

## Physics 201- General Physics - Fall 1997

### Prerequisites:

Calculus (Math 221 or equivalent)

### Materials Needed:

- Text: R. A. Serway, *Physics for Scientists & 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: trig, exponential, and log 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](mailto:wsmith@wishep.physics.wisc.edu)) and Peter Timbie (8209 Chamberlin, 262-5916, [timbie@wisp5.physics.wisc.edu](mailto:timbie@wisp5.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 are due at the first meeting of your discussion section after the week of the assignment. Homework will count toward your grade. Feel free to discuss homework with others. The solutions will be explained in discussion section and available in the Physics Library.

### 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 have office hours in the consultation room (2318 Sterling Hall). You may go to the office hours of any TA. Profs. Smith and Timbie have office hours from 11 am to noon, Tues. and Thurs. 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 including sample examinations, at <http://hep.physics.wisc.edu/wsmith/p201/p201syl.html>.

### Honors Credit:

The course may be taken for honors credit. Honors students are required to attend regularly an additional lecture 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 Sept. 24, Oct. 20, Nov. 17 at 5:55 - 6:55 PM, or a final at 5:05 PM on Dec 19). Make-up 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" 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 (1997)	Chapter	Lab	Homework
1	T Sep. 2	Chap 1	M-1*	2, 14, 26, 32, 42
	R 4	Chap 2	(see note)	4, 15, 24, 29, 46
2	T 9	Chap 3	M-2*	9, 16, 31, 48, 50
	R 12	Chap 4	(see note)	10, 34, 36, 43, 56
3	T 16	Chap 5	M-4*	11, 25, 26, 30, 32
	R 19	Chap 5	(see note)	38, 39, 43, 52, 54, 62
4	T 23	Chap 6	Makeup	8, 10, 15, 20
	W 24	EXAM 5:55 pm (Ch 1 - 5)		
	R 25	Chap 6		34, 36, 38, 52
5	T 30	Chap 7	M-10	8, 16, 20, 25, 43, 48
	R Oct. 1	Chap 7, 8		54, 57, 70, (8)-1, 10
6	T 7	Chap 8	M-5	12, 22, 25, 36, 49
	R 9	Chap 9		12, 18, 28, 40, 83
7	T 14	Chap 10	M-6	5, 12, 18, 24
	R 16	Chap 10		28, 29, 34, 41
8	M 20	EXAM 5:55 pm (Ch 6 - 10)		
	T 21	Chap 11	Makeup	1, 4, 7, 20, 28
	R 22	Chap 11		33, 34, 36, 48, 54
9	T 28	Chap 12	M-9	6, 10, 18, 22, 34, 35, 38
	R 30	Chap 12, 13		28, 32, (13)-3, 10, 16
10	T Nov. 4	Chap 13	M-7	18, 22, 29, 39, 46
	R 6	Chap 14		10, 15, 20, 30, 42
11	T 11	Chap 14, 15	M-15	44, 54, (15)-12, 13, 23
	R 13	Chap 15		30, 35, 40, 44, 47
12	M 17	EXAM 5:55 pm (Ch 11 - 15)		
	T 18	Chap 19	Makeup	2, 18, 32, 40
	R 20	Chap 19	H-2**	47, 50, 63, 66
13	T 25	Chap 20	(see note)	3, 12, 19, 32, 37
14	T Dec. 2	Chap 20, 21	H-4	46, 74, (21)-6, 7, 12
	R 4	Chap 21		20, 29, 38, 48
15	T 9	Chap 22	Makeup	3, 14, 18, 20, 27, 43
	R 11	Review		
	F 19	FINAL EXAM 5:05 PM	(Ch 1 - 22)	

\* Labs will be given on a Tuesday through Monday schedule through Sept. 22. Tuesday through Friday labs will be given in the week shown. Beginning Sept. 29, all labs will be given in the week shown except for weeks 12, 13 as noted below. Therefore, Monday labs will be given on these dates: M-1: 9/8, M-2: 9/15, M-4: 9/22, M-10: 9/29, M-5: 10/6, etc.

\*\* For weeks 12 and 13, Monday Labs will have H-2 on 11/24, Thursday Labs will have H-2 on 11/20. TA's will poll their labs before Nov. 1 and announce whether Tuesday and Wednesday Labs will be held on 11/18, 19 or 11/25, 26. Each lab may decide individually.