

Conceptual Physics 2007-2008

Instructor: Mr. Secrest
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Text:

Conceptual Physics by Paul Hewitt

Supplies Needed:

2 Notebooks (one for class notes and one for homework), scientific calculator (needs to have sine, cosine, tangent, etc.)

Course Description:

This course is intended to teach the important ideas in physics. The emphasis will be on physics concepts, rather than calculations. This does not mean that there will not be any math involved in this class, but it will not be the focus of what we are doing. To truly understand physics, you must first start with the concepts and build from those. This course is also intended to make physics “phun” and to give you an idea of what physics is and why it is important.

Homework

Written homework will be assigned most nights and will include both conceptual and numeric questions. In your **homework notebook**, write the date and then work out the problems or answer the questions under it. The assignments will help you learn the material, but only if you put thought and effort into doing the problems. At the beginning of each class I will go around and check your notebooks to see that the assignment was completed. You must attempt to answer everything. We will go over questions that people have from the homework after it is checked, but you need to try to answer it the night before even if you are struggling with the problems.

I will randomly (by rolling dice) check your homework notebooks to see if your assignment from the night before is completed (by completed, I mean each problem attempted). When I check the homework it is either 10 points if it is completed, or zero points if it is not (or if you forgot to bring your homework notebook to class – *you will **not** be allowed to go get it from your locker*). You will be able to get partial credit ***once per quarter*** if your homework was not complete by turning it in the following day, but it will be graded on correctness, and it will be worth less than the full ten points.

You will also be given reading assignments from the textbook most nights that will serve as an introduction to the next day’s class. It is important to keep up with the reading because it makes it easier to follow what we talk about in class.

Quizzes

There will be a quiz each week on Tuesday. The format of these weekly quizzes will usually be about 4 multiple choice questions based on the material we have been covering and 2 or three questions that will come from the homework assignments from the previous week. There also will be other quizzes, some announced and some pop quizzes, each quarter. Some will be reading quizzes that will cover some of the basic ideas that were included in the reading to make sure that you are keeping up with the reading assignments. Others will be a question or two based on the type of problems that we have been doing to make sure that everyone understands the material. These quizzes will not be worth as many points as the weekly quizzes, but they add up so you should prepare for these like you would for other quizzes, which means doing the reading that is assigned and looking over the material we covered in class that day each night. Looking over the days material only takes a few minutes, but it is important to your understanding of the topics we are looking at.

Note: You will be allowed to make corrections for quizzes and tests to get some of the credit back that you missed. There is a separate handout that you will be given that gives the guidelines for these corrections. Just because you turn in corrections does not automatically mean that you get the points. The corrections must be correct and follow the required format. See me if you have any questions.

Tests / Projects

Tests will be given after every main topic that we cover (sometimes it is covered in one chapter, sometimes the topic is spread out over a few chapters) and cover the main ideas that we studied. The questions will be mainly conceptual, but there will be some that require calculations. There will be at least two or three tests each quarter.

In addition to the in-class tests, there may be projects that will be averaged in as a **test grade**. Not doing one of these projects is the same as getting a zero on a test. It is not a good thing. You will be given more information about these later in the course.

You will always be told about the tests at least a week ahead of time, so being absent *the day before the test* **does not** excuse you from taking it. If you miss *multiple days before the test*, you must talk to me when you return about when you can make it up, but it will usually be the day after you return. If you are absent *the day of the test*, you will make it up the *day that you return*. Even if you miss *one day before the test and the day of the test*, you **will take it the day that you return**. We will not cover any new material the day before the test, so *unless you miss multiple days before the test* you must be ready to make it up *on the day that you return*. **** The same policy applies to the Tuesday quizzes ****

***** NOTE:** Cheating **will not be tolerated** on quizzes, tests, or semester exams. See the student handbook for the schools policy on what the consequences of cheating are. Besides the obvious cases of copying off somebody else or allowing somebody to copy off you, other things that would be considered cheating would be passing a calculator to someone else, passing a note to someone else (even if it is unrelated to the test), or talking before everyone has turned in their test or quiz (even if it is to ask to borrow something from someone else). If you need something from a classmate, ask me to ask them for you. *******

Labs

Each week we have time given to us for labs. It won't always be used for labs. Sometimes it will be used for tests, or we might have a quiz and then still have time to cover new topics, or it might be used to do group work on problems based on topics that we cover in the first part of class. For some topics there are many labs that we can complete, so we will go to the lab more often. For other topics there aren't as many labs that can be done, so we will use other ways to allow you to see how what we are doing applies to real world experiences (classroom demonstrations, video analysis of labs that may be difficult to do, etc.) For each lab we will talk about what you will need to record, what needs to be answered, and what you will be turning in. **Any goofing around in the lab results in a zero for that lab and a trip to the dean's office.**

Participation

In class we are going to be using an interactive electronic response system for me to ask questions on concepts to the class. This allows both of us to get feedback each day on how well you understand the material. You will receive a participation grade based on whether or not you submit answers to the questions, not based on how many you got correct. This is going to be used as a learning tool, not an assessment tool. If you are paying attention in class, responding to the questions, and discussing with your neighbors when you are asked to you will receive **+1** point for the day. If you are sleeping, or not paying attention (but not distracting others) you will receive **0** points for the day. If you are being very disruptive (or have to be reminded several times to be quiet) you will receive **-5** points for the day. If you are causing problems and I have to either write a JUG or ask you to leave, you will receive **-10** points for the day. **Also, for safety reasons goofing around will not be tolerated when we are doing labs.** This type of behavior will result in **-20 points** for the day.

Grading:

Tests, homeworks, quizzes, and participation will be used to calculate the quarter grade. Tests count for 40% of the quarter grade quizzes count for 25%, homework and labs each count for 15%, and participation counts for 5%. The semester grade will be calculated in the following fashion: **1st Quarter (40%) + 2nd Quarter (40%) + Semester Exam (20%) = Semester grade.**

This course is on the school grading scale (grades will not be rounded):

A+	98 - 100	C+	82 - 84.99
A	95 - 97.99	C	79 - 81.99
A-	93 - 94.99	C-	77 - 78.99
B+	90 - 92.99	D+	74 - 76.99
B	87 - 89.99	D	72 - 73.99
B-	85 - 86.99	D-	70 - 71.99

If you have questions or any concerns about how you are doing, **do not hesitate** to talk to me.