

PHYSICS 212
PHYSICS FOR SCIENCE AND ENGINEERING
SUMMER II – 2007

COURSE SYLLABUS

Lecture: MO TU WE TH FR 08:00-09:50 Lewis Hall, Room 109

Instructor: Dr. Torma, Tibor

Office: Room 208 Lewis Hall, Email: kakukk@phy.olemiss.edu

- **Office Hours:** Every day 12:00, or by appointment (208 Lewis Hall)
- **Text:** Fundamentals of Physics, 7th edition, 2005, by David Halliday, Robert Resnik, Jearl Walker; (Chapters 21 through 37), John Willey & Sons, Inc; ISBN 0-471-21643-7.
- **Note:** You must take the **Lab Phys 222** along with this course unless you have already passed it.

Grading scale and evaluation:

- Grading Scale: A's --- 90 – 100%; B's --- 80 – 89%; C's ---70 – 79%; etc.
- Grades will be based on homework, tests, and the final examination:

Homework ----- 20%
Two tests ----- 40% (#1=20%, #2=20%)
Final exam ----- 40%

Homework Rules:

1. Home works are assigned almost every class period and are due in one-two days.
2. Homework paper should be 8.5 x 11 inches with no torn or tattered edges and should be stapled.
3. Show all your work; **the answer alone is not worth any credit.**
4. Homework problems must include **enough English to be understandable.**
5. Homework answers should have units and a reasonable number of significant digits.
6. **Circle the final answers that you want to be graded.**

Tests and Final examination schedule:

TEST #1	Chapters 21 through 25	Monday, July 9
TEST #2	Chapters 26 through 31	Wednesday, July 18
FINAL:	Comprehensive	Monday, July 26 at 8 a.m.

Common Courtesy Guidelines:

For the benefit of your fellow students and your instructor, you are expected to practice common courtesy with regard to all course interactions. **For example:**

- Show up for class on time.
- Do not leave class early, and do not rustle papers in preparation to leave before class is dismissed.
- Be attentive in class; stay awake, do not read newspapers, etc.
- If you must be late or leave early on any particular day, please inform your instructor in advance.
- After the first day, you will need to sit in the same seat for each class.
- **Absence** may jeopardize your standing because you are responsible for any in-class activities.

Students who do not practice common courtesy should not expect a good standing because their in-class activity is under the question.

Course objectives:

1. Introduce the Science and Engineering students to Fundamentals of Physics.
2. Expand an understanding of the ideas and results of calculus based Physics.
3. Develop an understanding of the current basis of broad knowledge in Physics.
4. Expand knowledge of contemporary numerous applications of Physics in Engineering and Sciences.
5. Enhance the critical thinking, analytical reasoning and problem solving skills at the level of calculus based Physics for Science and Engineering students.

Learning objectives:

In this course, we introduce the Science and Engineering students to the fundamentals of Physics.

The learning outcomes for students:

1. Understand the basic principles of Physics *including* electric and magnetic phenomena, optics, as well as the rudiments of modern physics.
2. Understand the physical basis of numerous contemporary applications of Physics in Science and Engineering.
3. Learners will build on a critical thinking, analytical reasoning, and problem solving skills.
4. Students will know how to use interactive methods and Internet for their independent learning on “Fundamentals of Physics”.