9-12 Curriculum Guides

For each discipline, there will be an overview stating the philosophy, outcomes, approach, etc. of the discipline (this will be developed by the K-12 Committee). This overview will address the program in grades K-12.

DISCIPLINE: Biology **GRADE: 9-10**

Curriculum Standard	Student Learning Goals	FHS Rubrics	Suggested Instructional Strategies and Resources	Suggested Assessment Techniques
1. The Chemistry of Life Broad Concept: Chemical elements form organic molecules that interact to perform the basic functions of life. 1.1 Recognize that biological organisms are composed primarily of very few elements. The six most common are C, H, N, O, P, S	Describe the unique properties of carbon that allow it to covalently bond to itself and other atoms. Compare and contrast organic and inorganic compounds.	Reader – Compare/Contrast	Testing foods lab Analyzing food labels Identifying organic molecules (worksheet) Bonding and chemical formulas (worksheet) "Basic Chemistry for Biology Students" video	
1. The Chemistry of Life Broad Concept: Chemical elements form organic molecules that interact to perform the basic functions of life. 1.2 Describe the basic molecular structures and primary functions of the four major categories of organic molecules (carbohydrates, lipids, proteins, and nucleic acids).	List the most abundant elements in living things	Problem Solver – Fact vs. Opinion Reader – Main Idea Reader – Compare/Contrast	Mystery molecules (building organic molecule models) Testing foods lab Analyzing food labels Identifying organic molecules (worksheet) Bonding and chemical formulas (worksheet) "Basic Chemistry for Biology Students" video	Chapter Test/Quiz Molecular and atomic models Film study guide Lab report
1. The Chemistry of Life	Identify carbohydrates,	Problem Solver – Multi-	Mystery molecules (building organic molecule models)	Chapter Test/Quiz