PHYS 1404 - 001
General Physics II
Spring 2011

Instructor:	Dr. Hani Dulli	***E-mail:***	hani.dulli@ttu.edu
Office:	SC 116	***Office hours:***	TR 2:30 – 4:30 p.m. and by appointment
Class location:	SC 07	***Class time:***	MWF 3:00 – 3:50 p.m.

Prerequisites

PHYS 1403

Course Description

This non-calculus introductory physics course covers the basic concepts of electricity, magnetism, and optics, thus providing background for study in science-related areas.

Core Competency Statement

Students graduating from Texas Tech University should be able to: explain some of the major concepts in the Natural Sciences and to demonstrate an understanding of scientific approaches to problem solving, including ethics.

Textbooks / Supplies

1. Textbooks:
    a. Physics: Principles with Applications, 6th edition, by D. C. Giancoli bundled with Mastering Physics student access kit.
    b. PHYS 1404 Lab Manual
2. Response Pad by Turning Point
3. Calculator: To help solve homework and exam problems you will need a scientific calculator (i.e. one that can calculate sines, cosines, tangents, find square roots, etc, in addition to having the usual arithmetic functions).

Expected Learning Outcomes

Successful students will be able to:

1. Identify the basic concepts and principles underlying various physical phenomena.
2. Apply physical principles and the associated math to a wide range of physical situations.
3. Develop scientific-inquiry skills as they study laws of physics.
4. Formulate strategies and apply appropriate techniques to solve problems.

Methods for Assessing the Expected Learning Outcomes

The expected learning outcomes for the course will be assessed through: Guided Classroom Discussion, Lab Exercises, Homework, Quizzes, In-class Exams, and the Final.

Warm-up Exercises & Homework

Success in this course is highly correlated with regular attendance and punctual completion of the warm-up exercises and homework. The assigned exercises and problems are graded on the web through the commercial site MasteringPhysics. Once you are registered at that website you will be able to download the assignments. The assignments and due dates are posted. You will be able to retrieve the answers after the due date. Pay attention to the instructions on the homework website about how the homework is scored.

To access MasteringPhysics you must register at the website http://www.masteringphysics.com. Instructions are in the Student Access Kit. Please do this ASAP. The HW course ID is **PHYS1404001** and there is no class password. If you do not have a Student Access Kit (part of the text for the course) you will need to purchase one through the MasteringPhysics website.

Quizzes and Examinations

There will be 4 short quizzes worth a total of 10% of the final grade. Two in-class exams will be given during the semester. Each exam is worth 15% of the final grade. The final exam, which is worth 20% of the final grade, will be comprehensive. Questions from all studied chapters should be expected in this exam.

Lab & Recitation

The lab portion of the course has a separate syllabus that you will receive in the lab. Lab is a required portion of the course. Recitation will help you with problems which figures into your homework and exam grades. Recitation is a very important and potentially useful part of the course.

Assessments Summary

Warm-up Exercises & Homework	15%
Quizzes	10%
Exam 1	15%
Exam 2	15%
Final Exam	20%
Lecture Participation (clickers)	5%
Lab	20%
Total	**100%**

Grading Scale: A 90-100%, B 80-89%, C 70-79%, D 60-69%, F <60%

Attendance

Students who attend classes regularly tend to earn higher grades and have higher passing rates in courses. Therefore, students are expected to attend all scheduled course activities, e.g. lectures, laboratories, scheduled group study sessions, exams, etc. Attendance will be taken in every class. Students who are absent from class for any reason are responsible for all missed work. They should contact a classmate for lecture notes and homework assignments.

Students should be in class and ready to participate by the scheduled beginning of each class. When they are late, they disrupt the class, particularly if the teacher must repeat anything just for their benefit. Students who come to class late or leave the classroom before a session is concluded will be marked absent.

Important Notes

Any student who, because of a disabling condition, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 806-742-2405.

The faculty is strongly committed to upholding standards of academic integrity. These standards, at the minimum, require that students **never** present the work of others as their own.

Disclaimer

The information contained in this course syllabus is correct at the time of issue. However, the class instructor reserves the right to amend any dates, topics, assignments or other planned features of the course. Any changes will be announced in class and absent students are responsible for keeping up-to-date with any changes and developments that may occur. The class instructor will not be responsible for any adverse consequences arising from the use of this information or students' failure to be aware of any subsequent amendments.

Clicker Registration

1. Go to the website http://student.turningtechnologies.com
2. Enter your ResponseCard ID (found on back of unit)
3. Enter your first name and last name in the appropriate fields
4. "Other Field" may be used to request the student to submit student ID or any other information you wish them to include to identify them in your class
5. Complete security entry
6. Press Next
7. Enter instructor's email address (hani.dulli@ttu.edu)
8. Select class(es) name that you are in for this instructor (PHYS 1404 – 001) and add it to the list on the right
9. Click Next and confirm information. You may click Back if you find information you need to correct.

PHYS 1404 - 001

Spring 2011

Tentative Schedule

Week	Date	Lecture	Note
1. *	Jan 12 - 14	Electric Charge	
2. *	Jan 17 - 21	Electric Field	**MLK Day**
3.	Jan 24 - 28	Electric Potential	**Quiz 1 (Jan 28)**
4.	Jan 31 - Feb 4	Electric Currents	
5.	Feb 7 - 11	DC Circuits	**Quiz 2 (Feb 11)**
6.	Feb 14 - 18	Magnetism I	
7.	Feb 21 - 25	Magnetism II	**Exam 1 (Feb 21)**
8.	Feb 28 - Mar 4	Faraday's Law I	
9.	Mar 7 - 11	Faraday's Law II	**Quiz 3 (Mar 11)**
10. *	Mar 14 - 18	-	**Spring Break**
11.	Mar 21 - 25	Geometric Optics	
12.	Mar 28 - Apr 1	Optical Instruments	**Quiz 4 (Apr 1)**
13.	Apr 4 - 8	The Wave Nature of Light	
14.	Apr 11 - 15	Atomic Structure I	**Exam 2 (Apr 11)**
15.	Apr 18 - 22	Atomic Structure II	
16. *	Apr 25 – 29	Nuclear Structure	**Easter** **Quiz 5 (Apr 29)**
17. *	May 2 - 3	Review	
18.	May 10		**Final Exam**