**PH2223 ( Sect. 4) , PHYSICS II, 2013 Fall,**

**Electricity and Magnetism ( *Tentative Syllabus )***

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| **Instructor** | Prof. Jinwu Ye,  Office: Hilbun 215,  Phone: 325-2926,  E-mail: jinwuye88888@gmail.com |
| **Lectures** | Time: TR 12:30 – 1:45 pm  Location: Hilbun 250 |
| **Office Hours** | Tu, Th, 2-3 pm or by appointments |
| **Required Text** | *Physics for Scientists & Engineers with Modern Physics (4th ed.) by Douglas Giancoli,*  Prentice Hall, ISBN-10: 0131495089 |
| **Pre-requisites** | PH2213 (Physics I): D or better;  MA1723 (Calculus II): D or better |

**Overview**: A calculus based introduction to electricity, magnetism, and basic electrical circuits. Ch 21-30 will be covered. The ppt of each Chapter and other course related updates will be posted in <http://mycourses.msstate.edu.> You are expected to be fluent in algebra, trigonometry, and calculus to succeed in this class.

**Grading**:

* **NO MAKEUP TEST WILL BE GIVEN.** Your exam total could be calculated in two different ways: Method (1):Your three In-class exams count 100 points each. Your final exam counts 200 points. Method (2): Drop your lowest In-class exam, but count the other two as 100 points each. Your final exam then counts 300 points. You will be automatically given the higher total of the two methods. Your homework counts 200 points. Your lab portion counts 100 points. The total points is 800. Your final grade will be determined after scaling back to the percentage. A: 100-90%, B: 89-80%, C: 79-70%, D: 69-60%, F: 59-0%.

**. In-class exams**: There will be three in-class exams each lasts a whole lecture.

They are all close books. Needed formula and constants will be provided in a

Sheet. The tentative dates are given on the schedule sheet. Any change will

be announced in mycourse website at least one lecture-day in advance. The exam problems will be similar to homework problems.

* **Final: Tue. 12/10, 12-3 pm.** Comprehensive.
* **No credit** will be given for unexcused absences. You must get the approval in advance with valid supporting document. If you are late for a test you will not receive extra time to finish it. If you miss one in-class exam for a legitimate reason ( sickness, attending a professional conference, etc), I will automatically use method (2) to calculate your total score.
* **Homework**: We will use the Mastering Physics online homework system at [http://www.masteringphysics.com/](http://session.masteringphysics.com/). The course ID to use is **MPYE39286**. You must complete each assignment on time to get the full credit. There will be 10 homework assignments corresponding to 10 chapters to be covered. Because the problems on the In-class exams will be similar to the homework problems, you are strongly encouraged to do these problems.
* **There are strong coordinations** among lectures, homeworks, exams and Labs.

You should try to attend all the lectures. The problems in Homeworks and exams are divided into three difficulty levels: easy, intermediate and advanced with corresponding weights of credits. You should try to finish

problems at least upto intermediate levels.

* **Office hours:** Tu/Th 2-3 pm or by appointments. For questions on solving problems, you need to bring the work you did so that I can help out where you have difficulties.
* **Lab**: Unlike PH2213, PH2223 has a lab component:
  + You must take lab and receive a grade of at least 70% in order to pass the class regardless of your grade in lecture. If you are retaking PH2223, you may have the option of using your previous lab score and not repeating the lab. Go to the Physics and Astronomy Department Office in 125 Hilbun to get the necessary form.
  + The lab schedule and lab manual are available at [http://labs.physics.msstate.edu/](http://physics.msstate.edu/labs/)
  + Before each lab session, you need to print out and read the lab manual for the experiment, and print out and fill in a pre-lab form.
* **Cell phones:** Cell phone use (of any kind – voice, texting, calculator, photography…) is banned during class. Phones must be rendered inaudible (either turn them off completely or at least set them not to make a noise) during class time. Note: During exams, any cell phone use will automatically constitute cheating (and will be dealt with as such).

**Academic Honesty:**

Mississippi State University’s policy on Academic Dishonesty and Academic Misconduct will be followed strictly. For additional information please visit: <http://www.honorcode.msstate.edu/resources/>

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**Electricity and Magnetism (*Tentative Schedule )***

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| Week | Date | Lecture | Week | Date | Lecture |
| 1 | 08/20 Tue | Ch 21 | 10 | 10/22 Tue | **Test 2 (Ch 24-27)** |
| 08/22 Thu | Ch 21 | 10/24 Thu | *Fall Break* |
| 2 | 08/27 Tue | Ch 21 | 11 | 10/29 Tue | Ch 28 |
| 08/29 Thu | Ch 22 | 10/31 Thu | Ch 28 |
| 3 | 09/03 Tue | Ch 22 | 12 | 11/05 Tue | Ch 28 |
| 09/05 Thu | Ch 22 | 11/07 Thu | Ch 29 |
| 4 | 09/10 Tue | Ch 23 | 13 | 11/12 Tue | Ch 29 |
| 09/12 Thu | Ch 23 | 11/14 Thu | Ch 29 |
| 5 | 09/17 Tue | Ch 23 | 14 | 11/19 Tue | Ch 30 |
| 09/19 Thu | **Test 1 (Ch 21-23)** | 11/21 Thu | Ch 30 |
| 6 | 09/24 Tue | Ch 24 | 15 | 11/26 Tue | **Test 3 (Ch 28-30)** |
| 09/26 Thu | Ch 24 | 11/28 Thu | *Thanksgiving* |
| 7 | 10/01 Tue | Ch 25 | 16 | 12/03 Tue | Review |
| 10/03 Thu | Ch 25 | 12/05 Thu | Reading Day |
| 8 | 10/08 Tue | Ch 26 | 17 | 12/10 Tue | **Final** |
| 10/10 Thu | Ch 26 |  | |
| 9 | 10/15 Tue | Ch 27 |  | | |
| 10/17 Thu | Ch 27 |