

AP Physics I

Course Expectations

Instructor: Mr. Brunette

Classroom: S351 (subject to change)

Email: brunettet@sps.springfield.ma.us

Course Description:

Advanced Placement Physics I is designed to present a first semester college-level physics course in scope and sequence. The course focuses on the exploration of classical physics and Newtonian mechanics. Competency in algebra and basic trigonometry is required for the course. Students are required to participate in the Advanced Placement Physics I Exam, on May 6, 2015, in order to receive Advance Placement credit. Students who successfully complete this course and receive a satisfactory score on the Advanced Placement Exam may receive college credit at participating institutions.

Class activities will consist of lectures, demonstrations, group problem-solving sessions and shorter investigations. Additionally, the course will include a hands-on laboratory component that will involve student-conducted investigations into a variety of physical phenomena. Each student will maintain a laboratory notebook and will submit reports and present data. In the spring semester, an AP Physics I Lab section will be part of your schedule. This additional class time will allow for in depth exploration into course topics, however, investigations will begin at the start of the year and carry on throughout the year.

Textbooks:

Primary: Cutnell, John D., and Kenneth W. Johnson. 2009. Physics Advanced Edition, 8th ed. Hoboken, N.J.: John Wiley & Sons

Secondary: Hewitt, Paul G. 1987. Conceptual Physics. Menlo Park, CA: Addison-Wesley Publishing Company, Inc.

These books will be used to supplement material covered in class and as a source of problem sets. It is not necessary to bring the book to class every day.

Student Materials:

- Scientific or graphing calculator - get one that you can take with you into the AP test.
- Three-ring binder
- An AP Physics I review book is *strongly* recommended.
- Internet access is recommended.

Homework:

Problem sets will consist of previous AP questions, problem sets from AP test review books and the textbook. Problem sets will be assigned on an ongoing basis throughout a particular unit. I encourage you to cooperate on problem sets. All homework must be an original document that includes the student name, date and assignment designation in the header of the first page.

Grading:

Grading and grade letter designations will follow the SPS grading framework.

Each marking period:

- 80% Exams
(timed, to reflect the AP test, and curved according to the traditional AP test scoring matrix)
- 20% Homework Problem Sets and Quizzes

Final course grade:

Q1 = 23%; Q2 = 23%; Q3 = 23%; *Q4 = 11%; MX = 10%; FX = 10%

*Q4 is abbreviated due to the May exam and seniors' early dismissal

Course Pacing: This course is designed to present content in a manner conducive for students to achieve success with the AP Physics I Exam. Building upon prerequisite knowledge of both physics and mathematics, physics concepts, as well as instruction in situational analysis, will be presented at a rapid pace. Given this, students are responsible for reviewing material covered in class at home via textbook readings and websites that will be described in class, as well as staying current with all assignments.

Student Work Groups: Due to the rigor and speed with which this course will be delivered, students are strongly recommended to form work groups of three to four members. Such groups will prove extremely effective in reviewing material, analyzing problems, performing lab investigations and preparing for assessments, including the AP Physics I Exam.

Attendance/Make-up: In the event of an absence from class, it is the student's responsibility to identify missed assignment(s) and to secure course materials distributed during the absence. All make-up work must be submitted in a timely manner. Any late assignment is penalized 5%, per day. After three days, it receives an automatic highest grade of 50%.

Students may make up any test missed as a result of an excused absence (the make-up assessment will be a similar assessment of comparable difficulty). Students must make arrangements to take the missed test upon their return and must complete the assessment within a reasonable time period as determined by the instructor. In the event of an unexcused absence, absent students may receive a zero for missed work.

After School Help: Thursdays will be the regularly scheduled and recommended time for help for my AP students. However, I will generally be available for assistance most days after school. Arrangements can be made for assistance before school. For students having trouble, Mr. Brunette will request after school help. Additional credit can be earned this way.

Contact Information:

I may be contacted by calling Springfield Central High School at **(413) 787-7085** or by email at **brunettet@sps.springfield.ma.us**. If phone contact is attempted, calls will be returned at the earliest opportunity. *Email is the preferred method of contact.* Additionally, I intend to obtain and use email addresses for students as an additional means of communication regarding class activities.

Important Notes:

1. You are to come to class each day prepared. This means that you should have all materials, including assigned homework, classwork, writing utensils and a calculator.
2. I expect an atmosphere conducive to learning.
3. You are expected to make every effort to attend the three (3) Saturday Study Sessions scheduled throughout the year. *These dates have not been scheduled at this time. They will be shared when they are determined.*
4. Late assignments are penalized 5%, per day. After three days, an automatic grade of 50% will be awarded.
5. Missing work is counted as a zero. Zeros significantly lower a grade point average. Please plan on handing in all assignments.
6. Cheating is...
 - a. Any form of copying ANY work from another student or peer, or giving answers.
 - b. Copying answers or materials from another student's test or giving answers to another student are both forms of cheating. Giving and receiving answers will be treated and punished equally.
 - c. Copying of another's work (papers or written work) without the expressed written permission of the author.

Those caught cheating will receive a grade of zero on the assignment and your parents will be contacted. Repeat offenses will result in more severe administrative punishment.

Student Name (print): _____

Student Signature: _____

Date: _____

Parent Name (print): _____

Phone: _____

Parent Signature: _____

Date: _____