

## PHY2061, Section 001, Enriched Physics II (Spring 2015)

**Instructor:** Dr. Inna Ponomareva; Office: ISA 5103; E-mail: iponomar@usf.edu; telephone: 974-7286

Text: University Physics, 13<sup>th</sup> ed., by Young & Freedman, with Mastering Physics Homework.  
Mastering Physics course ID: MPPONOMAREVA17147

A Mastering Physics **access code** should be part of the textbook package you select.

(<http://MasteringPhysics.com>)

Class: TR 12:30pm-1:45pm, ISA 4010

Office Hours: TR 2:00pm-3:00pm and by appointment.

### Course Outline and Objectives

Second semester of an enriched sequence of calculus based general physics. The course aims to promote a deeper understanding of traditional topics: Thermodynamics, Electromagnetism, and Optics. These topics are structured into five sections (Thermodynamics, Electromagnetism I, Electromagnetism II, Electromagnetism III, and Optics). The main ideas are understood and re-enforced by developing conceptual problem-solving skills. This is important in understanding the material, and success in the course; therefore, problems will be assigned for each section. These problems will be due at the beginning of the first lecture of the next section (see tentative schedule). The problems are assigned and graded through MasteringPhysics. However, students must have a hard copy of the entire homework that is clearly organized and shows all the work. Occasionally, the hard copy will be collected and graded. An online homework will not be credited if hard copy is missing. Students must carefully study all examples considered in the textbook and in class. In addition, there will be a quiz after each section that emphasizes basic concepts of the material learned. The quiz may contain a problem and/or conceptual question. I will give exact dates for these quizzes about one week in advance. In studying for the quizzes and examinations you are encouraged to work on problems in the book in addition to those assigned. Please read the text before each lecture. Although I will not require attendance, it is paramount that you come to every lecture in order to keep up with the work. Please come see me during office hours if you have missed a lecture to get 'up to speed' on the course work. The students are advised to bring textbook to every class.

### Prerequisites

Calculus II (MAC 2282 or MAC 2312) and PHY 2060 with a minimum grade of 'B' are prerequisites for this course. Students completing PHY 2048 with a minimum grade of 'A' are also eligible with permission of the instructor.

<b>Course Grading Breakout</b>	Homework Problems	20 %
	Quizzes	20 %
	Mid-term Exam	30 %
	Final	30 %

Extra points will be offered for attendance\*

\* To qualify for extra credit for attendance students must attend 23 out of 29 classes excluding Midterm. The extra credit will be in the form of grade increment. For example, if student earns A- and qualifies for extra credit, the final grade will be A.

### Course Grading

93 - 100	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
67 - 69	D+
63 - 66	D
60 - 62	D-
0 - 59	F

## Tentative Schedule and Examination Dates

Week Beginning	Topics (Chapters in Text)
Jan 4	Thermodynamics (17-20)
Jan 11	
Jan 18	
Jan 25	Electromagnetism I (21-24), Quiz 1 + HW 1 (17-20) on Tue Jan 27
Feb 1	
Feb 8	
Feb 15	Electromagnetism II (25-28), Quiz 2 + HW 2 (21-24) + MIDTERM (17-24) on Tue Feb 17
Feb 22	
Mar 1	Spring Break
Mar 8	
Mar 15	Electromagnetism III (29-32), Quiz 3 (25-28) on Tue Mar 17
Mar 22	
Mar 29	
Apr 5	Optics (33-36), Quiz 4 (29-32) on Tue Apr 7
Apr 12	
Apr 19	
Apr 26	Quiz 5 (33-36) + FINAL (25-36) on Thu Apr 30, 10:00 am – 12:00 Noon

### NOTE

Students who anticipate being absent from exams due to a major religious observance must provide notice of the date(s) and event(s) to the instructor, in writing, by the second class meeting. Notes and Tapes are not permitted for purposes of sale.

Any student with a disability is encouraged to meet with me privately during the first week of class to discuss accommodations. Each student must bring a current Memorandum of Accommodations from the Office of Student Disability Services (974-4309, SVC1133) which is prerequisite for receiving accommodations. Accommodated examinations through the Office of Student Disability Services require at least two weeks notice.