College Physics II

PHY 2054.002 Fall 2010 TUTH 3:00 - 4:15 pm MAP 359

Instructor

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Office Hours:	TUTH 4:30 – 5:20 pm Or by appointment	

Course Text

"PHYSICS" by CUTNELL & JOHNSON (8th Edition) Wiley (2009) and PHY 2054 LAB MANUAL. **NOTE:** A Webassign login is required. It can be purchased online.
https://www.webassign.net

Laboratory

The laboratory component of PHY 2054 covers material related to class lectures. The laboratory is required for all students enrolled in the course. The laboratory score will determine about one-ninth of your final grade in PHY 2054C. At the beginning of each laboratory there will be a recitation section to practice problem solving skill relevant to the course.

Course Description

PHY 2054 is the second part of a two-semester sequence in introductory physics offered primarily for students majoring in information technology, the biological sciences and pre-health professions. Emphasis is placed on understanding major principles, and mathematics is used to clarify concepts. Students should have a good working knowledge of algebra and trigonometry. The course is quite intense and will require you to invest considerable time in study and problem solving.

Objectives

The major objectives of this course are for students to learn the fundamental principles of electricity and magnetism, to develop solid and systematic problem solving skills, and to lay the foundations for further studies in science, pre-health professions, and engineering.

Prerequisites

Prerequisites are PHY2053C or PHY2048. You also need to know algebra and trigonometry which includes algebraic expressions, higher order polynomials, exponential and logarithmic functions, circle arc length, trigonometric functions, identities, inverse trigonometric functions, function of angles, triangle solving.

Course Organization and Expectations

The course will consist of a set of class lectures with demonstrations, unannounced quizzes, homework assignments, mid-term examinations, and a comprehensive final exam. Also, due to the department regulations to cover all material in the syllabus, the course will have a fast pace. It is therefore advisable, to read the relevant material prior to attending the class, to attend all lectures, and to keep current with the homework. **Attendance at lectures is very essential.** If you miss class and fall behind, it will be extremely difficult, if not impossible, to catch up. Please, be aware!

Homework and Quizzes (iClicker)

Homework will be submitted online at https://www.webassign.net/login.html. You are expected to check for new assignments without being notified. Doing a thorough job on the homework problems and quizzes can earn you up to 29% of the total credit for the course and will be a good preparation for the exams. The quizzes will NOT be announced. Quizzes will be based on previously covered material up to and may include the quiz day reading assignment. Usually, they will consist of 1 problem with several parts or several multiple choices problems to be answered in 10 minutes or less. It is anticipated that about 10 quizzes will be given during the semester. The two lowest scores will be dropped. **As one or more quizzes will be dropped from the final grade there will be no make-up quizzes !**

Examinations

You will have three in-class exams and one final exam. The final Exam will be comprehensive including all the material covered during the semester. All exams may be problem solving, multiple choices, or a combination of the two. For written problems, you need to provide the steps that lead to your answer. You must bring a number two (2) pencil and a computer scored answer sheet to each exam. You also MUST know your student PID number and record it accurately in the proper location on the Test Form and on each written exam so that the computer can keep track of your scores as the term progresses. (You must SHOW your UCF photo ID card when you turn in your exam.) A protractor, ruler and calculator with trigonometric capabilities (TI 83 or similar) may be used during exams. However, calculators must not have any preprogrammed physics information.

Missed Work Policy

It is Physics Department policy that making up missed work will only be permitted for University-sanctioned activities and bona fide medical or family reasons. Authentic justifying documentation must be provided in every case (in advance for University-sanctioned activities). At the discretion of the instructor, the make-up may take any reasonable and appropriate form including, but not limited to the following: a replacement exam, replacing the missed work with the same score as a later exam, allowing a 'dropped' exam, replacing the missed work with the homework or quiz average. All assignment and exam grades are final 72 hours after they have been returned. Contact me before this 72-hour period is over if you have a grading dispute.

Grades

All examinations will be closed book and closed notes. A one page formula sheet will be provided. The grades of exams, labs, homework and quizzes will be added together to determine your final

grade. NO GRADE INFORMATION WILL BE GIVEN OVER THE TELEPHONE.

Your grade in this course is based on the following weighting:

Mid-terms exams	**360**	**(36%)**
Final (comprehensive)	**250**	**(25%)**
Quizzes (iClicker)	**140**	**(14%)**
Homework	**150**	**(15%)**
Laboratory	**100**	**(10%)**
Total points	**1000**	**(100%)**

The final letter grade will be determined based on the following proposed breakdown:

A 85 - 100 %
B 75 - 84 %
C 60 -74 %
D 50 - 59 %
F less than 50%

For borderline cases, + / - grades will be considered.

Examination Schedule and Coverage

Midterm 1	Thur., Sept. 30	Chapters 18, 19, 20
Midterm 2	Thur., Oct. 28,	Chapters 21, 22, 23
Midterm 3	Tu., Nov. 23,	Chapters 24, 25, 26

Final Exam in MAP 359 — Thursday, Dec. 9, 1:00PM Comprehensive (Chapters 18 - 27)

Webpage

Lecture materials and other course information are on-line:
http://www.physics.ucf.edu/~chow/Phy2054.html
The schedule is tentative and may be adjusted during the semester. The latest version will always be available on the class website.

Important UCF Dates: Drop/Swap deadline August 26. Withdrawal deadline Oct. 15.
Final on December 9, 1:00 pm – 3:50pm
Grades due on MyUCF December 16.

CLICKERS

This class, along with others, will use clicker technology so you will have to purchase an "i-clicker" module from the bookstore or from a student who is finished using it. Information about how to register your new i-clicker can be found at: http://www.iclicker.com/dl/registrationoptions.pdf Be sure to register your clicker as soon as possible. The registration number for your i-clicker will be found on the back. If you can't read the clicker number on the back of the device you will need to speak to your instructor who can determine what it is. This number tends to rub-off so put a piece of transparent tape across it to maintain its value. It is probably best not purchase an i-clicker if you can't read the registration number on the back of the device.