

**COURSE TITLE:** College Preparatory (CP) Physics

Level of Difficulty	Estimated Homework	Prerequisites
Difficult	30-60 minutes	<b>District:</b> CP (or H) Chemistry CP Algebra II (at minimum concurrent enrollment)  <b>Department Suggestion:</b> CP Algebra II (at minimum concurrent enrollment) B- or higher in CP math & science classes

**Course Description:**

Physics is a rigorous course that takes a conceptual and mathematical approach to the study of matter and energy. Major topics studied first semester include motion in one dimension, projectiles or motion in two dimensions, Newton's laws, conservation of energy & conservation of momentum. Second semester studies circular motion, and non-mechanics topics such as electrostatics, circuits, magnetism, waves, and sound.

The classroom environment is a combination of lecture, concept demonstrations, laboratory experiments. Students will be expected to work collaboratively in groups in a laboratory setting several times per unit.

This course relies heavily on the use of algebraic expressions, graphical analysis, unit conversions, data interpretation, and word problems. Students will be expected to have a solid foundation in math (particularly algebra) that can then be applied to concepts in physics. Success in previous math courses and chemistry can be a stronger indicator of physics readiness.

Homework in this class is estimated at 30-60 minutes as a nightly average. This is a very rough estimate for planning purposes. A student's ability level will affect actual study time needed to be successful in this class. Comprehensive lab reports will be assigned in this class that will require additional outside class time to complete. Common homework assignments include textbook reading, textbook problems, worksheets and lab reports.

**Grading:**

The grading system is based on weighted percentages. Each assignment will have a point value within the weighted category. Assessments and labs are weighted more heavily than homework. Individual teachers may make modifications on the weighted percentages.

**Syllabus:**

Refer to individual teacher websites

**Supplemental Information:**

UC Subject Area "d"

10 Credits