

Course Title: PHYSICS B	Course Description
<p>Course No. 4358 Grade level: 9-12</p> <p>Text and Resources: N/A</p>	<p>Course Value: *One Semester</p> <p>Credit Value: 1 – 5 credits</p>
<p>Course Content: Key Content Standards and Course Objectives</p>	
<p>The following objectives are based on the Grades 9-12 Physics standards:</p> <ol style="list-style-type: none"> Waves: Waves have characteristic properties that do not depend on the type of wave: waves carry energy (4-a), transverse and longitudinal waves in mechanical media (4-b), solving problems related to wavelength, frequency, and wave speed (4-c), sound as a longitudinal wave (4-d), radios waves, light and x-ray rays (4-e), characteristic properties of waves (4-f). Electronic and Magnetic Phenomena: Electric and magnetic phenomena are related and have many practical applications: how to predict the voltage or current in simple direct current electric circuits (5-a), Ohm’s law (5-b), rate of energy dissipation (5-c), transistors and their role in electric circuits (5-d), charged particles as sources of electric fields (5-e), magnetic materials and electric currents (5-f, g) <p><u>Investigation and Experimentation</u></p> <p>Students will ask meaningful questions and conduct careful investigations addressing the content of the above Physics standards.</p>	<p>This course is designed for the advanced high school student. The instructor will direct the resources and guide the assignments.</p> <p>Physics includes the study of motion, forces, energy, heat, waves, light, electricity, and magnetism. Physics focuses on the development of models deeply rooted in scientific inquiry, in which mathematics is used to describe and predict natural phenomena and to express principles and theories.</p> <p>The Grades 9-12 Investigation and Experimentation Standards are infused throughout the high school science curriculum and reinforce content. They form the foundation of science knowledge and allow students to make concrete associations between science and the study of nature, as well as to provide many opportunities to take measurements and use basic mathematics.</p> <p>*Open entry/open exit</p>
<p>Methods of Study</p>	<p>Evaluation of Performance Standards</p>
<ol style="list-style-type: none"> Students will complete all activities assigned. Students will participate in discussion with other class members and/or teacher. 	<ol style="list-style-type: none"> Students will complete all assignments with a minimum of 70% accuracy. The supervising teacher will be satisfied with the quality of the student’s work. The student must receive a minimum score of 70% on a teacher assigned final evaluation. Letter grade contracts are optional and require a higher level of performance.