

**DeSoto County Schools**  
**Biology I**  
**2018-2019 Pacing Guide (Block)**  
**Fall Semester**

<b>Unit</b>	<b>Days</b>	<b>Comp/ Obj</b>	<b>Major topics/concepts</b>
<b>Introduction</b>	2	-	Intro to Course Lab Safety Scientific Method Policies and Procedures
<b>Characteristics of Life</b>	3	1A	Biotic/abiotic Cell theory Levels of organization Evidence for virus- Living/non-living
<b>Macromolecules/ Biochemistry</b>	5	1B	Organic compounds (structure and function) Metabolism Enzymes
<b>Cells</b>	7	1C, 1D	Cells (organelles structure and function) Prokaryotic/eukaryotic Plant/animal/fungi Virus reproduction Cell membrane Active/passive transport osmosis, diffusion, hypo-, hyper-, isotonic
<b>Photosynthesis/ Cellular Respiration</b>	5	2	ATP structure and function Photosynthesis equation (More in-depth) Cellular respiration Anaerobic/aerobic Computer Simulations with real work examples
<b>Cell Growth and Division</b>	6	1E, 3A.1, 3A.2	Cell cycle Cell differentiation, cancer, stem cells Meiosis Compare Mitosis/Meiosis Asexual reproduction Karyotypes Nondisjunction
<b>October 1 - 5, 2018</b>			<b>Case 21 Benchmark Window (covering all previously listed material)</b>
<b>Genetics</b>	7	3A.3, 3B	Chromosomal abnormalities Mendel's Laws Punnett Squares Incomplete/codominance Multiple Alleles Sex linked traits Pedigrees

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<b>DNA and RNA</b>	9	3C	DNA/RNA structure Replication Transcription Translation Mutations Types of RNA Cloning Transgenic DNA technology Stem cell research Gel Electrophoresis
<b>Evolution</b>	6	4	Organic Chemical evolution Evidence for evolution Anatomy Fossil record Molecular/biochemical (gene and protein homology) Biogeographic distribution Cladograms/phylogenetic trees Adaptations Genetic variation Natural selection Speciation
<b>Ecology</b>	8	5	Levels of organization Cycles of matter Greenhouse gases Food chain, web, pyramid Symbiosis Predation/Prey Cooperation Mimicry Density independent/dependent Logistic/exponential growth Succession

\*Aligned to MS CCRS 2018