# Physics 202 - General Physics - Spring 1998

## Prerequisites:

Physics 201 or equivalent.

### Materials Needed:

- Text: R. A. Serway, Physics for Scientists and Engineers, 4th ed.
- Laboratory Manual; Rollefson and Richards, Laboratory Experiments in General Physics, 1997 edition.
- Laboratory notebook: Spiral bound, preferably with 5 or 6 mm cross-hatched ruling. Bring to first lab.
- Calculator: trigonometric, exponential, and logarithmic functions. Know its use and bring it charged to exams.

### Lectures:

The lectures are to supplement, not substitute for, reading and studying the text. They will be shared by Profs: Wesley Smith (4275 Chamberlin, 262-4690, wsmith@wishep.physics.wisc.edu) and Tao Han (5289 Chamberlin, 262-2865, han@pheno.physics.wisc.edu).

## Laboratory:

Follow the "General Instructions" in the laboratory manual (pages 1-3). The experiments are to be written up during the laboratory period in the lab notebook. The lab notebook is not to be taken from the laboratory. YOU MUST COMPLETE AT LEAST 10 OF THE 11 LABORATORY ASSIGNMENTS IN ORDER TO RECEIVE CREDIT FOR THE COURSE. You must get written permission from *only your*lab TA to take a make-up lab. Make-up time is given for the labs covered in each exam period during the week of the exam only.

#### Homework:

The homework problems are assigned in the syllabus for each week and should be handed in at the first meeting of your discussion section after the week of the assignment. Homework will count toward your grade. Feel free to discuss the homework with others. The solutions will be explained in discussion section and available in the <u>Physics Library</u>.

## Discussion Section:

There will be a weekly 10-minute quiz consisting of a problem similar to one of the assigned homework problems.

#### Office Hours:

Teaching Assistants will have office hours in the consultation room (4280 Chamberlin Hall). You may go to the office hours of any TA. Profs. Smith and Han will have office hours from 11 am to noon, Tuesday and Thursday or by appointment.

#### Electronic Aids:

All of the instructors are available by e-mail, and there is an e-mail list for the entire class that will occasionally be used for important announcements. The course has a home page on the World Wide Web where you will find course information and useful links, including sample examinations, at <a href="http://hep.physics.wisc.edu/wsmith/p202/p202syl.html">http://hep.physics.wisc.edu/wsmith/p202/p202syl.html</a>

#### Honors Credit:

The course may be taken for honors credit. Honors students are required to attend regularly an <u>additional lecture</u> on Fridays at 8:50 am in 1300 Sterling. Attendance will be taken.

### Examinations:

DO NOT REGISTER FOR THIS COURSE IF YOU ARE NOT SURE THAT YOU WILL BE ABLE TO ATTEND ALL EXAMS. (i.e. do not take a course that meets or has exams on Monday, Feb. 16, Mar. 23 or Apr. 20 at 5:45 - 6:45PM, or a final at 7:25PM on Thurs., May 14). Makeup exams will not be given. The average of the other exam scores will be substituted for the missing exam, provided you have a written excuse from a physician, dean, or academic advisor only. There will be three one-hour exams on the dates shown. Rooms will be announced. You may bring one 5" x 8" card (crib sheet) to each exam (8.5" x 11" for the Final).

## Grading:

The course grade will be made up of 75% exams (15% per hour of exam) and 25% discussion, homework and labs.

Week	Date (19	98)  Chapter	Lab	Homework
1	T Jan.:	20   Chapter 23 22   Chapter 23	No Lab   	1,9,19,23,29 38,42,48,52,54
2	• .	27   Chapter 24 29   Chapter 25	E-1, part 1  	4,7,10,21,31,40,50,58 3,12
3	<b>T</b> Feb.   R	3   Chapter 25 5   Chapter 26	E-1, part 2  	17,26,29,40,45,54,63 8,18,31
4	•	10   Chapter 26 12   Chapter 27	E-2	47,58,62,67 8,12,23,38,45,53
5	T	16   EXAM I: 5:55 P 17   Chapter 28 19   Chapter 28	M on Chapters   Make-up   	23 - 26 <<<<<<< 6,14,19,29,32 44,47,54,65,82
6	•	24   Chapter 29 26   Chapter 30	E-3	4,11,14,26,32,42,55,59 4,16
7	T Mar.   R	3   Chapter 30 5   Chapter 31	E-6	27,34,44,50,55 2,9,18,23,31
8		17   Chapters 31,32 19   Chapter 32	1 E-7	(31)-38,44 2,6,26,39,43,50,58,68
9	T	23   EXAM II: 5:55 24   Chapter 33 27   Chapter 33	PM on Chapter  Make-up   	s 27 - 31 <<<<<<<< 1,10,18,25,31 40,48,52,62,66
10	T   :	31   Chapter 16 2   Chapter 17	E-8, E-9	6,10,29,35,42 1,10,20,32,42
11	T   R	7   Chapter 18 9   Chapter 34	E-8, E-9   	7,16,19,32,52,57 5,14,28,32
12		14   Chapters 34,35 16   Chapter 35	S-1, S-3   	(34)-33,40,47 2,11,17,24,30,33,43
13	T :	20   EXAM III: 5:55 21   Chapter 36 23   Chapter 36	PM on Chapte   Make-up   	rs 32-34, 16-18 <<<<<< 3,5,13,24,28 46,52,66,72,73
14		28   Chapter 37 30   Chapters 37,38	L-2   	2,20,28,42,51,59 (38)-6,14,31,44,50,58
1 <b>5</b>	   Т	5   Chapter 38	L-1	•