

SYLLABUS PHYSICS 122, FUNDAMENTALS OF PHYSICS, SPRING 2005

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Abstract

Lecture: Monday, Wednesday, and Friday 10:00-10:50, Room 1412,
Physics Bldg.

1 Text: Serway and Faughn, *College Physics*, Volumes 1, 2, 6th ed.

2 Teaching assistants for each section

- Section 0101 - Brad Conrad
- Section 0102 - Brad Conrad
- Section 0103 - Nathan Orloff
- Section 0104 - Sanjeev Chauhan
- Section 0105 - Nathal Orloff
- Section 0106 - A. Eftekhazadeh

- Section 0107 - Sanjeev Chauhan
- Section 0108 - Brian Christy

3 Course Description

This is the second semester of a two semester introductory physics course. Although we will not use calculus, you should know algebra, trigonometry, and geometry. Material covered will include wave motion, electricity and magnetism, optics and modern physics, essentially the contents of Chapters 13 -30 of the text. We will not cover all of these chapters, and we will not cover all the material in many of the chapters we do study.

The course will stress a descriptive understanding of physical phenomena, as well as problem solving. An important component of the course will be learning to think about the physical world in a logical as well as creative way. We will work together to find answers to challenging questions, first by means of intuition and then by careful experiments and mathematical analysis.

4 Examinations

There will be two exams during the semester of an hour each. There will be a two hour final at the end of the semester. The FINAL EXAM will be held on Saturday, May 14, from 8:00-10:00 AM. This will be a cumulative exam, but it will emphasize material covered after Exam II. Please note that EVERY EXAM will include a question about one of the lecture demonstrations, and one question based upon material covered in the tutorial sessions. Make-up exams will be given ONLY to students with a valid, documented excuse.

5 Grading

- Hour exams - 15% each
- Final Exam - 30%
- Labs, Quizzes, Homework - 40%

6 Extra Help

See me during my office hours - Friday afternoons from 2:00-4:00 PM. You can also make an appointment with me for another time. The TA's will also have regular office hours.

IN ADDITION YOU SHOULD TAKE ADVANTAGE OF THE SLAWSKY PHYSICS CLINIC, Rooms 1208 and 1214. The clinic is open from 10:00 AM-3:00 PM, Monday through Friday. You may go at any time but there will also be special times set aside for Physics 122. Please check the Clinic Schedule.

7 Weekly Schedule

WEEK NUMBER

- 1 - CHAP. 13
- 2 - CHAPS. 13, 14
- 3 - CHAP. 15
- 4 - CHAP. 16
- 5 - CHAPS. 17, 18
- 6 - EXAM I - CHAP 19
- 7 - CHAPS. 19, 20
- 8 - CHAP 21
- 9 - CHAP. 22
- 10 - EXAM II - CHAP. 23
- 11 - CHAP. 24
- 12 - CHAPS 25, 26
- 13 - CHAP. 26, 27
- 14 - CHAPS. 27, 30

Homework assignments will be posted on this web site each weekend. Homework is due Monday of the following week.