

## General Course Information

<b>Course Name:</b>	
<b>Advanced Placement Biology</b>	
Department: Science	Grade Level(s):11,12
Duration/Credits:1 Unit - Two Semesters	Prerequisites
BOE Approval Date:December 2022	Course Code
<b>Course Description:</b>	
<p>This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Topics covered include an in-depth study of molecules, cells, heredity, evolution, organisms, and populations. The two main goals are to help students develop a conceptual framework for modern biology and to help them gain an appreciation of science as a process. It is possible to achieve college credit for this class by taking the optional AP Biology exam at the end of the year, or by getting Dual Credit.</p>	
<b>Course Rationale:</b>	
<p>In a world filled with the products of scientific inquiry, scientific literacy is a necessity for everyone in order to use scientific information to make wise choices. Today, the job market demands advanced skills, requiring people to be able to learn, reason, think creatively, make decisions, and solve problems. An understanding of science and the processes of science contribute in an essential way to these skills.</p>	
<b>Course Objectives:</b>	
<ol style="list-style-type: none"> <li>1. The student will demonstrate the use of proper statistical analysis to determine the significance of biological lab results with 80% accuracy. Locally assessed. (SC7; 1.6, 1.7, 1.8, 2.1, 2.2)</li> <li>2. The student will read and summarize the function of cellular processes like respiration, photosynthesis, and homeostasis with 80% accuracy. Locally assessed. (SC3, 8; 1.5, 1.6, 1.10) (A+: Reading)</li> <li>3. The student will research and discuss the importance of DNA through analysis of reproductive variability, inheritance patterns, and evolutionary theory with 80% accuracy. Locally assessed. (SC3, 8; 1.5, 1.6, 1.10) (A+: Research)</li> <li>4. The student will describe in writing the relationships of systems to each other, structurally and functionally for plants and animals to an accuracy of 80%. Locally assessed. (SC3; 1.2, 1.4, 1.6, 1.10, 2.1, 2.3, 2.4, 2.7, 3.5) (A+: Writing)</li> <li>5. The student will classify organisms into groups and subgroups based on structural similarities, will place those organisms into an ecosystem, and discuss how humans are affecting the environment with an accuracy of 80%. Locally assessed. (SC3; 1.1, 1.2, 1.3, 1.4, 1.6, 1.8, 2.1, 2.3, 2.4, 3.1, 3.5, 4.1, 4.6) (A+: Speaking)</li> </ol>	