

The University of Texas at Tyler
Syllabus
Fall 2025
College Physics II
Physics 1302
Section 2

Instructor: Dr. Randy Back

Classroom: RBN 4034

Class Time: MWF 11:15-12:10

Office: RBN 4047

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Office Hours: MTWRF 10-11. You should feel free to stop by my office any time or make an appointment. If I am available, I will be happy to help you.

Course Topics: This course will introduce the student to some basic concepts and principles in physics. Problem solving will be a major component of this class. Major topics covered will include Fluids, Waves, Light, Electric Fields and Magnetic Fields.

Text: A digital copy of *College Physics*, by Knight, Jones and Field 4th edition with access to modified mastering physics.

ISBN-13: 9780136782216

Here is a link to the Pearson website where you can purchase the e-text and access to the homework site.

<https://www.pearson.com/en-us/subject-catalog/p/college-physics-a-strategic-approach/P200000007003/9780136782216>

Prerequisite: Trig or Pre-Calculus. This class will be in-person.

Homework: Homework will generally be assigned after each class period. Homework will be assigned on

<https://mlm.pearson.com/northamerica/masteringphysics/>

The Course ID is: back78673. It will be due the following class day. You must spend significant time on the homework to really understand this material.

Tests: There will be four in-class tests during the semester. The tentative dates for the tests are (Sept. 17, Oct. 10, Nov. 3 and Dec. 5) Calculators will not be allowed during the test.

Final Exam: The final will cover material from the entire semester. The final will be cumulative, and it can replace your lowest test score.

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:** The components of your final grade are given below

10 % Homework

75 % Tests

15 % Final

Every correct homework assignment, quiz and groupwork problem completed on time will add 0.1% to your final grade.

Your final letter grade will be given based on the following percentages: A (90%-100%), B (80%-89%), C (70%-79%), D (60%-69%), F (<60%).

Disclaimer: All of the above are subject to change due to circumstances beyond our control.

Students' Rights and Responsibilities

A complete description of student rights and responsibilities can be found on the Canvas page for this course.

The Census Date is September 8.

Last Day to withdraw from a course is November 3rd.

The final exam will be on December 8th.

Online Physics Resources

1. <http://lightandmatter.com/>
2. <http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html>
3. <http://www.physicsclassroom.com/>
4. <http://ocw.mit.edu/courses/physics/>

Course Objectives/Student Learning Outcomes

1. **Critical Thinking:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
2. **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

General Course Information

1. You are responsible for all the material covered in class.
2. Physics builds on itself. It is very important that you do not fall behind on the material.
3. You should read over the material before and after we cover it in class.
4. If you do not understand the material in the book, you will not understand the material on the tests.
5. It is very important that you spend time outside class reading the material and doing the homework. The only way you will understand the material is to spend time working on the problems.
6. I strongly encourage you to ask questions in class and come by my office any time you need help.
7. Regular classroom attendance is expected.
8. Using electronic devices for non-classroom activities is a distraction and if caught you will be asked to leave class.

Material for Test 1 (Aug 25-Sept.17)

Chapter 13 sections 1, 2, 3, 4, 5
Chapter 14 Sections 1, 2, 3, 4, 5
Chapter 15 Sections 1, 2, 3, 4, 7
Chapter 16 Sections 1, 2, 3, 4

Test 1 September 17**Material for Test 2 (Sept.19-Oct. 10)**

Chapter 17 Sections 1, 2, 4
Chapter 18 Sections 1, 2, 3, 5, 6, 7
Chapter 20 All Sections

Test 2 October 10**Material for Test 3 (Oct. 13-Nov. 3)**

Chapter 21 Sections 1, 2, 3, 4, 5, 7, 8
Chapter 22 Sections 1, 2, 3, 4, 5, 6
Chapter 23 Sections 1, 2, 3, 4, 5, 6, 7

Test 3 November 3**Material for Test 4 (Nov. 5- Dec. 5)**

Chapter 24 Sections 1, 2, 3, 4, 5, 6, 7, 8
Chapter 25 Sections 1, 2, 3, 4

Test 4 December 5

Final Exam December 8 10:15-12:15