

# TEXARKANA COLLEGE

**Syllabus:** College Physics I w/ Lab

**Course Number:** Phys 1401

## **Instructor Information**

Name: Seth Schirmer

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## Textbook Information

*College Physics – A Strategic Approach*, Knight, Jones and Field

## **Student Learning Outcomes for the Course**

1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.
2. Apply Newton's laws to physical problems including gravity.
3. Solve problems using principles of energy.
4. Use principles of impulse and linear momentum to solve problems.
5. 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.
6. Solve problems involving rotational and linear motion.
7. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.
8. Demonstrate an understanding of equilibrium, including the different types of equilibrium.
9. Discuss simple harmonic motion and its application to quantitative problems or qualitative questions.
10. Solve problems using the principles of heat and thermodynamics.
11. Solve basic fluid mechanics problems.

## **Student Assessment**

- Each six weeks will be 50% Tests and 50% Quizzes/Labs/Homework
- You will be required to keep a lab notebook
- Your semester average will be calculated with each six weeks counting twice and the semester final counting once
- Every student will be required to take the semester exam for the semester.

**Grading Scale:** (Anything below a 70 is an F for the high school credit)

Grade	
A	90-100
B	80-89
C	70-79
D	60-69
F	59-below

**Attendance Policy**

The course will follow the Texas High School attendance policy.

**Make-up Policy**

At least two test grades will be given each six weeks. Since tests count 50% of the student grade, it is very important to the student to do his or her best and be prepared for each test. Since this is a college class, students are not allowed to re-take tests or quizzes, redo homework or lab reports. If a student is not present the day the test is administered, an alternative test will be given and must be taken in the appropriate time frame based on district policy. If the test is not taken in the time period given, points will be deducted from the test grade. The alternative test will cover the same material; however, number of questions and question format is at the teacher's discretion. Students are welcome to take the test in advance if they know ahead of time they are going to miss.

**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.