

The University of Texas at Tyler
Syllabus
Spring 2026
Physics 2125 Section 1 and 2

Instructor: Dr. Randy Back

Classroom: RBN 4034

Class Time: Monday 1-4 (Section 1) Thursday 1:30-4:30 (section 2)

Email: rback@uttyler.edu

Office: RBN 4047

Phone: (903) 565-5797

Office Hours: MTWRF 9-10 or by appointment. You should feel free to stop by my office any time. If I am available, I will be happy to help you.

Course Topics: This course is designed to give students hands-on experience that will complement the principles and concepts covered in lecture. Major topics covered will include Kinematics, Forces, Energy, Momentum and Rotational motion

Text: No Textbook required

Co-requisite: PHYS 2325

Labs: We will do a lab each week. The labs will be on Canvas. The lab report will be due before the next lab. You will turn the labs in on Canvas. If you are late to lab you will have to complete the lab on your own, time permitting.

Make-up: No late work will be accepted. If you have an excused absence you must make up the work before the due date.

Grading: Each lab report will be worth a maximum of 30 points. At the end of the semester there will be a lab project due. More details on the project will be provided in class. The project will be worth a total of 60 points. At the end of the semester all of your points will be totaled and divided by the maximum possible. A (90%-100%), B (80%-89%), C (70%-79%), D (60%-69%), F (<60%).

Disability Statement: "If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability support services/accommodation(s) must provide appropriate documentation of his/her disability to the Disability Support Services counselor. In order to assure approved services the first week of class, diagnostic, prognostic, and prescriptive information should be received 30 days prior to the beginning of the semester services are requested. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 566-7079 (TDD 565-5579)." Additional information may also be obtained at the following UT Tyler Web address: <http://www.uttyler.edu/disabilityservices>.

Social Security Statement: It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number.

Note Regarding Student Absence due to Religious Observance: Students who anticipate being absent from class due to a religious observance are requested to inform the instructor by the second class meeting of such absences.

Grade Replacement

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the Census date. Failure to file an intent to use grade forgiveness will result in both the original and repeated grade being used to calculate your overall grade point average. A student will receive grade forgiveness (grade replacement) for only three (undergraduate student) or two (graduate student) course repeats during his/her career at UT Tyler. (2006-08 Catalog, p.35)

Student Academic Conduct

In this course students are encouraged to work in groups when doing homework and preparing for quizzes and tests. However, during quizzes and examinations a code of honor will apply under which students are to work alone and neither give help to others nor receive help from any sources. Cheating will not be tolerated.

Concealed Campus Carry

We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>.

A more complete description of University policies is listed at the following website:
<http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf>

The Census day is January 26

Last Day to withdraw from a course is March 30

Course Objectives/Student Learning Outcomes

1. Critical Thinking Skills (includes creative thinking, innovation, inquiry and analysis, evaluation and synthesis of information)

The student will demonstrate their critical thinking skills by analyzing collected data and comparing their calculations to theoretical predictions. This Student Learning Outcome (SLO) will be assessed on the analysis part of their lab reports.

2. Communication Skills (includes effective development, interpretation and expression of ideas through written, oral and visual communication)

THIS STATEMENT MEANS TO PROVE YOUR WORK FROM START TO FINISH MAKING SENSE MATHEMATICALLY. (NO SKIPPING STEPS). YOUR WORK MUST BE THOROUGH AND IT MUST BE NEATLY WRITTEN.

The student will communicate an understanding of the physics principles discussed in class on free response essay questions. The questions will require the student to express a qualitative understanding through written communication of the physics concepts covered in class. This SLO will be assessed on the question section of their lab report.

3. Empirical and Quantitative Skills (includes the manipulation and analysis of numerical data or observable facts and results in informed conclusions)

The student will demonstrate the ability to collect empirical data on a physical system. This SLO will be assessed on the data section of their lab report.

4. Teamwork (includes the ability to consider different points of view and to work effectively with others to support a shared purpose or goal). This will be assessed by the instructor, based on the students' participation in the group. **If the student is late and/or not actively engaged in the experiment points will be deducted from the lab grade.**