PHYS 1211
Introductory Physics for Science and Engineering Students: Mechanics, Waves, Thermodynamics

Course Syllabus and Schedule
Fall 2007

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Times and Locations

Class*:* Tu-Th Period 4 (12:30 PM -1:45 PM), Physics Bldg., Room 221
Office Hours*:* As posted on course blog.

Required Course Materials

Physics For Scientists and Engineers, A Strategic Approach, 2nd Edition, Randall D. Knight, Pearson/Addison Wesley, 2007. This book is not yet in print. You will be provided with a CD-ROM with PDF files of the chapters we will need until the bookstore receives the books. You will then need to buy the book. See course blog for further details.

Student Workbook for Physics For Scientists and Engineers.
You will be assigned various problems from the workbook which will be collected every class, and will be the basis of classroom activities.

InterwritePRS "clicker" for classroom participation, available at bookstore. You will receive a rebate coupon when you buy the new book. You must save your clicker receipt until then to redeem the rebate!!

"Mastering Physics" online homework system. www.masteringphysics.com
You will receive an access code at no charge. Details provided on the first day of class.

Additional Materials (not required)

Student Solution Manual, Chapters 1-19.
You will be provided a PDF copy of a portion of the solutions manual.

ActivPhysics Online. www.aw-bc.com/knight

ActivPhysics Online Workbook Volume 1: Mechanics, Thermal Physics, Oscillation & Waves. (ISBN 0-8053-9060-X)

Course Blog

http://www.physast.uga.edu/classes/phys1211/fertig
A blog will be used to disseminate course information. This syllabus, the course schedule, news, materials, and other important information will be

posted here. You will often receive email notices when new content is posted, but check-in often.

Grades website

You will be able to confidentially access all your grades throughout the semester via the website https://grades.physast.uga.edu. Login with your MyID. I encourage you to check your grades often to catch any mistakes in bookkeeping.

Course Format -- An Active Learning Classroom

This course consists of two lecture classes and one lab per week. Each lecture class lasts 1 hour 15 minutes. Class will not be conducted in the traditional "sage on the stage" format. Rather, we will use interactive exercises and demonstrations to develop a deeper understanding of the material you have ALREADY encountered in textbook completing your reading assignments in preparation for class. The importance of your role as an **active** learner is reflected in the substantial portion of your grade assigned to class participation. Please note that you are be responsible for all material in the assigned chapters of the book, even if that material is not explicitly used or discussed in class.

"Clickers" and classroom participation

Class participation grades will also derive from your use of "clickers" to respond to questions posed during classtime. The importance of your participation in these in-class activities cannot be stressed enough. You will receive 4 points for every clicker question you respond to, and an extra bonus point if you answer correctly. Obviously, you cannot respond to any questions if you don't attend class, so attendance is critical.

Mastering Physics Online Homework System

www.masteringphysics.com

Pre-lecture reading quizzes and weekly problem sets will be assigned and completed using this system. Your first assignment will include a tutorial introduction to using the system. Problems will be worth 20 points each, and your final homework average will be an average over the total possible points for all questions assigned throughout the semester (i.e, you won't receive a "grade" for each homework)

Workbook Problems

A few exercises from the Student Workbook will be due in class, every class. This helps to keep you from getting behind. Workbook problems will count 5 points each, and will contribute to your classroom participation grade. Class-time activities will involve the workbook problems.

Reading Quizzes

You are required to read the assigned portions of the textbook before the class in which the relevant material will be discussed, and to complete a short on-line quiz using the Mastering Physics system the night before every class. Reading quiz questions will be worth 5 points each, and will contribute to your homework grade.

Homework

Homework is an integral part of the course, and will be assigned weekly. All problems will be assigned through Mastering Physics. Most problem sets will include problems that require a hand-written component, often to be completed using "Dynamics Worksheets" provided in the Student Workbook. You must complete the worksheets for all the relevant problems, and they will be collected in class the day homework is due. One worksheet will be selected for grading, and will count for 20 points, just like a regular question. Note that you will be required to solve exam problems using the problem solving strategy stressed in the "Dynamics Worksheets," so using them to solve homework problems will be valuable preparation for exams.

Exams

There will be two in-class midterm exams and a final exam. All exams are closed book and closed notes. You will be allowed to prepare and bring a 3x5 notecard with any formulas you wish to use. Calculators are allowed on the exam. The use of any other aid, such as PDAs, cell phones, blackberrys, etc., is considered cheating and a form of academic dishonesty. If you cheat during an examination, you will receive a zero for that exam, and will be subject to the provisions of the University Policy on Academic Honesty (see below).

Rules concerning withdrawals and incompletes

You must know the rules concerning withdrawals and incompletes, as published in the UGA Bulletin. Of particular importance is the following:

> "Students who fail to drop a course or wish to withdraw from a course after the designated drop/add period for a term must withdraw through OASIS (Online Access to the Student Information System). An instructor also may withdraw a student from a course due to excessive absences as defined in the courses syllabus. Withdrawals after the drop/add period will result in course entries on the academic record with grades of W or WF as assigned by the instructor(s). A student who withdraws or is withdrawn for excessive absences after the midpoint withdrawal deadline of the semester (date to be specified in the Schedule of Classes) is assigned a grade of WF, except in those cases in which the student is doing satisfactory work and the withdrawal is recommended by the Office of Student Affairs because of emergency or health reasons"

Assignment of Course Grades

Your final score for the course will be determined by the following average:

Class participation/workbook problems	20%
Homeworks/reading quizzes	20%
1st Midterm	15%
2nd Midterm	15%
Final	20%
Laboratory grade	10%
Final Score (F.S.)	100%

Your final grade will be the highest grade to which you are entitled according to the following scale:

F.S. ≥ 94 = A	F.S. ≥ 77 = C+
F.S. ≥ 90 = A-	F.S. ≥ 74 = C
F.S. ≥ 87 = B+	F.S. ≥ 70 = C-
F.S. ≥ 84 = B	F.S. ≥ 64 = D
F.S. ≥ 80 = B-	F.S. ≥ 0 = F

Please note that the +/- grading system is used for this course, and that the standard numerical scores corresponding to the letter grades may differ from your past experience. For more details on the plus-minus system, look to http://www.bulletin.uga.edu/PlusMinusGradingFAQ.html#Q15

Note that all homeworks, quizzes, and exams will be scored on an absolute scale (i.e., no curving or scaling). The performance of others does not impact your grade -- it is possible for everyone to get an A in this course.

Missed homeworks/Missed reading quizzes

No homework problems will be accepted after the due date and time as enforced by the Mastering Physics homework system. Everyone will get 200 "free" points in the homework/quiz category. This is roughly equivalent to allowing you to "drop" your lowest homework score, or put another way, is a one "free" missed homework. If you turn in all your homeworks, then these points are extra credit!

Missed classes/Missed workbook exercises

In a similar fashion to how missed homeworks are handled, everyone will get 60 "free" points for classroom participation/workbook exercises. This is roughly equivalent to being allowed to miss approximately 3 lectures without adversely affecting your participation grade. If you exhaust these 100 free points, then up to 20 more points can be made up by completing extra workbook exercises -- see me for details. Beyond these 80 points, no further accommodation will be made for missing class. If your schedule does not permit you to attend class regularly, you should not take this course.

Missed exams

If you must miss an exam for a serious, documented excuse, (i.e., you have a doctor's note for a serious illness), you may request to take a make-up exam. This request must be made no later than 12 hours before the exam time. Missing an exam without permission to take the make-up exam will result in a grade of zero for the exam.

Academic Honesty

http://www.uga.edu/ovpi/honesty/acadhon.htm

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. More detailed information about academic honesty can be found at the website given above. As a UGA student, you are responsible for knowing and understanding this policy. If you have any questions about the propriety of actions relating to this course, you are obligated to ask me for clarification.

Other

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.