

Wharton HS AP Biology

Syllabus

Instructor: C. Austin

Text: Biology by Campbell (6th Ed.)

Topics	Chapters & Pages	Required AP Labs & <u>Supplemental Activities</u>	Days Allotted
Chemistry of Life (7%) <ul style="list-style-type: none"> H₂O & Carbon Compounds Energy changes/Laws of Thermodynamics 		SA/Lab: Bioassay SA/Demo: Chemical Analysis of Organic Compounds	
Cells (18%) <ul style="list-style-type: none"> Structure/Function Membrane Composition Cell Energetics Metabolism / Coupled Reactions Cell Respiration / Photosynthesis Cell Communication Cell Reproduction Cell cycle / Mitosis /Meiosis 		AP Lab#1: Diffusion & Osmosis AP Lab#2 Enzyme Catalysis AP Lab#5 Cell Respiration AP Lab#4 Plant Pigments & Photosynthesis AP Lab#3 Mitosis / Meiosis	
Heredity (17%) <ul style="list-style-type: none"> Heredity Mendelian Genetics Chromosomal Basis of Inheritance Molecular Genetics RNA/DNA structure Protein Synthesis Gene Regulation ; mutation Viral Structure & Replication 		AP Lab#6A: Bacterial Transformation AP Lab#7: Genetics of Organisms SA/Lab: Drosophila melanogaster Investigations / Virtual Fly Mating	
Evolution (8%) - (Winter Break) <ul style="list-style-type: none"> Origin of Life Evidence/mechanisms of evolution 		AP Lab 8: Population Genetics & Evolution	
Diversity of Organisms (8%) <ul style="list-style-type: none"> Phylogenetic classification Monerans, Protists,&Fungi Survey 		SA/Lab: Survey of Organisms Powerpoint Presentations	
Plants and Animals(32%) <ul style="list-style-type: none"> Plant Survey; Form & Function Animal Survey; Form & Function Animal Behavior 		AP Lab 9: Transpiration AP Lab 10: Physiology of the Circulatory System AP Lab 11: Animal Behavior SA/Lab: Powerpoint Presentation	
Ecology (10%) - (Spring Break) <ul style="list-style-type: none"> Communities & ecosystems Population dynamics; global issues 		AP Lab 12: Dissolved O ₂ & Aquatic Primary Productivity	
Exam Review		SA/Lab Vertebrate Dissection -- (conducted after May 12 th exam)	

AP Exam: May 12, 2003