PH 201-1C College Physics I (Fall, 2006)

Lecture: PH 201-1C meets Monday, Wednesday, Friday 10:00 am – 10:50 am in Campbell Hall 301. The corresponding College Physics I Recitation class, PH201R-E3 meets on Monday at 11:00 (following the Monday PH201-1C class). Enrollment in the PH201R-E3 is mandatory for PH 201-5C. Failure to enroll in PH201R-E3 is grounds for administrative class withdrawal.

Professor: Dr. Chris M. Lawson; Professor of Physics and Director, UAB Center for Optical Sensors and Spectroscopies (COSS), http://www.phy.uab.edu/~lawson, Phone: 975-5059, E-Mail: Lawson@uab.edu; Office Hours: Wednesday and Friday from 11:00-11:45am in CH 421C.

Course Objective and Description: The objective in this first term of non-calculus-based Physics is to teach the student linear and planar motion, Newton's Laws, work and energy, gravitation, momentum, rigid body motion, and statics, oscillations and waves, sound, interference phenomena.

Course Prerequisite: PH 100 or successful completion of Physics Placement Test

Course Text: *Physics* by J. Cutnell and K. Johnson; 7th Edition (2006, Wiley & Sons) coverage is Ch 1-10, 16-17

Grading:

Quizzes	40%	(80 pts)
Homework	12.5%	(25 pts)
Labs	12.5%	(25 pts)
Final Exam	35%	(70 pts)
TOTAL:	100%	(200 pts)

Grading Scale: A: 90-100%; B: 80-90%; C: 70-80%; D: 60-70%; F: Below 60%

Tests and Exams

3 Quizzes, will be given during the class (preliminary quiz dates, subject to change, are underlined in bold in the schedule below). Any needed formulas will be provided on the exam sheet. A calculator may be used. The tests & exams will be based on problems related to (but often with important differences) homework problems and problems discussed in class. The intent of the test & exam problems will be to test your understanding of physics principles and to test your ability to apply these principles to practice. To do well on the tests & exams, you should do the reading assignments before class, pay attention to lectures, and personally work all of the homework problems when they are assigned. The tests & exams will be graded on a step-by-step basis, with partial credit awarded for correct steps and techniques even if the answer is wrong. Full credit will be awarded only if the right answer is obtained for the right reason, with the correct work shown leading up to the answer. Note: no make-up quizzes will be given except for the most extraordinary circumstances: those being: (1) documented serious illness- only if an original signed statement from a physician (copies not acceptable) is provided listing start and end of excused period (but NO confidential medical information or medical "worksheets") and physician's contact phone number; (2.) death in the immediate family- provide an obituary printed in a newspaper or a printed funeral program that includes your name as a family member; (3.) other unavoidable UAB-recognized activity (official required participation in a UAB extracurricular activity, military duty, or jury duty) – it is necessary to provide appropriate written documentation PRIOR to the absence.

Homework: Homework is electronically processed via an internet website: http://www.webassign.net/uab/login.html. It is important to enter this web page ASAP, successfully authenticate using your BlazerID, and after that you will be automatically added to your roster. Homework due is strictly enforced by a computer. NO LATE HOMEWORK ACCEPTED. You are strongly advised to start homework as soon as a problem set is given. It is absolutely critical to work these problems yourselves when they are assigned, since this will help to lock in understanding of the physical principles learned from class and the textbook and develop problem-solving skills, which will be necessary for any type of success on the exams. Do not fall into the trap of just reading over or memorizing homework solutions, this will generally be of little or no use for solving the exam problems. Developing the necessary problem solving skills will only come from personally going through the struggle of working homework problems yourself. In order to solve homework problems, you need internet access and a web browser (Netscape or Internet Explorer is recommended). Students who do not have internet access can use computers in Stern Library and Physics Labs (Campbell Hall 4th floor). Day schedule when 4th floor labs are open for use by students enrolled in PH201 will be set up by Dr. Todd Devore (CH468A, phone 934-4295, E-mail: devore@uab.edu).

Last day to withdraw from course with a "W" is October 23, 2006

Tentative Schedule

DATE	TOPICS
Aug 23, 25	CH 1 (Introduction and Math Concepts)
Aug 28,30, Sept 1	CH 2 (Kinematics in One Dimension)
---Sept. 4---	Labor Day Holiday
Sept. 6,8	CH 2, CH 3 (Kinematics in Two Dimensions)
Sept. 11, 13, 15	CH 3
Sept. 18, **20**, 22	CH 3**,** CH 4 (Forces / Newton's Laws of Motion) ***Quiz 1 (Sept 20),***
Sept. 25, 27, 29	CH 4
Oct. 2, 4, 6	CH 4, CH 5 (Dynamics of Uniform Circular Motion)
Oct. 9, **11**, 13	CH 5 ***Quiz 2 (Oct. 11)***
Oct. 16, 18, 20	CH 6 (Work and Energy)
Oct. 23, 25, 27	CH 7 (Impulse and Momentum)CH 7, CH 8 (Rotational Kinematics)
Oct. 30, Nov 1, 3	CH 9 (Rotational Dynamics),
Nov. 6, **8**, 10	***Quiz 3 (Nov. 8),*** CH 10 (Simple Harmonic Motion)
Nov. 13, 15, 17	CH 10, CH 16 (Waves and Sound)
Nov. 20	CH 16
Nov. 22	No Class for Students
---Nov. 24	Thanksgiving Holidays
Nov 27, 29, Dec 1	CH 17 (Interference Phenomena)
Dec. 4, 6	CH 17, Review for Final
Dec. **13**	***Final Exam, Wednesday, December 13th, 8:00 am – 10:30 am***