PHYS 1408 Principles of Physics I Laboratory Syllabus Fall 2015 Texas Tech University Course Syllabus

Laboratory Instructor: ______ Section:_____

Laboratory Coordinator: Dr. Keith West Office: SC 116 Phone: 806-834-3651 Email: <u>keith.h.west@ttu.edu</u>

Laboratory Manual: The manual is available from the Society of Physics Students. It will be sold for \$20 until Friday, January 30, from Room 004. Lab manuals will be sold from 2:00-5:00 PM daily. **Students must purchase a lab manual before their first lab meeting. Students who do not have a lab manual will not be admitted to lab and due to most sections being full probably will not be allowed to make that lab up.** Students may still buy lab manuals after the 24th, but there will be a markup and the student is responsible for contacting SPS.

Meeting Place: Science Building 105 Note: No food or drinks are allowed in the laboratory, including bottles and cups with lids.

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.

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 fall into two broad categories: expected absences and unexpected absences.

Expected Absences: These are absences that you know you will have in advance. They include but are not limited to university sponsored trips and events (athletic events, conferences, etc.), doctor/dentist appointments, court appearances (plaintiff, defendant, witness, juror), religious observances, and other things that require advanced planning. Please note: This includes the Engineering Job Fair. University policy states that students are responsible for any work missed for university sponsored events. In the Physics Department, this means that a lab missed for a university sponsored event must be made up if possible. University policy also states that instructors must be notified in advance of absences due to university sponsored events. Instructors must also be notified in advance for absences due to religious observance.

Therefore the absence policy for expected absences of any sort is the following: **Students must make arrangements for a makeup lab and those arrangements must be made in advance of the absence**. The makeup can take place either before or after the absence, but the arrangements must be made in advance. Because many labs are at capacity and a few are over capacity, available seats are somewhat limited. All arrangements for a makeup lab must be made through the Dr. West, the lab director. Your TA does not have the authority to approve a makeup lab. The reason for this policy is to make sure there is space for you in the lab you attend for the makeup. Please email Dr. West; he will work with you to find a section that works with your schedule. He will also confirm the makeup and CC both your regular TA (to ensure the TA is aware of the makeup and won't count the absence against you) and the TA of the section you'll be attending for the makeup (to ensure that you are admitted to the lab). Please also note that the TA will not allow you to makeup the lab without prior approval from Dr. West. Make sure you receive confirmation from Dr. West that you have been approved for a makeup. There are roughly 2000 students in labs this semester, and it is possible for someone to fall through the cracks. Neither Dr. West nor you want that to happen.

Unexpected Absences: These are absences which occur when "life happens." They include but are not limited to illness, death of a family member or close friend, car accident (either directly involved or stuck in traffic if it's a major wreck), and other unexpected events. Dr. West understands that things can happen that are beyond your control. In the event something unexpected prevents you from attending class, please contact Dr. West as soon as you can. If possible he will help you find a section in which to makeup the absence. In the event you can't make up the lab, he may excuse it. Please be advised that being excused for unexpected absences is at Dr. West's discretion, and he may ask for documentation, such as a doctor's note, funeral program, police report, or other supporting material. In the event of an unexpected absence, you have one week from the date of the absence to contact Dr. West. After that, the absence will be unexcused and the zero will count.

Absences for the following reasons will not be excused under any circumstances: oversleeping, "I forgot", long weekends, family trips, extended Spring Break. Students who show up to lab without a lab manual will not be allowed to attend lab; in this case, a makeup may be allowed at Dr. West's discretion, provided there are lab sections with open seats remaining. If you are going to be absent for any reason not directly addressed above and wonder if the absence will be excused, please do not hesitate to contact Dr. West. He recognizes that occasionally a unique opportunity presents itself. The worst he will say is no, but sometimes he will excuse the absence.

Students are expected to arrive on time and be prepared to begin work when the lab starts. Please keep in mind that if someone is late, that person's group will have to catch that individual up. This can result in the group not finishing the laboratory activity, and as a result everyone's grade suffers. Therefore, students arriving more than 15 minutes late will not be admitted to lab. Dr. West recognizes that from time to time things happen which can delay someone. If something occurred to prevent the student from arriving on time, a makeup lab without penalty can be arranged at Dr. West's discretion. Students who are late on a consistent basis will be given a

warning to be on time. If that person continues to be late, he/she will not be admitted to lab and will not be allowed to make up that lab.

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.

Laboratory experiments: The laboratory experiments are as listed in the laboratory manual, except that they may not always be worked in the same order as in the manual. Every effort will be made to keep the lab topic the same as is being covered in lecture that week or was covered in lecture the previous week, but please keep in mind that it will not always be possible to do so. Performing the experiment will count as 45% of your grade.

Tentative list of laboratory experiments:

Date	Activity
01/26 - 01/30	Experimental Uncertainty
02/02 - 02/06	One Dimensional Motion Part 1
02/09 - 02/13	One Dimensional Motion Part 2
02/16 - 02/20	The Ballistic Gun (2-D Motion)
02/23 - 02/27	Force and Motion
03/02 - 03/06	Work and Energy
03/09 - 03/13	Conservation of Momentum
03/16 - 03/20	Spring Break
03/23 - 03/27	Rotational Motion
03/30 - 04/03	Statics and Torque
04/06 - 04/10	No Labs
04/13 - 04/17	Gravitational Forces
04/20 - 04/24	Periodic Motion
04/27 - 05/01	Standing Waves

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.