

AP Biology Curriculum Map

| | Molecules and Cells: | | | Heredity and Evolution: | | Organisms and Populations: |
|--|---|---|---|--|---|--|
| | August | September | October | November | December | January |
| Essential Questions | How does the structure of molecules in living systems effect the way that they interact? What influence does energy have on the behavior of molecules? | How do enzymes interact with substrates and influence rates of chemical reactions? How are molecules organized into cells? What structures are common to cells? What functions are performed by cellular organelles? | How do cells use metabolic pathways to provide energy for cellular tasks? How do the structures of chloroplasts and mitochondria organize the individual pathways of metabolism? | How do cells pass on hereditary information? What activities occur in the cell to insure that chromosomes are properly distributed to daughter cells? How do the patterns of nuclear division relate to the patterns of heredity discovered by Mendel? | What evidence exists to suggest that species change (evolve) over time? What patterns of change are observable in species when considered against Geological Time? What forces drive evolution? How can different patterns of evolution be characterized? | How is the evolution of species reflected in modern taxonomic systems? What key innovations have caused the divergence of living things into the major taxonomic divisions? |
| Content in terms of essential concepts and topics | | | | | | |
| Standards/Skills i.e., processes and skills emphasized Indiana Academic Standards plus MCSC skills | | | | | | |
| Product/Assessments It is assumed that teachers will assess students with traditional tests. | | | | | | |
| May 2005 | | | | | | |