

**PHYS 1404 General Physics II**  
**Laboratory Syllabus**  
**Spring 2009**  
**Texas Tech University**  
**Course Syllabus**

**Laboratory Instructor:** \_\_\_\_\_  
**Section:** \_\_\_\_\_

**Coordinator of Instructional  
Laboratories:**

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**Laboratory Manual:** Laboratory Manual General Physics II, Texas Tech University, (John Wiley and Sons, Inc.), 2009, available at bookstores, ISBN 9780470478493.

**Meeting Place:** Science Building 119

**Laboratory:** Each laboratory meeting will consist of working through one of the interactive laboratories in the Physics 1404 Laboratory Manual. It may also include working through questions or problems in the lab manual or home work assignments from the lecture portion of the class or from the laboratory instructor. There may also be quizzes on the laboratory material. Topics include electricity, magnetism, optics and radioactivity. The laboratory and homework will be graded.

**Pre-Lab preparation sheet:** Some laboratories have pre-lab preparation sheets. You should read through the laboratory and answer the questions on the pre-laboratory preparation sheet before coming to class. The sheets will be collected and graded for completion. Points will be subtracted from the participation part of your grade, if the pre-lab is not completed and turned in.

**Laboratory homework:** Each week, laboratory homework may be assigned. It will be turned in the following week at the beginning of the laboratory period. It is late after the beginning of the laboratory period and late laboratory homework will not be accepted. The laboratory homework will count as 25% of your laboratory grade.

**Quizzes:** There may be quizzes given at the beginning of the laboratory period. Quizzes will be announced. Quizzes will count as 25% of your grade.

**Participation:** Coming to class on time, not leaving early and being “on-task” when you are in the lab counts as part of your participation grade. Also, working the pre-lab sheets

and participation in departmental assessment, which may include a general pre-test, post-test or other survey, will count toward your participation grade. For all of these things, you will get full credit, if you do them, such as filling out the pre-lab sheets, any surveys or pre- or post-tests administered, and points will be subtracted from your participation grade, if you do not do them. They will not be graded, except for completion. However, if they are not completed or are not taken seriously, you will have points taken off. Participation will count as 15% of your grade.

**Recitation:** The recitation is designed to help you with problem solving. Active participation will also help you on homework and exams. You will work with students in your group on solving problems, often homework problems or problems similar to homework problems. After you have worked on it for a while, you will discuss it with the class or with the TA. You may be asked, as a group, to present problems on the board or to the TA. Your active participation in recitation will count as 15% of your laboratory grade. This means that you will actively work on problems when asked and turn in some problems for grading.

**List of laboratory experiments:**

1. Exploring the Nature of electrostatic Forces
2. Electric Field and Potential
3. Batteries, Bulbs, and Current
4. Current in Simple DC Circuits
5. Voltage in Simple DC Circuits and Ohm's Law
6. Kirchhoff's Circuit Rules
7. Introduction to Capacitors and RC Circuits
8. Magnetism
9. Introduction to Light
10. Reflection and Refraction of Light
11. Geometrical Optics-Lenses
12. Radioactivity

**Grading:**

Recitation	15%
Laboratory work	20%
Laboratory homework	25%
Quizzes	25%
Pre-lab and participation	15%

Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make any necessary accommodations. Student should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this approved university procedure.