

CTEC 1401
Applied Petrochemical Technology

Western Texas College

- I. Basic Course Information
 - A. Instruction in the basic principles of physics and their application to process facilities.
 - B. Topics include physical laws and properties and how these relate to the operation of processes.
- II. Student Learning Outcomes
 - A. Define terms and principles of applied physics.
 - B. Solve problems using basic laws of physics.
 - C. Use principles of physics to perform calculations on the operation of plant equipment.
- III. Major Course Requirements
 - A. Homework
 - B. Lab participation / attendance
 - C. Test / Final Exam
- IV. Information on Books and Other Course Materials
 - A. TBA
- V. Other Policies, Procedures and Important Dates
 - A. Please refer to the WTC Course [Catalog](#)
- VI. Course Organization and Schedule - Disclaimer: Schedule and content is subject to change at the instructor's discretion
- VII. Grading - All material must be turned in prior to the week of finals; **written work will not be accepted week of finals.**

Homework	40%
Lab	30%
Test (2)	20% (10% each)
Attendance	10%

- VIII. Disclaimer: Grading percentages subject to change at the instructor's discretion.
- IX. Schedule (subject to change)

Week 1	Newton's first law of motion and Linear motion (displacement, velocity, acceleration)
Week 2	Newton's second law of motion & Newton's third law of motion
Week 3	Momentum

Week 4	Test 1
Week 5	Work and Energy
Week 6	Rotational motion
Week 7	Electric Current & Electrostatics
Week 8	Magnetism and Electromagnetic Induction
Week 9	Test 2
Week 10	Atomic nature of matter (Solids, Liquids & gases)
Week 11	Atomic nature of matter (Solids, Liquids & gases)
Week 12	Temperature, heat and expansion
Week 13	Heat transfer
Week 14	Change of Phase & Thermodynamics
Week 15	Review
Week 16	Final

Last Modified: August 29, 2016