
***** Unit Test		
<b>2nd Quarter</b>		<b>II. Heredity and Evolution (19 days)</b>
10/28-11/16	Ch. 13-15	<b>A. Heredity (6 days)</b> 1. Meiosis and gametogenesis 2. Eukaryotic chromosomes 3. Inheritance patterns
11/18-12/8	Ch. 16-21	<b>B. Molecular Genetics (7 days)</b> 1. RNA and DNA structure and function 2. Gene regulation 3. Mutation 4. Viral structure and replication 5. Nucleic acid technology and applications
12/10-1/7	Ch. 22-25	<b>C. Evolutionary Biology (6 days)</b> 1. Early evolution of life 2. Evidence for evolution 3. Mechanisms of evolution
***** Unit Test		
<b>3rd Quarter</b>		<b>III. Organisms &amp; Populations (35 days + 3 during Break )</b>
1/17-1/26	Ch. 26-28, 31	<b>A. Diversity of Organisms (6 days)</b> 1. Evolutionary patterns 2. Survey of the diversity of life 3. Phylogenetic classification 4. Evolutionary relationships
1/28-4/7	Ch. 29, 30, 35-39, Ch. 32-34, 40-49	<b>B. Structure &amp; Function of Plants and Animals (24 days)</b> 1. Reproduction, growth, and development 2. Structural, physiological, and behavioral adaptations 3. Response to the environment
***** Unit Test		
<b>4th Quarter</b>		<b>C. Ecology (5 days + 3 during Winter Break)</b>
4/19-4/30	Ch. 50-55	1. Population dynamics 2. Communities and ecosystems
5/4-6	All Materials	<b>IV. Exam Review ( the week before the exam)</b> <b>A. Concept Review</b> <b>B. Laboratory Review</b>
5/10/09	***IMPORTANT***	<b>V. Exam on Monday morning, May 10<sup>th</sup></b>