## Tripoli Evangelical School

## Curriculum

Class : 3SE
Subject : Physics

Teacher's name: Ziad Mina

Cycle: Secondary

**Textbook :** National Textbook (S 3)

Coordinator: Dr. Jamal Bitar

**HOD**: Miss Wafa Bitar

Unit	Objectives
Unit 1 : Energy	<ul> <li>Define and calculate work in the case of a constant force parallel to the displacement</li> <li>Define and calculate the gravitational potential energy</li> <li>Define and calculate the kinetic energy</li> <li>Define and calculate the mechanical energy</li> <li>Apply the conservation of the mechanical energy</li> <li>Relate thermal energy to changes in temperature and changes in state</li> <li>Define chemical energy</li> <li>Relate electrical energy to charge and voltage</li> <li>Know that the nuclear energy is due to nuclear forces</li> <li>Relate mass to energy (E = m c²)</li> <li>Apply the law of conservation of energy</li> <li>Give examples of sources of energy of each form</li> <li>Relate pollution to different sources of energy</li> <li>Identify the effects of pollution on environment and health</li> </ul>
Unit 2 : The Universe	<ul> <li>Distinguish between astronomy, cosmology and astrology</li> <li>Explain the geocentric theory of Aristotle and Ptolemy</li> <li>Know the development of astronomy in the 16<sup>th</sup> and 17<sup>th</sup> century (Scientific revolution)</li> <li>Recognize that the development of astronomy during the 18<sup>th</sup> and 19<sup>th</sup> centuries was a continuation of the ideas of the Scientific Revolution</li> <li>List the basic data of the constituents of the solar system</li> </ul>