UNIVERSITY of PENNSYLVANIA

School of Arts and Sciences
Department of Physics and Astronomy

PHYSICS 151 - Fall 2005

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General Information:

The four "regular" hours class schedule is: MWF 11-12, in DRLB A2, and W 1-2 in DRLB A8 each week. These regular classes will be used for a combination of lectures and recitation sessions. A few Lab lectures will be given as a part of the regular class lectures: the first lab lecture is scheduled for Friday, September 9, 2005 and the second one for Monday, September 19, 2005. The fifth hour (Thursday at 5:00 P.M. in DRL A6) will be used on specific dates for review sessions and for common examinations, only.

There will be two "midterm" examinations in the course. The first will be at 5:00 P.M. on Thursday, October 13, 2005 in DRLB A6, the second will be at 5:00 P.M. on Thursday, November 17, 2005 in DRLB A6. The final examination is tentatively scheduled for Monday, December 19, 2005, 9.00 A.M.-11:00A.M.
Homework will be regularly assigned and quizzes given approximately once every 10 days. Solutions to the assigned problems will be provided shortly after they are due. Although the homework will not be graded, most students who neglect the homework assignments will encounter significant difficulties on the examinations.

Texts:

The text for the course is ***Volume 2***, Revised Edition *University Physics* author Harris Benson, pub. John Wiley & Sons IBSN 0 471476943. The chapters to be covered: 22-32; 34; 37-38. The Laboratory experiments are described in the *Undergraduate Labs* section of the department's web site (http://www.physics.upenn.edu, check undergraduate courses)
During the Lab lecture on Monday, September 19, 2005, the hard copy of the Lab instructions will also be handed out.

Office Hours:

Office hours are scheduled for MWF 12:00 noon - 1:00 P.M., and Wednesday 5:00P.M. - 6:00 P.M. I will also be happy to schedule mutually convenient times to meet with students who find those office hours inconvenient. The most effective way to make appointments is by e-mail (*best*) or by telephone.

Web Site:

Announcements, assignments, and problem solutions will be made available on "Blackboard" (https://courseweb.upenn.edu//)

Laboratories:

The laboratory experiments are intended to supplement the lectures in the course by providing

concrete demonstrations of the specific physical principles and by giving some insight into how those principles operate in practice. In some cases (geometric optics, for example) the laboratory experiments will be used to develop important topics that will not be covered in the normal classroom lectures. The experiments are not intended to provide precise measurements of any physical constants, nor are they designed to introduce students to sophisticated instrumentation. Lectures associated with the laboratories will be given as a part of Friday lectures.

The rooms in which the experiments will be performed will change from week to week. The exact schedule of locations will be posted on bulletin boards located outside rooms 3W5 and 3N18 in DRL.
Student Lab Note book by Hayden & McNeal should be used for lab reports. Before each Lab experiment, students should complete the pre-lab assignment described in the Undergraduate Labs section for a particular lab experiment.

Tentative Schedule of Experiments:

Week Beginning	Experiment Number	Experiment
September 19	52	The Thin Lens
September 26	60	The Electric Field
October 3	62	DC Circuits and Ohm's Law
October 10	66	Capacitors and Resistor - Capacitor Time Constant
October 17	Fall Break	No Laboratory
October 24	81	Ratio of Charge to Mass for the Electron
October 31	70	Magnetic Field Measurements
November 7	72	Induced Voltages
November 14	56	Measurement of Wavelength with a Diffraction Grating, Balmer Series
November 21	Thanksgiving Break	No Laboratory
November 28	55	Interference and Diffraction
December 5	various	Make Up Experiments

Grades:

Grades in the course will be determined by giving the following weights to examinations, quizzes, and labs.

Final Examination - 40%
Mid term Exam 1 - 15%
Mid Term Exam 2 - 15%
Quizzes - 15%
Labs - 15%