Physics 112 – Algebra-Based Physics for Biological, Chemical, Geological, and Sport Scientists II

1. General Information

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Website: http://www.hirophysics.com/

Class Hours: Monday, Wednesday & Friday from 11:00 AM -11:50 AM

Textbook: "College Physics 7th Edition" by Wilson, Buffa & Lou

Office Hours: The best time is after class or you may find me on MWF from 9 am

to 5 pm. Otherwise, make an appointment by email.

Prerequisite: Algebra, Trigonometry, and Physics I

Topics & Materials: Physics II covers waves, sounds, electromagnetism, optics, etc.

Evaluation: HW Exam + In Class Exam 1 20%

HW Exam + In Class Exam 2 20% HW Exam + In Class Exam 3 20%

Comprehensive Final 30% (Wed. Dec. 8: 10:45 am –

1:15 pm)

Online Assignment 10%

In-Class Quiz included in the assignment part

and missing this gives -5 points for

each

Final Grades: $A \ge 87.5\%$, $B \ge 77.5\%$, $C \ge 67.5\%$, $D \ge 57.5\%$ (In case that the exams are <u>too easy</u> or <u>too difficult</u>, the above scale will be slightly changed to adjust the grade distribution. No make-up exams will be given unless you have a verified excuse from the Assistant to Vice President of Student Affairs in Union 219.)

2. Specific Information

The last day to drop and receive 100% financial refund: August 31 The last day to drop without academic penalty: September 29

Assignments

All problems are provided from the Web, Mastering Physics. Go at www.masteringphysics.com. Register yourself as a New Student. For trying the homework problems, discussion with other students is encouraged. However, copying is not allowed. No late assignments will be accepted. An extra credit is set for specific

^{*} You will be notified of exam dates in a timely manner. These dates will be final, and no discussion of changes will be considered.

problems. Except multiple-choice questions, the deduction of points is not significant. The homework and its due date will be announced in the lecture class (mostly one week).

Beyond class time

The class related handouts and resources will be posted on the web, hirophysics.com. Emails are frequently sent out to inform on homework, exams, study sessions, etc. Check your university email account at least twice a week. You may also ask me questions by email anytime. (We may utilize the web for some discussion.)

Attendance policy

Attending class is very important. If you missed classes for some reason, you should come to my office to understand the lectures to compensate your attendance. If you miss lectures more than:

- one-fourth of the total number ⇒ <u>lowering one letter grade from the final grade</u>
- one-third of the total number

 failing the class

For general advice,

☑ Tell your friends, girl/boy friend, parents, brothers/sisters, advisor, boss in the work place, roommates, fiancé, spouse, and any other people related to your daily life that you are studying at university; and participating in classes is also an important work. ☑ If you become sick, focus on recovering. If necessary, go to a medical doctor. If the illness continues for a long term, we may arrange the lecture at a different time/place so you can catch up with class. However, if you are incapable of studying or attending the lectures, you may have to leave the semester to focus on the medical treatment since it would ruin both your health and the academic achievement.

☑ If some problem in your life keeps you from coming to class, you should consult reliable persons or some expert, so you can come back to class as soon as possible. ☑ If your habit keeps you from attending class, try to refrain from it at least before class. ☑ Check your time schedule. If it is unmanageable, consult the related persons. If necessary, drop a class or reduce work loads.

Homework Exam & In-Class Exam

The "home work exam" takes 30% of one midterm examination. It will test your ability of thinking, creativity, and other discussion skills. It will be posted in the webpage about one week before the in-class exam. Due date is one day before the in-class exam. The grading scale is all or nothing; namely, you can have either full credit or zero point. You are also allowed to resubmit the exam until accepted. No penalty will be applied if it is accepted after all. The following may be the factors to be rejected:

- Copying from other people's reports, books, or web pages.
- Not satisfying the conditions indicated by the instructor
- Trifling content and format
- Not reflecting on topics taught in class
- Wrongful conjectures and conclusions

The problems of "in-class exam" will be similar to the practice problems given one week before the exam date. A few of problems are based on the concepts explained in the lecture. This covers 70% of the total point of each exam (except the final).

For writing exam solutions, show all work: A problem that gives results only and does not show how they are obtained will receive no point. Work them out neatly: Don't write solutions randomly. (See the last section of this syllabus, "How to format your solution.")

Extra consideration to the final grade

This will be given for your overall performance in this class. The keywords are effort, diligence, improvement, and better thinking skills. It is NOT a back-up plan for your better grade. This will be offered by the instructor if following are adhered to:

- Attend all lectures. (The attendance sheet is just a reference, not necessarily the evidence.)
- Turning in every assignment (quiz, homework, test, exam, etc.) and completing it to your best ability. It must also be neat and legible.
- Class participation (asking questions)
- Coming to study sessions and to instructor for extra help
- Improving your skills (progress in overall performance)

People who conduct themselves in the following manner will be ineligible for the extra consideration.

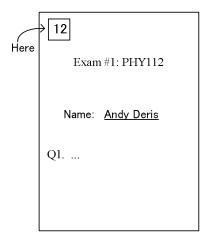
- Not working problems by yourself
- Leaving class or sleeping during lecture
- Frequently missing class even with excuse

Other Advice

- Jokes sometimes make you relaxed. © Enjoy learning!
- Feel free to ask me questions.
- Make sure everything you have to submit before you leave for vacation.

How to format your solution

• You will be provided an identification number for this class by the instructor. Please remember the number assigned and put it on the top and left of the first page shown below. (*Without the number, you may lose the whole score of the assignment or exam.*)



- For every question that you are supposed to do, you have to show your work through the following instruction:
 - 1. Write down the conditions and basic formulas.
 - 2. If you need to derive equations, indicate how you did.
 - 3. Write numbers in the equation that you plug in.
 - 4. Circle or box the final answer with appropriate units.