

## Syllabus

*Note: If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.*

### Instructor Information

Name: Dr. Yu Lin  
Email: [ylin@physics.auburn.edu](mailto:ylin@physics.auburn.edu)  
Office location: 203 Allison Laboratory  
Office hours: Any time 8-5, or by appointment  
Phone: 844-4683

### Course Information

Course title: General Physics II  
Course number: PHYS 1510  
Course discipline: Physics  
Course activities: The class meets on the scheduled meeting days as listed below. Lab/Recitation activities are scheduled on Wednesday and Thursday.

Lab Manager: Dave Patrick ([patridm@auburn.edu](mailto:patridm@auburn.edu); 844-2950; 103 Parker Hall)

Course date: Thursday, August 16, 2012 through Friday, November 30, 2012.  
Location: PKH 307  
Meeting day(s): Mondays, Wednesdays, and Fridays  
Meeting time(s): 9:00 am - 9:50 am

### Course Goals

Course goals: Understand the basic concepts of Optics, Electricity & Magnetism, and Modern Physics.

## Textbooks

Required **Required Text (with Mastering Physics) – College Physics - A Strategic Approach (2<sup>nd</sup> edition) – by Knight, Jones, and Field**  
and  
optional:

The text may be purchased at all book stores and students have 3 options:

Option A – Hardback text – comes with Mastering Physics shrink wrapped with text (contains an etext)

Students may get this option with and/or without the Student Workbook shrink wrapped with text.

Option B – Loose leaf text - comes with Mastering Physics shrink wrapped with text (contains an etext)

Option C – Stand alone Mastering Physics (contains an etext)

**Lab Manual** Students do not need to purchase a lab manual. All Physics lab activities are posted on-line at the Physics Web page:

<http://www.auburn.edu/academic/cosam/departments/physics/intro-courses/ugrad-lab/>

**Optional but highly recommended Student Workbook**

**Optional but highly recommended Student Solution Manual**

## Class Schedule

Aug. 17, 20, 22 -- Chapter 17

Aug. 24, 27, 29 -- Chapter 18

Aug. 31 -- Chapter 19/Review

Sept. 5 -- Test 1

Sept. 7, 10, 12 -- Chapter 20

Sept. 14, 17, 19 -- Chapter 21

Sept. 21, 24 -- Chapter 22

Sept. 26, 28, Oct. 1 -- Chapter 23

Oct. 3 -- Review

Oct. 5 -- Test 2

Oct. 8, 10, 12 -- Chapter 24

Oct. 15, 17, 19 -- Chapter 25

Oct. 22 -- Review

Oct. 24 -- Test 3

Oct. 26, 29, 31 -- Chapter 27

Nov. 2, 5, 7 -- Chapter 28

Nov. 9, 12, 14 -- Chapter 29

Nov. 16, 26, 28 -- Chapter 30

(Note: Nov. 19-23 – Thanksgiving Break)

Nov. 30 – Review

**Final Exam: Thursday, December 6, 8:00AM – 10:30AM**

### **Grading Policies**

Your final grade in this class will be based on:

Mastering Physics homework (15%) + recitation & laboratory (15%) + in class participation I-clicker (5%) + 3 tests (45%) + Final Exam (20%) = 100%.

Note: Each test weighs 18%, but as a buffer against one bad test, the weight of your worst grade on any one of your tests will be reduced to 9%. If, for example, test 2 is your lowest grade, it will have a weight of 9%, instead of 18%, in your final average.

Grading Scale:

A - 90; B - 80; C - 70; D - 60; F - <60.

### **Homework and Mastering Physics**

On-line homework assignments will be given through Mastering Physics. They will be submitted and graded electronically. *It is not wise to put homework off until the last minute.* If there is a computer problem, it might be impossible for you to access your homework at the last minute.

**You need to register for Mastering Physics. In order to complete this process you will need the following Course ID: MPLIN81125.**

Please login to register the class as soon as possible. You must work on the homework problems soon after classes: problems from each chapter are due soon after the lectures of the chapter.

We will do two sets of homework per chapter: "Skill Builder" type homework and "End of Chapter Problems" type homework (taken from the textbook but the numbers in the problems are changed). Every homework problem should give 5 opportunities. *Your lowest 2 homework scores in each type will be dropped.*

### **Tests**

The tests will be in the form of multiple-choice and/or word problems, and will be **closed book exams**. **You cannot bring notes and/or cards.** You are required to **SHOW YOUR WORK** in solving the problems. A formula sheet will be attached to each test and the final exam. Calculators are permitted during the tests.

Exams will be motivated by the following:

- a. Class presentations and worked examples
- b. Homework
- c. Physics Activities (lab and recitation)

**Calculator:** A cheap calculator with the following functions should be adequate for problems, Physics Activities and tests:  $1/X$ , SIN, COS, TAN,  $\text{SIN}^{-1}$ ,  $\text{COS}^{-1}$ ,  $\text{TAN}^{-1}$ , LOG, LN,  $x^y$ , RAD and DGR.

**How to submit missed exam documentation:** Print a copy of the “Missed an Exam” form on the course homepage in Black Board, fill it out and attach available relevant documentation. Place all materials to be submitted in an envelope, address it to the instructor, place your name in the return address space and hand it to the Physics Department receptionists (in Allison Lab 206). Until you receive word in writing from the instructor that your documentation is accepted, no make up exam will be given.

**Academic Honesty:** The Students Academic Honesty Code is printed in the Tiger Cub and it is expected that you are familiar with and will abide by this code.

### **Reading Requirements**

It is required that the students READ the scheduled chapters prior to the corresponding lectures.

Students are encouraged to ask questions regarding homework problems and lecture material. I will be in my office most of the time everyday from 8am to 5pm.

### **Class Participation and I-Clicker:**

The Radio Frequency I-Clicker will be used in lectures, which is a wireless technology that will help you to engage in the in-class learning. **We use iclicker2.** If you already have an old iclicker1, you can get a \$10 refund after purchasing the iclicker2 from the bookstores. The evaluation using I-clicker may occur during each class, and 5% of your grade will come from class participation. Since this is a class participation, if you aren't there and/or if you don't have a response device (clicker) you can't participate, and there will be no way to make up this work. If attendance is taken on a day when “clickers” are used and there is a response for an absent person (checked by seat number) – the penalty will be 5 points per occurrence out of the total 100 points of the semester.

*Your lowest 6 I-clicker scores will be dropped.*

### **Physics Activities:**

We will have one 3-hr Physics Activity sessions each week. During these Physics Activity sessions we will review concepts, work problems and do some inquiry based labs. It will be to your advantage to read the experiment and/or handout before attending the activity session. 15% of your course grade will come from your performance at these Physics Activity sessions. 10% will come from the lab part and 5% will come from the problem solving part. The problem solving grade will come from problem solving quizzes and class participation.

Your lowest lab score will be dropped, and your lowest two quiz scores will be dropped. No

make up quizzes will be given. If a lab activity is missed, that will be your drop. If a second lab activity is missed, with a valid reason you will be allowed to participate in a makeup lab experience that will be used for the second missed lab activity grade.

**Changes:** The instructor reserves the right to make reasonable modifications to the course syllabus in the event a situation arises that warrants a modification. For example, a chapter might be omitted (if we get behind schedule) and/or at the end of the semester the grade scale might be adjusted (downward).