

PHYS 2401 Principles of Physics II
Laboratory Syllabus
Spring 2013
Texas Tech University

Laboratory Instructor: _____
Section: _____

Laboratory Coordinator:

Dr. Keith West
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Laboratory Manual: Physics 2401 Lab Manual, Department of Physics Texas Tech University, (Stipes Publishing L.L.C, 2011).

Meeting Place: Science Building 130 Note: No food or drinks are allowed in the laboratory, including bottles and cups with lids.

Laboratory: Each laboratory meeting will consist of working through one of the interactive laboratories in the Physics 2401 Laboratory Manual. Topics include electricity, magnetism, and optics. The laboratory and homework will be graded.

Laboratory homework: Each week, a laboratory homework will 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 30% of your laboratory grade.

Laboratory Write-up: The lab write-up will be completed each week as you answer the questions while working through the lab, as well as completing the summary at the end of the lab. You will turn in the lab at the end of each lab period. The laboratory write-up is 45% of your laboratory 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 any departmental assessments, which may include a general pre-test, post-test or other surveys and surveys to be done online outside of class, will count toward your participation grade. For all of these things, you will get full credit, if you do them, 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.

Obviously attendance is the most important part of participation. If you aren't here, you can't participate. Absences will be excused for university events, illness (documentation may be required), funerals (documentation may be required and excuses for funerals are at Dr. West's discretion), court appearances (plaintiff, defendant, witness, juror, documentation **IS** required). Occasionally something so out of the ordinary occurs that you may feel should be grounds for being excused. Please see Dr. West if you feel you have extenuating circumstances. Excuses for extenuating circumstances are at Dr. West's discretion. (Note that long weekends or family trips do not count as extenuating circumstances.)

Students more than 20 minutes late without a valid reason will receive a 5% deduction in their participation grade. Each unexcused absence will result in a 10% deduction in your participation grade.

After attendance, conducting the investigation, taking part in class discussions, and group work in recitation are the most important parts of participation. If you do these things, you should be fine. Participation points will be lost if you socialize, play with lab equipment, fail to take part in group work, or are otherwise not on task. Cell phone usage or other violations of the lab rules that result in a student being dismissed will carry a 10% reduction in the participation grade.

Participation will count as 25% of your grade.

Tentative list of laboratory experiments:

Date	Activity
01/28 – 01/01	Electrostatic Forces and Coulomb's Law
02/04 – 02/08	Electric Fields
02/11 – 02/15	Electric Potential
02/18 – 02/22	Electric Circuits I
02/25 – 03/01	Kirchhoff's Circuit Rules
03/04 – 03/08	Introduction to Capacitors and RC Circuits
03/11 – 03/15	Spring Break
03/18 – 03/22	Magnetism I – Magnetic Fields
03/25 – 03/29	Magnetism II – Force on a Current-Carrying Wire
04/01 – 04/05	No Labs
04/08 – 04/12	Magnetism III – Faraday's Law, Lenz's Law, and Induction
04/15 – 04/19	Geometrical Optics I – Reflection and Refraction
04/22 – 04/26	Geometrical Optics II – Lenses and Images
04/29 – 05/03	Physical Optics

Grading:

Laboratory write up	45%
Laboratory homework	30%
Participation	25%

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.