

Physics 270 – Section 0401, 0402

Spring 2010

General Physics: Electrodynamics, Light, Relativity, and Modern Physics

Instructor:

T.R. Kirkpatrick

Office: IPST Building, Room 1110

(301)405-4801

tedkirkp@umd.edu

TEXT: Physics for Scientist and Engineers (Second Edition) - A Strategic Approach by Randall D. Knight.

CLASS MEETINGS:

	Time	Location
Lecture:	M: 7:00-8:50pm, W:7:00-7:50pm	Phys 1201

OFFICE HOURS:

Name	Email	Place	Phone	Time
Prof. Kirkpatrick	tedkirkp@umd.edu	IPST-1110	301-405-4801	W:4:00pm-5:30pm

You may also meet with the instructor appointment.

ELECTRONIC CALCULATORS:

The homework and exam problems require an electronic calculator with scientific functions: trig, log, exponential and arbitrary roots and powers.

HOMEWORK

The weekly homework problem sets, and their due dates, are shown on the [homework assignments](#) page. Problem sets are to be handed in at the start of your discussion section of the week shown. Late homework may be accepted up to one day late at the discretion of the teaching assistants. The homework problems are an essential part of the course: the exams in the course will test your ability to solve problems of the type given in the homework. For grading, several homework problems will be selected at random from each set turned in. Your course homework score will be based on the number of solutions submitted (2/3) and the grade for the problem (1/3).

EXAMS

There will be 3 exams given during the lecture period on the dates shown in the attached schedule. *All exams are closed-book exams.* In computing your course grade, the lowest score of the three in-class exams will be dropped. The final exam will be based on the entire semester's work; the material covered in the in-class exams is indicated on the schedule. Make-up exams will not be given.

QUIZZES

Starting the week of February 1, a 10-min quiz will be given during recitation every week except those weeks in which hour exams are scheduled. Each quiz will consist of a slightly revised problem from the homework due the previous week. Make-up quizzes will not be given; however, your lowest two-quiz scores will be dropped.

LABORATORY

Physics 271 is the laboratory part of Physics 270. This course carries one credit and the grade is folded in with the Physics 270 course grade. You must pass Physics 271 in order to pass the entire course. If you do not pass this part of the course you will be required to repeat the entire course. The labs meet for three hours a week. You must complete all of the labs, including the culminating labs in order to pass the course. You are expected to attend each class and will be allowed to make up labs only under exceptional circumstances. For more information on the laboratory portion of this course, consult the course web page, or contact the instructors listed in the Schedule of Classes. If you have already taken Physics 271 and want that to count for this semester's course, go to the Student Services Office, 1120 ask that they officially report the grade to the instructor.

GRADE

The course grade will be based on homework, in-class exams, the final exam and the laboratory weighted roughly as follows:

2-highest in-class exams:	35%
Quizzes (best 10)	5%
Homework (best 10)	10%
Final Exam:	25%
Laboratory	25%

LECTURE AND EXAM SCHEDULE

Day	Date	Lecture will cover chapters	Notes
Monday	January 25	Chapter 33	
Wednesday	January 27	Chapter 33	
Monday	February 1	Chapter 33	
Wednesday	February 3	Chapter 34	
Monday	February 8	Chapter 34	
Wednesday	February 10	Chapter 34	
Monday	February 15	Chapter 35	
Wednesday	February 17	Chapter 35	
Monday	February 19	Review	
Wednesday	February 22	Exam #1	Chapters 33-35
Monday	February 26	Chapter 36	
Wednesday	February 28	Chapter 36	
Monday	March 1	Chapter 23	
Wednesday	March 3	Chapter 23	
Monday	March 8	Chapter 22	
Wednesday	March 10	Chapter 22	
Monday	March 22	Chapter 25	
Wednesday	March 24	Chapter 25	
Monday	March 29	Review	
Wednesday	March 31	Exam #2	Chapters 36, 23, 22, 25
Monday	April 5	Chapter 38	
Wednesday	April 7	Chapter 38	
Monday	April 12	Chapter 39	
Wednesday	April 14	Chapter 39	
Monday	April 19	Chapter 40	
Wednesday	April 21	Chapter 40	
Monday	April 26	Chapter 41	
Wednesday	April 28	Chapter 41	
Monday	May 3		
Wednesday	May 5	Review	
Monday	May 10	Exam #3	Chapters 38-41

HOMEWORK ASSIGNMENTS

Week Number	Homework Due Week Of	Problems
2	February 1	Chapter 33: 3,6,9,12,18,23,27,33
3	February 8	Chapter 33:35,37,39 Chapter 34:2,6,7,11,13
4	February 15	Chapter 34: 15,19,23,25,30,31,53
5	February 22	Chapter 35: 2,6,11,13,16,22,25,29,36
6	March 1	Chapter 36: 3,5,7,11,15,17,19,23,25,31,33
7	March 8	Chapter 23: 1,5,7,9,13,15,17,49
8	March 22	Chapter 22: 1,3,5,7,11,15,17,30,34,66
9	March 29	Chapter 25: 1,3,4,8,11,12,15,17,19,28
10	April 5	Chapter 38: 2,4,7,10,13,19,21,36
11	April 12	Chapter 39: 1,3,8,14,20,21,25,29,40
12	April 19	Chapter 40: 1,2,7,10,12,14,19,22,25
13	April 26	Chapter 41:
14	May 3	NO HOMEWORK DUE

FINAL EXAM: SATURDAY, MAY 15, 2010 - 6:30pm – 8:30pm