Principles of Physics I
Physics 1408-003, CRN 10120 Fall 2010

Section	PHYS 1408-003
Instructor	Dr. Wallace Glab
Class Time	MWF 3:00-3:50 p.m.
Classroom	SC 07
Glab Office/lab	SC 26/28
Web page	www.phys.ttu.edu/~gglab/1408_003_f10.html
Office Hours	MWF 2:00-3:00, TT 8:00-9:30
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Texts: *Physics for Scientists and Engineers* by D. Giancoli, 4th ed., bundled with Mastering Physics online homework access. Also the lab manual available from the bookstores. DO NOT buy a TurningPoint Clicker, we will not be using them. If you have already, sell it to a friend or use it to crack walnuts open.

Course Coverage: Time permitting, the course will cover material from the first 17 chapters in the text. We will cover kinematics, mechanics, statics, rotation, fluids, mechanical waves, and sound.

Grading Policy: The following scores will be accumulated during the semester: Labs; On-Line Homework; Exam 1; Exam 2; Exam 3; Final. The course grade will be based on the labs, on-line homework, two of your three exam scores, and the final. **NO MAKEUP EXAMS WILL BE GIVEN.** The lowest grade of the 3 in-class exams will be dropped. So, only the highest 2 of the 3 one-hour exams will count in determining your course grade, but your final exam grade will count.

Your letter grade will, tentatively, be determined according to the following scale: 55 D; 67 C; 80 B; 90 A.

Hour exam	25%
Hour exam	25%
Hour exam (lowest of the 3)	0%
Final	25%
Lab	12.5%
Homework	12.5%

Labs: You will receive a separate lab syllabus. Lab is a required portion of the course, and also contains a recitation component. Recitation will help you with problems which figures into your homework grades, and exam grades. Recitation is a very important part of the course. Heck, it is all very important!

Homework: Homework problems are assigned and graded on the web through the commercial site at **www.masteringphysics.com**. Once you are registered at that website you will be able to self-register for our section and download and work on the assignments. You will be able to retrieve the answers and solutions after the due date. Pay attention to the instructions on the homework website about how the homework is scored. In order to register in our section you need the course designation MPGLAB20998. This website is not at TTU and you should give yourself plenty of time to submit answers. Sometimes the network can be slow or down.

The value of the assigned homework problems is that they are the basis for some of the problems on your exams. Doing well on the homework is crucial to your success in the course. The single best indicator of success in the course is success with the homework. We've done the experimental study, you must do the homework in order to do well in the course. Do not let the small percentage weight delude you into thinking these homework problems are in some way optional. They are the single best factor in determining how you do in the course.

Exams: Three exams will be given, plus a comprehensive final. The dates will be announced well in advance. The lowest of these 3 exams will be dropped from the calculation of your course grade. You may bring a 3x5 note card to the exams. This note card can be used to list any equations or words that help you in solving physics problems.

Final: A comprehensive final exam will be given. You may bring up to 4 3x5 cards to it as well. The final will be on Saturday, 12/11 from 7:30 a.m. to 10:00 a.m.

Course Goals:
This course is intended to acquaint students with the basic laws of physics, to develop a better understanding of physical science in general, and help prepare you for other upper division science classes. To this end, the course will emphasize a mix of conceptual understanding and standard "end-of-chapter" homework solving skills.

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.

Expected Learning Outcomes:
Upon successful completion of this course, students will be able to:
Describe the basis of the scientific method.
Distinguish between a scientific theory and speculation.
Explain at a quantitative level the fundamental elements of energy and motion.

Methods for Assessing the Expected Learning Outcomes:
The expected learning outcomes for the course will be assessed through: non-Graded Pre- and Post-Tests, Guided Classroom Discussion, Lab Exercises, Homework, In-class Exams, and the Final.

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 in 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.

Strategy for Success:
- Be prepared! Study your notes and read the material in the text *before* we cover it in class. This will help you keep up, will make for more productive classroom interaction.
- Begin all homework assignments as soon as possible. The assignments take time and thought. The homework isn't graded separately, but some test questions are based on the problems you do in the homework. Homework is essential to pass.
- Build a study group or join one. Students helping each other is very effective. Do not join a study group because you all share an interest in a football team or a particular flavor of music. You need a mix of strong and weak students.
- 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 day or so later.
- Never wait until the night before a test to "begin" studying.
- The course schedule is fast. Don't get left behind.
- Come see your instructor when you get stuck--that's why they pay me the big bucks! I am always willing to help anyone who tries.
- There are also TAs, SI instructors, and help sessions available. Avail yourself of all resources.