GENERAL PHYSICS II

PHYSICS - 214

SUMMER II - 2006

Lecture: MTWThF 10:00 a.m. to 11:50 a.m., Room 109 Lewis Hall
Instructor: Dr. Ostrovskii, Igor
Office: Room 207 Lewis Hall, Email: iostrov@phy.olemiss.edu

- Office Hours: MWTh 3:30 – 4:30 p.m. (207 Lewis Hall)
  (Chapters 15 through 28), John Willey & Sons, Inc.

- 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. Homework is assigned almost every class period and is due at the beginning of the next class period.
  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 anything.
  4. Homework problems must include enough English to be understandable.
  5. Homework answers should have units and a reasonable number of significant digits.
    - Circle the finale answers that you want to be graded.

- Tests and Final examination schedule:
  Test 1, PART 1, Chapters 15 through 21 ----------------- Thursday, July 13
  Test 2, PART 2, Chapters 22 through 27 ----------------- Monday, July 24

- 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, don’t 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 in class because you are responsible for any in-class activities.

- Students who do not practice common courtesy should expect their grade to be reduced because their in-class activity is under the question.

COURSE CONTENT:

I. OPTICS
   Chapter 15 – Wave Optics [4 hrs]

   Chapter 16 – The Geometry of Wave Paths and Image Formation:
     Geometric Optics [2 hrs]
Chapter 17 – Lenses and Optical Instruments [3 hrs]

II. ELECTRICITY

Chapter 18 – Electrical Phenomena: Forces, Charges, and Currents [2 hrs]
Chapter 19 – Electric Field and Electric Potential [2 hrs]
Chapter 20 – Quantitative Treatment of Current and Circuit Elements [2 hrs]
Chapter 21 – Quantitative Circuit Reasoning [3 hrs]//=18 hrs

➤ TEST 1 (CLASS # 19), CHAPTERS 15 - 21 -------------- THURSDAY, JULY 13 [1 hr]

III. MAGNETISM

Chapter 22 – Magnetism and Magnetic Fields [3 hrs]
Chapter 23 – Electromagnetic Induction [2 hrs]

IV. MODERN PHYSICS

Chapter 24 – As the Twentieth Century Opens: The Unanswered Questions [2 hrs]
Chapter 25 – Relativity [3 hrs]
Chapter 26 – Inroads into the Micro-Universe of Atoms [1 hr]
Chapter 27A – The Concept of Quantization I [2 hrs]//=32 hrs

➤ TEST 2 (CLASS # 33), CHAPTERS 22 - 27 -------------- MONDAY, JULY 24 [1 hr]

Chapter 27B – The Concept of Quantization I [1 hr]
Chapter 28 – The Nucleus and Energy Technologies [3 hrs]

REVIEW [1 hr]// Total = 38 hrs

➤ FINAL EXAMINATION ---- NOON on Thursday, July 27, 2006 [3 hrs]

➤ The dates and hr-schedule are tentative, and may be changed (but not Final exam!).