Physics 1401

Physics for Nonscience Majors
Fall Semester 2009
Course Outline

Instructor: Thomas L. Gibson **Office:** Sc 27 **Office Hours:** 2:00-3:00 (M-F) (or by appointment)
Required Texts: *Conceptual Physics,* 10th edition, by Paul G. Hewitt and *Physics 1401 Laboratory Manual*
Course Coverage: The course will cover topics from the eight sections in the text by Hewitt.
Web page: www.phys.ttu.edu/~ritlg/courses/p1401/index.html

Grading Policy:

The following six scores will be accumulated during the course of the semester:
Short Quizzes; Exam I; Exam II; Exam III; Final; Final.
The course grade will be the average of the Short Quizzes and your four highest exam scores. **NO MAKEUP EXAMS OR QUIZZES WILL BE GIVEN.** Your letter grade will be determined on the following scale:
(55-65) D; (66-81) C; (82-91) B; (92-100) A. I do use +/- grades one point either side of a grade boundary, e.g., grades of 80 or 81 earn a C^+ while grades of 82 or 83 earn a B^-.

Quizzes:

Short (unannounced, in-class) quizzes based on *assigned* reading, homework, online quizzes, and material covered in class will be given approximately once a week. If you take **all** of the online quizzes, at the end of the semester you may replace your two lowest in-class quiz grades with the average of the highest value for each of your online quizzes. Your Lab Score will be entered in the short quiz category and count as four in-class quizzes. Since this is a lab-credit course, you must obtain a laboratory score of 55% or better for the current semester in order to pass the entire (Physics 1401) course.

Hour Exams: Three one-hour exams will be given. **You will need a scantron sheet for each exam.**

Final: A *comprehensive* final exam will be given. **You will also need a scantron sheet for the final exam.**

Important Dates:

August 27 = Thursday---First day of class.
September 7 = Monday---Labor day. University holiday.
September 19 = Friday---International Talk Like a Pirate Day, Arrrr.
October 12-13 = Monday-Tuesday---Student Holiday.
November 2 = Monday---Last day to drop a course.
October 31 = Saturday---Halloween. **Not** a University Holiday.
November 25-29 = Wednesday-Sunday---Thanksgiving Break.

December 9 = Wednesday---Last day of classes.
December 11 = Friday---**Final Exam** (1:30 p.m. to 4:00 p.m.)

Approximate Dates for One-hour Exams:

- Exam 1: September 30, 2009.
- Exam 2: October 21, 2009.
- Exam 3: November 18, 2009.

Important Notes:

Any student who, because of a disability, 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. Further, rude, disruptive, or disrespectful behavior has no place in the classroom and will not be tolerated.

Course Goals:

This course is intended to acquaint students with the basic laws of physics and to develop a better understanding of physical science in general. To this end, we will emphasize concepts over mathematical manipulation and student participation over more traditional lecture. The laboratory portion of this course, Physics 1401 Laboratory, is an important component of developing "hands on" understanding of the material that we will cover in the lecture portion. The combination of Physics 1401 with its associated laboratory course counts toward fulfillment of the natural science requirement in Arts and Sciences.

Expected Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Describe the basis of the scientific method.
2. Distinguish between a scientific theory and speculation.
3. Explain at a conceptual level the fundamental elements of energy, motion, and thermodynamics.

Methods for Assessing the Expected Learning Outcomes

The expected learning outcomes for the course will be assessed through:

A beginning of the semester pretest and an end of the semester posttest.

Strategy for Success:

- Be prepared! Study your notes, read the material in the text *before* we cover it in class.
- Take the online quizzes. These will help you keep up, will make for more productive classroom interaction, and will help keep you prepared for those unannounced quizzes that make up 10% of

your final grade. It is your responsibility to make sure that your online quizzes are being properly recorded.

- Begin all homework assignments as soon as possible. The assignments take time and thought.
- Once you can work through a problem with your notes, book, study group, etc., write the question down on a blank sheet of paper and then try to rework it entirely on your own a few days later.
- Never wait until the night before a test to "begin" studying.
- See your instructor if you are stuck--that's why they pay me the big bucks!
- Check out the web pages for important announcements, information, and FAQs.