

Course Title: Advanced Placement Physics I* 2003420(Y)

Prerequisite: B or higher in Algebra II or taking concurrently and teacher recommendation

This college level physics program shall include the use of the scientific method to solve problems, employ metric measurements and demonstrate safe and effective use of laboratory instruments; analyze the principles of kinematics (motion in one dimension, in a plane, and use vectors); identify and apply Newton's Law of Motion; apply conservation laws in classical mechanics; describe torque, rotational equilibrium, gravitation, planetary motion and oscillations; describe the kinetic theory and solve problems in thermodynamics; quantitatively analyze the principles of electrostatics; describe electric currents; interpret concepts of magnetism; develop an understanding of waves and optics, analyze the concepts of modern physics; and analyze the interactions of physics, technology, and society. Upon completion, you may take the trigonometry-based AP-B exam for college credit.