



Syllabus: University Physics Lab

Course Number: Phys 2125

Semester & Year: Fall 2025

Instructor Information

Name: Calvin Ainsworth

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Office Hours: M 11am-3pm, T 11am-12pm, W 11am-3pm, TR 11am-12pm

Textbook Information

Labs will be provided to students free of charge.

Student Learning Outcomes for the Course

1. Demonstrate techniques to set up and perform experiments, collect data from those experiments, and formulate conclusions from an experiment.
2. Record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written reports.
3. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.
4. Apply Newton's laws to physical problems including gravity.
5. Solve problems using principles of energy.
6. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.
7. Use principles of impulse and linear momentum to solve problems.
8. Solve problems in rotational kinematics and dynamics, including the determination of the location of the center of mass and center of rotation for rigid bodies in motion.
9. Solve problems involving rotational and linear motion.
10. Demonstrate an understanding of equilibrium, including the different types of equilibrium.
11. Discuss simple harmonic motion and its application to quantitative problems or qualitative questions.
12. Solve problems using the principles of heat and thermodynamics.
13. Solve basic fluid mechanics problems.

Student Requirements for Completion of the Course

Lab Experiment

Lab Report

Student Assessment (For Specifics, see grade sheet)

You have the following possibilities for earning points:

Lab Reports

1000 points

Grading Scale

Grade	
A	900-1000
B	800-899
C	700-799
D	600-699
F	599-below

Absentee Policy

Texarkana College's absentee policy allows instructors to withdraw a student from a course due to excessive absences. If a student leaves and returns during class or leaves the class before the class is over, he/she **may** be considered absent. Three tardies constitute one absence.

Faculty members **are not** obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student's absence from class. The institution is not required to take attendance with the exception of workforce/vocational areas, where certification requirements require taking attendance. However, experience demonstrates that regular attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.

A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of "F" in the class. The instructor will submit the last date of attendance for students receiving a grade of "F" or "W".

Withdrawal from a course(s) **may** affect a student's current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal.

Excused absences

A student's absence due to school trips and/or school business will not be counted against a student's allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only excused absences that are considered by Texarkana College. Responsibility for work missed for any absence is placed on the student. Instructors are required to allow students to make up work missed if the absence is due to military duty* or religious holy days when students follow the correct notification procedures. Instructors are not required to allow students to make up work for absences due to other reasons.

An absence is defined as any time you are not in class.

You are allowed 2 absences for a class that meets one time a week for 3 hours per period.

You may be dropped for any absence over the 2 allowed.

Make-up Policy

Only certain work can be made up and only if the student has a very good excuse for not doing the work. Tests may not be made up.

Assignments

Any late work turned in without a very good excuse will have 20% of that grade deducted for each day late up to 4 days late. After 4 days, the paper will receive minimum credit.

Cell Phones

All cell phones must be turned off and placed out of sight and off your body. Violations may result in your being asked to leave the class and counted absent.

Classroom Behavior

A classroom is a place where everyone is expected to respect the desire to learn by students. All students are expected to behave in an adult, nondisruptive manner. Outbursts, cursing, excessive talking, or other behavior that is disruptive may result in the student being asked to leave the classroom.

Course Correspondence

Any course correspondence will be through TC student email. It is the student's responsibility to check his/ her TC email regularly for any communication related to the course.

*Being dropped from the course could affect your financial aid.

Academic Integrity Statement

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature will result in the student being dropped from the class with an "F".

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at <https://texarkanacollege.edu>.

Disability Act Statement:

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Tonya Blase at 903.823.3283, or go by the Recruitment, Advisement, and Retention Department located in the Administration building for personal assistance.

If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. *It is best to request these changes at the beginning if not before the start of class* so there is ample time to make the accommodations.

Financial Aid:

Attention! Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.