

**Biology Year-At-A-Glance  
2020-2021**



Term 1	Term 2	Term 3	Term 4
<p><u>Unit 1: Lab Safety and Intro to Biology</u></p> <ul style="list-style-type: none"> <li>• Lab safety</li> <li>• Experimental design</li> <li>• Characteristics of life</li> </ul> <p><u>Unit 2: Biomolecules</u></p> <ul style="list-style-type: none"> <li>• Compare functions of biomolecules.</li> <li>• Analyze and investigate the role of enzymes.</li> </ul> <p><u>Unit 3: Cell structure, function &amp; transport</u></p> <ul style="list-style-type: none"> <li>• Prokaryote vs. Eukaryote</li> <li>• Cell organelles</li> <li>• Cell membrane</li> <li>• Cell processes ( transport)</li> </ul> <p><u>Unit 4: DNA: structure ,replication, cell cycle</u></p> <ul style="list-style-type: none"> <li>• DNA importance and structure</li> <li>• DNA replication</li> <li>• Mitosis and Cell Cycle</li> </ul> <p><u>Unit 5: Mutations and Gene Expression</u></p> <ul style="list-style-type: none"> <li>• Transcription &amp; Translation</li> <li>• Mutations</li> <li>• Cell differentiation &amp; Gene expression</li> </ul>	<p><u>Unit 5: Mutations and Gene Expression</u></p> <ul style="list-style-type: none"> <li>• Transcription &amp; Translation</li> <li>• Mutations</li> <li>• Cell differentiation &amp; Gene expression</li> </ul> <p><u>Unit 6: Viruses</u></p> <ul style="list-style-type: none"> <li>• Classification of virus structure compared to cells</li> <li>• Lytic &amp; lysogenic cycles</li> <li>• Viral disease causes</li> </ul> <p><u>Unit 7: Taxonomy &amp; classification</u></p> <ul style="list-style-type: none"> <li>• Taxonomy system structure</li> <li>• Domain and kingdom comparison</li> </ul> <p><u>Fall Semester Review and Exam</u></p>	<p><u>Unit 8: Meiosis &amp; Genetics</u></p> <ul style="list-style-type: none"> <li>• Meiosis</li> <li>• Mendelian Genetics</li> <li>• Non-Mendelian Genetics</li> </ul> <p><u>Unit 9: Cell energy and Plant systems</u></p> <ul style="list-style-type: none"> <li>• Photosynthesis</li> <li>• Cellular respiration</li> <li>• Comparing photosynthesis &amp; Cellular respiration</li> <li>• Plant processes: transport, reproduction, &amp; response</li> </ul> <p><u>Unit 10: Matter and Energy Flow</u></p> <ul style="list-style-type: none"> <li>• Levels of organization</li> <li>• Relationships between organisms</li> <li>• Succession</li> </ul> <p><u>Unit 11: Environmental Changes</u></p> <ul style="list-style-type: none"> <li>• Energy flow through ecosystems and stability</li> <li>• Nitrogen and Carbon cycles and disruptions</li> </ul>	<p><u>Unit 11: Environmental Changes CONT.</u></p> <ul style="list-style-type: none"> <li>• Energy flow through ecosystems and stability</li> <li>• Nitrogen and Carbon cycles and disruptions</li> </ul> <p><u>Unit 12: Biodiversity</u></p> <ul style="list-style-type: none"> <li>• Adaptations &amp; Natural selection</li> <li>• Evidence of Evolution</li> </ul> <p>Genetic drift, flow, mutation, recombination</p> <p><u>Unit 13: Human Body systems</u></p> <ul style="list-style-type: none"> <li>• Interactions and functions of nutrient absorption</li> <li>• Interactions and functions of reproduction</li> <li>• Defense from illness or injury</li> </ul> <p><u>Unit 14: Countdown to STAAR</u></p> <p><u>STAAR Testing</u></p> <p><u>Spring Exam Review and Assessment</u></p>