

# Physics 202

General Physics - Fall 1998-9

Professor D. D. Reeder

Professor F. Roesler

This is the second semester of the introductory physics sequence. The course will introduce wave motion, electricity, magnetism, and relativity.

## Prerequisites:

Physics 201 or equivalent.

## Text and Materials Needed:

- Text: R. A. Serway, *Physics for Scientists and Engineers*, 4<sup>th</sup> 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 to substitute for, reading and studying the text. They will be shared by Prof. Don Reeder (4287 Chamberlin, 262-8798, reeder@hep.physics.wisc.edu) and Prof. F. Roesler (B306 Sterling, 262-1495, roesler@wisp.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 *only* from *your* lab TA to make-up a 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. Feel free to discuss the homework with others. The solutions will be explained in discussion section and available in the Physics Library. Although not graded in detail, your diligence in the home work will be reflected in good quiz grades and in examinations.

## Discussion Section:

There will be a weekly 10-minute quiz consisting of a problem similar to one of the assigned homework problems. Your grade in discussion/lab will be based in part on your participation in discussion as well as written activities such as quizzes and labs.

## Office Hours:

Teaching Assistants will have office hours in the consultation room (2402 Sterling Hall). You may go to the

office hours of any TA. Prof. Reeder and Reesler 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.

### 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 Monday, Sept. 21, Oct. 19 or Nov. 16 at 5:30-6:45PM, or the final at 5:05PM on Friday, Dec. 18). 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 page of notes (8.5" x 11") (crib sheet) to each exam; two pages (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.

Three hour exam grades will be performance weighted (1.2 x highest score + 0.8 x lowest score + other score)

# SYLLABUS 1998

Week No.	Date	Chapter	Lecture	Laboratory	Homework
1	T _____ R_Sep_3	23	FR	no lab	23-1,9,17,25,29,39
2	T_Sep_8 R_Sep_10	23, 24	FR	E-1A	23- 42,48,52,54 24-4,10,21,31,40,51,58
3	T_Sep_15 R_Sep_17	25	FR	E-1B	25- 4,13,17,26,29 25- 40,46,54,63
exam	M_Sep_21	23-25	DDR		5:30 p.m.
4	T_Sep_22 R_Sep_24	26	DDR	make-up	26- 8,16,31,33 26-46,58,62,67

5	T_Sep_29 R_Oct_1	27, 28	DDR	E-2	27- 8,12,21,37,45,53 28-6,14,19,26,30,44
6	T_Oct_6 R_Oct_8	28, 29	DDR	E-3	28- 48,55,66,82 29-4,11,14,26,32,46,55
7	T_Oct_13 R_Oct_15	30	DDR	E-6	30- 4,16,24,27,36 30-44,51,55
exam	M Oct 19	26-29	DDR		5:30 p.m.
8	T_Oct_20 R_Oct_22	31, 32	DDR	make-up	31- 2,9,18,23,31,38,39 32-2,6,26,39
9	T_Oct_27 R_Oct_29	32, 33		E-7	32- 43,50,58,68 33-1,10,18,25,30
10	T_Nov_3 R_Nov_5	33, 16		E-8,E-9	33- 40,48,52,62,66 16-6,10,29,35,42
11	T_Nov_10 R_Nov_12	17, 18		E-8,E-9	17- 1,10,20,32,42 18-76,16,19,32,52,57
exam	M Nov 16	30-17			5:30 p.m.
12	T_Nov_17 R_Nov_19	34		S-1,S-3	34-5,14,28,32,33,40,47
13	T_Nov_24 Thanksgiving	35		no lab	35-2,11,17,24,30,33,43
14	T_Dec_1 R_Dec_3	36	FR	L-2	36-3,5,13,24,28 36-46,52,66,72,74
15	T_Dec_8 R_Dec_10	37, 38		L-1	37- 2,20,28,42,51,59 38-6,14,31,44,50,58
16	T_Dec_15	38		make-up	
Final	F Dec 18	16-18 23-38			5:05 p.m. Rooms to be announced