

## AP Physics 1, 2017-2018

Name: \_\_\_\_\_

### Course Outline

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### The Subject

AP Physics 1 is equivalent to a one-semester, non-calculus, college freshman course. It covers about half of the elements of elementary physics including mechanics, waves, sound, introductory electricity, and rotation.

### Required Materials

- Text: *Principles of Physics* (2010). Kinetic Books.
- Calculator
- Method of keeping handouts organized (binder, folder, etc.)
- Paper to take notes on
- Pencil or pen

### Homework

The homework grade will be based on online quizzes, which must be completed on The Hub by five minutes before the next class meeting. There will be approximately five quizzes each unit. You are allowed one late quiz per unit. Any additional quizzes that are completed after the due date will not receive any credit.

### Laboratory Exercises

The experimental work for this course may be quite different from your other science courses. You will often need to design your own procedure before collecting data, and the conclusions are generally expected to be more sophisticated. We will complete approximately two experiments per unit. A 10% penalty will be applied for each school day a lab report is late. With the exception of an extended excused absence, no lab reports more than a week late will be accepted for credit.

### Tests and Quizzes

Tests will occur at the end of a unit. They will be comprised of both multiple choice and free response questions. Most units will include in-class quizzes as well. You can anticipate a test or a quiz approximately once a week. **In cases of absences, students are expected to see their teacher before school on the morning of their return to arrange a time to make up quizzes or tests.** If a student misses the day of the quiz or exam only, they are expected to take the make-up on the day of their return.

### Grading

Your grade is based upon the total number of points received throughout the year. Generally, tests are worth 100 points, in-class quizzes are worth 30 points, and lab reports are worth up to 100 points, depending on the complexity. Homework is worth 10 points each unit.

### Suggested Supplement

Previous students have found *5 Steps to a 5: AP Physics 1* (McGraw Hill Publishing) a useful text for additional problems or short explanations. If you would like a hardcopy textbook to supplement *Principles of Physics*, we recommend *College Physics* (Etkina, Gentile, Van Heuvelen) or *College Physics: A Strategic Approach* (Knight, Jones, Field). Ms. Hutchison has copies of these texts available at her desk if you would like to browse through them.

### **The Hub (hub.hw.com)**

We will utilize The Hub extensively in this course. Homework quizzes, extra problems, important handouts, and web simulations can all be found here. You can also find solutions for the problems in each unit packet. In addition, you have the option to turn in your lab reports through the Hub.

### **Personal Electronic Devices Policy**

Cell phones should be kept in your backpack during class; they must be put into silent or airplane mode. You may have your laptop or tablet open on your desk as long as it does not become a distraction. You are expected to participate fully in class discussions and problem-solving sessions, both of which will often require a piece of paper to write on. As in all of your classes, you need to obtain permission before taking photographs and/or recording others and before posting or transmitting pictures or recordings of others.

You are expected to have Microsoft Excel and *Principles of Physics* installed on your computer, as well as the latest version of Java so that you can run web-based simulations. If you need help installing any of this software, please contact your teacher.

### **Drop deadline**

If you decide to transfer from AP Physics 1 into Physics, you must make this switch before Thanksgiving break. No transfers into Physics will be allowed after November 17, 2016. If you transfer before the end of the first quarter grading period, you have the option of retaking tests and making up labs to improve your grade. If you transfer during the second quarter grading period, you will carry your current average in AP Physics 1 into Physics with you.

Other courses that you might want to transfer into will have different deadlines to add. Please check with the teacher of that course for their policies.