



Course Syllabus

SY 2014-15

COURSE TITLE:	Conceptual Physics
PREREQUISITE:	Algebra I. Students must attain a passing score on the Algebra I SOL Test.
DESCRIPTION:	<p>In science, a special emphasis is placed on the research process in all grades. This includes making decisions about the generation and testing of ideas; prediction, measurement, data collection and representation; evaluation of sources of information; collaborative investigation; interpretation and communication of findings; evaluation and verification of findings and considerations relating to the social context of research.</p> <p>Students build on basic physical principles by exploring the nature and characteristics of energy and its dynamic interaction with matter. Students gain a conceptual understanding of physical systems. Students use Algebra I to understand concepts. They engage in experimentation, apply scientific reasoning, and perform data analysis and interpretation. This course draws connections between the concepts of physics and many everyday applications. This course is not intended for students who are planning to pursue the sciences in college.</p>
MAIN TOPICS:	<p>Mechanics</p> <p>Dynamics</p> <p>Momentum</p> <p>Work, Energy & Power</p> <p>Electrostatics</p> <p>Electric Circuits</p> <p>Electromagnetic Waves</p> <p>Sound and Waves</p> <p>Optics</p> <p>Fluids</p> <p>Modern Physics</p>
CREDIT INFO:	1 Credit. This course provides one of the credits required for the Standard or Advanced Studies Diploma.