PHYS 1403 General Physics I

Laboratory Syllabus - Fall 2014Texas Tech University

Section: 1403–_____ Instructor: _____

1403 Laboratory Coordinators:

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Laboratory Manual:
The manual is available from the *Society of Physics Students* and is not available from any bookstore. A schedule showing the hours SPS will be selling the manuals will be posted. Students must purchase a lab manual before their second lab meeting (i.e., before Friday 5 Sep 2014). Students without a lab manual will not be admitted to lab and the absence will be unexcused. Lab manuals *may* be available after 5 Sep 2014 at higher cost.

Class Meeting:
The class will meet in Science room 102 at your officially registered time. Each class period will consist of a laboratory and a recitation portion as described here. Food or drinks (including chewing tobacco, gum, etc) in any form and cell phone usage are not allowed in the lab room.

Laboratory:
The laboratory portion will consist of working through one of the interactive laboratories in the Physics 1403 Laboratory Manual including the questions and problems within each exercise. There may be pretests and periodic quizzes on the laboratory material. Overall topics include classical mechanics (motion, forces, work, energy, momentum) fluids and waves. Performance in the laboratory portion will be evaluated via instructor in-class observation and lab write-ups to be submitted at the end of each lab period. Submitted work counts as 50% of your overall lab grade.

Recitation:
The recitation portion meets during the same class period as the laboratory exercise and is designed to help with general physics concepts and problem solving. Active participation will also help you with an overall understanding of the material, homework and exams. You will work with students in your group on various concepts, activities and solving problems (e.g. homework problems). You will then present and discuss the work with the class or the instructor. You are required to attend and actively participate in the recitation part of the laboratory.

Quizzes:
There will be quizzes given at the beginning of the laboratory period. Quizzes may or may not be announced. Quizzes will count as 25% of your grade.

Participation:
Punctuality (i.e. in your seat and ready to begin at or before the scheduled start time), not leaving early and being on-task when you are in the lab and recitation contributes to the participation grade. Working physics education research or department assessments, which may include a general pre-test, post-test or other surveys may also count toward your participation grade.
Full credit for participation is earned by making a serious effort in completing the assigned activities regardless of the *accuracy* of the particular responses.
Participation points will be lost if lab equipment is utilized in any form that is not related to the prescribed exercise, fail to take part in group work or are otherwise not on task.
Violations of the lab rules will result in a student being dismissed for that class period, reduce the participation grade in addition to whatever graded work is incomplete due to the dismissal.

Attendance:
Attendance contributes directly to the participation grade as if one is absent one is not capable of participating in a given activity. Absences will be excused for officially sanctioned university events, illness (documentation may be required), court appearances (plaintiff, defendant, witness, juror, documentation is required), family emergencies (e.g. funerals with appropriate documentation and at the discretion of the instructor). If something occurs that you feel should be grounds for being excused, contact your instructor, in writing, PRIOR to the absence (if possible, or as soon after as possible) to discuss the situation. Excused absences for situations beyond the purview of TTU OP 34.04 are at sole discretion of the instructor and will be evaluated confidentially and on a case-by-case basis.
An excused absence does NOT necessarily excuse you from completing the work. Arrangements for a planned excused absence, if possible, should be finalized (with written confirmation between the student and instructor) no later than the Friday before the week for which the absence will occur. Otherwise, establish contact with the instructor as soon as reasonably possible.

Grading:

Submitted Laboratory Work:	50%
Quizzes:	25%
Participation:	25%
Total:	100%

ADA Statement
In compliance with the ADA, TTU OP 34.22 and TTU OP 10.08
"Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as possible to make necessary arrangements. Students must present appropriate verification from Student Disability Services during the instructor's office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services office in 335 West Hall or call 806-742-2405."

Religious Holiday
Pursuant of TTU OP 34.19, a student who intends to observe a religious holy day should make that intention known, in writing, to the instructor prior to an absence. A student who is absent from a class, exam or exercise for the observance of a religious holy day shall be allowed to complete an assignment or exam scheduled for that day within a reasonable time after that absence.

Academic Integrity
TTU OP 34.12 outlines grading policy as well as the definitions of scholastic dishonesty; all of which will be followed in all aspects of this course.
Excerpt: *"It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension. 'Scholastic dishonesty' includes, but [is] not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts and any act designed to give unfair academic advantage to the student […]".*

Appropriate behavior:
Students are expected to behavior in a respectful, considerate and courteous fashion in any activity related to this course. Rude, disrespectful or disruptive behavior will *never* be tolerated.

Tentative list of laboratory experiments (subject to minor modification):

Date	Lab Activity
08/25 – 08/29	Experimental Uncertainty
09/01 – 09/05	No Labs – Labor Day
09/08 – 09/12	One Dimensional Motion Part 1
09/15 – 09/19	One Dimensional Motion Part 2
09/22 – 09/26	Force and Motion
09/29 – 10/03	Gravitational Forces
10/06 – 10/10	The Ballistic Gun (2-D Motion)
10/13 – 10/17	Conservation of Momentum
10/20 – 10/24	Work and Energy
10/27 – 10/31	Statics and Torque
11/03 – 11/07	Periodic Motion
11/10 – 11/14	Buoyancy
11/17 – 11/21	Standing Waves