

## **PHYSICS HONORS - 2003390**

Grade 10-12, Credit 1.0

**Prerequisite: Student should be concurrently enrolled in or have completed Algebra II**

Physics Honors is an Algebra-based study of the laws which govern the physical universe, connecting them with observable phenomenon, and covers the general topics of kinematic and dynamic motions, gravity, uniform circular motion, work, energy, momentum, simple harmonic motion, waves, optics, fluids, gases, heat, electricity, magnetism, nuclear, quantum and relativity. This course includes extensive use of hands-on labs to demonstrate physics concepts. Students will be challenged to master physics concepts by expressing situations with equations that enable them to solve problems using a basic knowledge of algebra and right angle trigonometry. Students will apply physics principles to real-life situations. Additionally, students will have the opportunity to practice the scientific method as applied to physics while they design and perform independent experiments.