General Course Information

Course Name: Physical Science	
Department: Science	Grade Level(s): 10-12
Duration/Credits: 1 year/1 credit	Prerequisites: none
BOE Approval Date: December 2022	Course Code: H3024-Physical Science
Course Description:	
This course provides the student with a study of chemistry and physics topics. This course will provide an understanding of the basic scientific principles of physics as well as incorporate laws, concepts, and principles that govern the composition and changes of matter within real world applications.	
Course Rationale:	
Chemical elements and compounds surround us everywhere we look- in our clothes, our food, even our bodies. Chemical reactions are used in burning fuels, cooking, and shaping the world around us. By studying chemicals and their reactions, the student gains a better understanding of the applications of science in their lives. By gaining the knowledge of the rules that regulate the physical world, students will better comprehend the real-life scenarios to promote personal safety and citizenship.	

Course Objectives:
1. The student will discuss and describe molecular, atomic, and ionic make-up of different complex substances including accurate nomenclature and the ability to predict properties of elements that make up these substances. (A+: Speaking and Listening) 2. The student will read scientific articles which includes analyzing graphs, tables, patterns and relationships in support of a meaningful conclusion. Locally assessed. (A+: Reading) 3. The student will research the concepts of nuclear chemistry and the risks and benefits of using nuclear energy. (A+: Research) 4. The student will write about how some technological devices use the principles of wave behavior to transmit and capture information and energy. 5. The student will predict and describe the outcome of forces acting on an object. 6. The student will develop and use models to demonstrate that energy is conserved. 7. The student will develop an understanding of Newton's Laws of Motion and the application to real word scenarios. 8. Students will develop and use models to demonstrate knowledge of electricity and magnetism.
Standards Alignment:
NGSS (MLS Correlation)