St. Francis School
Conceptual Physics, 2013-2014
Instructor: Benjamin Studevent-Hickman
E-mail: bstudevent-hickman@stfrancisschool.org
Course Website: https://sites.google.com/a/stfrancisschool.org/conceptual/

Syllabus

Course Description

This course offers an introduction to the major topics found in physics. Its focus is on the basic *concepts* we use to describe natural phenomena; however, most things in physics have mathematical relationships, so we will examine those where appropriate. Conceptual Physics sets the foundation for students' future work in science at St. Francis.

Course Topics

Fall: Measurements, units, scientific notation, and significant figures; vectors and scalers; motion in one and two dimensions; Newton's laws; momentum; work, energy, and power; temperature, heat, and thermodynamics.
Spring: Solid, fluid, and gas behaviors; electricity and magnetism; circular, rotational, and harmonic motions; waves; light, optics, and wave-particle duality; the atom and nuclear physics (time permitting).

Textbooks

P. G. Hewitt, *Conceptual Physics* (10th ed.; San Francisco: Addison-Wesley, 2006).

Late Work

Late work will be accepted but penalized one letter-grade per day late.

On Academic Misconduct

Any clear instance of academic misconduct is grounds for failing the class. This includes cheating and plagiarism (the presentation of someone else's words, images, or ideas as your own).

Cellphones and Laptops

No cellphones or laptops are to be used in class unless you have an accommodation or special permission. If seen, they will be taken and kept until the end of the day.

Requirements and Grades

Each semester, requirements for the course include regular attendance and participation, homework assignments, lab write-ups, short quizzes, and four tests, including the midterm and final. These make up your final grade as follows:

Homework and labs:	25%
Tests and quizzes:	60%
Participation, effort, etc.:	15%