### Text and Materials (available at bookstore and elsewhere)

- *Physics for Scientists and Engineers* by Randall D. Knight (Pearson Addison-Wesley, 3rd Edition)
- *Mastering Physics Access Code* for online homework (online at Addison-Wesley). The website is [http://www.masteringphysics.com](http://www.masteringphysics.com) The Course ID is MPFERNSLERW14133
- Weekly lab instructions – download from course webpage.
- Spiral bound notebook for homework, in-class activities and labs
- Scientific calculator (trigonometric functions, scientific notation, etc.)

### Class time and assignments:

There will be little lecturing so your main source of information is the text. You are to read the appropriate sections in the textbook and work the examples prior to each class meeting. During class time there will be interactive demonstrations, and individual/group work focusing on conceptual exercises, problem solving, and other activities. Each week, we will have a lab activity, which must be downloaded from the course website before the day we do the activity. Some of these activities will be turned in and graded for credit on your overall grade. **Regular class attendance is expected!!**

### Groups:

You may be assigned to specific groups during the quarter. If so, please sit with your group in the room and work together to complete workbook exercises and other activities.

### GRADING (approximate letter grades and percentages for each category)

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<th>Homework</th>
<th>Quizzes</th>
<th>In-class Exams (lower counts less)</th>
<th>Final Exam</th>
<th>In-class activities</th>
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**Homework:** Homework will be done on-line using the Mastering Physics system with one problem turned into class per assignment. The problems are listed on the class schedule. They are from the book, but you will turn them in online. Some of the problems will have randomly generated numbers. In this situation it is helpful to solve the problem symbolically, rather than immediately plugging numbers. I recommend that you first solve the problems symbolically. Substitute the numbers from the book and see if they give the answer at the back of the book. Then you can substitute the on-line numbers. **Use the book’s numbers for the weekly turn-in problem, instead of the randomly-generated online numbers.** Computers can be frustrating. Don’t let them be. Spend a reasonable amount of time. If things are not working, send me an email. We can clean up the details later. However, the problems are from the back of your book, so you should still be able to solve the problems symbolically and enter the answers later.

**Homework Notebook:** You should record your homework in a spiral bound notebook. I am happy to help you with homework during office hours but only if you bring your attempted solution in your homework notebook.

**Quizzes:** There will be a quiz each week, except when there is an exam. The quizzes will be conceptual in nature and will require explanations. There will be limited time for the quiz, ten minutes at most. Come prepared to write.

**In-class Exams:** There will be two exams during class period: **Friday, January 31 (Chaps 25, 26, 28) and Friday, February 21 (Chaps 29-31).** Exams will be closed book and notes, but you will be supplied with a formula sheet.

**Final exam:** The final exam is **Wednesday March 19 10:10am-1pm** during finals week. It will be cumulative (Chapters 25,26,28,29,30,31,32,33) with emphasis on Chaps 32-33. The final exam will be closed book/notes; however, you will be supplied with a formula sheet.

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[jf ernsle1/6/14 133syW14.doc.doc](http://www.masteringphysics.com)
General Policies:
- I encourage you to work with other students (form groups?); however, you must do and turn in your own work.
- Work submitted for credit must be on time, stapled, neat (no perforations), and readable. Your work should be clearly organized on the page, with explanatory phrases, correct units, and the answer circled or boxed. **Late or messy work will receive less than full credit.**
- If there is a problem (illness, car trouble, course conflict, game, performance, etc.) let me know as soon as possible and we might be able to make other arrangements.
- Check the appropriate university documents for details and deadlines concerning academic honesty, adding, dropping, grading, withdrawal, incomplete, etc.
- Unforeseen circumstances may necessitate changes in this information. Changes will be announced in class and posted on the course website.