# PHYS 1617 Honors Physics Spring 2012

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**Text**: Fundamentals of Physics, Halliday, Resnick, Walker, 9<sup>th</sup> Ed, Vol 1,2

Lab Manual (online at www.physics.auburn.edu, choose Intro Courses)

**Meetings**: MWF 8-8:50 am (S 1,3) and TTh 8-9:15 am (S 2,4) (bring breakfast snacks)

**Office Hrs:** 1-2 pm, F

#### **SCHEDULE**

Temperature, Heat, First Law of Thermodynamics Entropy and Second Law of Thermodynamics

Electric Charge Electric Fields Electric Potential Capacitance

Current and Resistance

Magnetic Fields

Electromagnetic Waves

Optical Images Interference Diffraction

Selected Topics in Modern Physics

**Final Exam** (comprehensive): MWF Section, Monday, April 30, 8-10:30 a.m.

TTh Section, Wednesday, May 2, 8-10:30 a.m.

**Grading:** The final grade will be determined by the following scheme.

Exams (3) 60% Final Exam 30% Recitation/Lab 10%

Total 100%

Student scores will be scaled to determine grades, based on the class average (~ C). UNDER NO CIRCUMSTANCES will makeup exams be given. In lieu of a makeup test when there is a valid excuse for a missed scheduled test, the final exam score will be used for the score on that test. After each test I post a scale of scores vs. letter grades so each student knows what a score of say, 68, on a test means in terms of a letter grade. This enables you to know how you are doing in the

course. For the final course grade, I apply the weighting factors above to each grade component and generate a total raw score for each student that is compared to the class average raw score. The calculation is completely based on numbers and there is no bias. Exams will cover material covered in class, lab, and homework. If the class average grade is above 75%, on a test, I reserve the option to *not* scale the scores.

**Lab/Recitation:** Lab/Recitation is a three-hour affair. It is made of a one-hour problem solving session (recitation) ending with a quiz and/or a two-hour activity or laboratory. The labs for PHYS 1617 are available online. The lab room numbers will be listed outside the Physics Lab Office on the first floor of Parker Hall. Most of the time, I will let you know what lab we will do on a given week, and you go to the website and download it before going to the lab.

### **Lab/Recitation Schedule:**

Room assigned weekly, see posting.

Section 001 meets R, 1230-320 pm Section 002 meets R, 330-620 pm Section 003 meets F, 1200-250 pm Section 004 meets R, 330-620 pm

Labs will begin the week of January 16.

## **Frequently Heard Comments:**

- Is this on the test? Answer: yes.
- The questions on the test are not like those in the homework. Response: To the extent that you understand the concepts of physics, you will realize that they are more closely related than you might have thought. Also, they are not supposed to be the same questions.
- I studied, read the book, read the notes, did the homework, came to class, and understood the labs, yet I'm still not doing well in the course. Response: If that is true, there is something wrong with the way you are approaching this class. Please come and see me early in the semester so we can attempt to fix the situation. Don't wait too long to ask for help.

#### **Contingency Procedure:**

If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation (such as a flu outbreak), 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.