**Laboratory Instructor:** __________
**Section:** __________

**Laboratory Coordinator:**
Dr. Keith West  
Office: SC 116  
Phone: 806-742-3761  
Email: keith.h.west@ttu.edu


**Meeting Place:** Science Building 102  
Note: No food or drinks are allowed in the laboratory, including bottles and cups with lids.

**Laboratory:** Each laboratory meeting, will consist of two parts, working through one of the interactive laboratories in the Real Time Physics laboratory manual and a “recitation” component. In the “recitation” part, you will be working on problem solving. You will work with students in your group on solving problems. There will also be group work, where the teaching assistant (TA), will help you with problem solving strategies.

**Pre-Lab preparation sheet:** Each laboratory has a pre-lab preparation sheet. 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:** A laboratory homework will be assigned each week. 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. They will include both lecture and lab questions and content. 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 surveys, 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 part of the laboratory part of your grade. This means that you will actively work on problems when asked and turn in some problems for grading.

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. It is also possible that an additional laboratory or two may be added or replaced.

Tentative list of laboratory experiments:

1/30 – 2/03  Introduction to Motion
2/06 – 2/10  Changing Motion
2/13 – 2/17  Force and Motion
2/20 – 2/24  Combining Forces
2/27 – 3/02  Force, Mass and Acceleration
3/05 – 3/09  Gravitational Forces
3/012 – 3/16 Spring Break
3/19 – 3/23  Passive Forces and Newton’s Laws
3/26 – 3/30  Work and Energy
4/02 – 4/06  Conservation of Energy
4/09 – 4/13  No Labs
4/16 – 4/20  One-dimensional Collisions and Conservation of Momentum
4/23 – 4/27  Statics
4/30 – 5/04  Harmonic Motion

Grading:

Laboratory 30%
Laboratory homework 25%
Quizzes 25%
Pre-lab and participation 10%
Recitation 10%

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.