Physics 1308.002 & 1008.021 – Fall 2020
Introduction to Engineering/Physics
Department of Physics, Engineering and Astronomy, Stephen F. Austin State University

Instructor: Dan Bruton, PhD
Email: dbruton@sfasu.edu
Office: STEM 319 or 207Q
Phone: 936-468-2360
Office Hours: Monday through Thursday 12:00-noon to 2:00 PM (or by appointment)
Class Meetings: Monday and Wednesday from 3:00pm to 4:50pm; Synchronous Zoom Meeting
Course Home Page: https://D2L.sfasu.edu

Course Description
Introductory course on engineering/physics analysis with practice in analyzing and solving problems in physics and engineering. Includes use of computational devices and methods.
(3 semester hours, 2 hours lecture and 2 hours laboratory per week.) Co-requisite(s): PHYS 1008

Text and Materials
"Schaum’s Outline Series College Physics",

All other materials required for the course will be communicated to the student on D2L (the course website) throughout the semester.

Grading Policy
Each major exam will be graded on a 100-point scale. The course grade will be computed as shown below.

\[
\text{Course Average} = (0.75E + 0.15H + 0.10P)
\]

where
E = Exam Average
H = Average of Homework and In-Class Assignments
P = Presentations of Team Assignment

Letter grades are based on the ranges below.

A 90.0 - 100  B 80.0 - 89.9  C 70.0 - 79.9  D 60.0 - 69.9  F < 60.0

Attendance Policy
Attendance will be taken using completed assignments in D2L. PHYS 1308/1008 will be delivered as a live-stream course in Zoom on Monday and Wednesday from 3:00pm to 4:50pm. The Zoom link will be provided via email and in D2L. This means that there will be no face-to-face classes for this course unless the conditions improve before the end of the semester. There will be some opportunities to visit face-to-face with me during office hours but there will be no face-to-face requirement for the course.

Face Covering
All students and faculty must be wearing a mask or face shield while in the STEM Building regardless if you are maintaining a safe distance away.
Face Covering (Message from SFA)
Masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.

Exams
There will be six major exams, each covering a limited amount of lecture and text material. The final exam will not be comprehensive. The dates of these exams are listed in the course outline attached to this page. Students will have one week after each exam to review the exams and discuss the grades. No make-up exams will be given except in the case of an excused absence. An official written notice is required for an excused absence within three days of the exam. Any makeup exam must be taken within three days of the missed exam. Students who make below a 70 on an exam must visit with instructor before the following exam.

Homework Assignments
The due dates for each homework assignment will be posted in D2L. Homework will be electronically submitted for grading via D2L. No late homework will be accepted unless you have an excused absence. Your homework problems will be of professional quality and professionally presented. They will be complete in themselves to the extent that any competent person can determine the following: (a) the problem you are solving, (b) your method of solution, and (c) your answer. To assure these things you must adhere to the following rules.
✓ Use 8 ½ x 11 in. Engineer’s Computation Pad.
✓ Write in pencil on one side of the page only.
✓ Each problem must be started on a new page.
✓ Staple homework in the upper left corner and leave flat (not folded) before submitting for grading.
✓ Include the following when working a problem: problem number and statement (word for word), sketch, definition of variables used in the solution, units, vector arrows, numbering of equations when needed for clarity, organized steps in the solution, and identification of the answers with boxes. Required graphs should be attached to the back of the problem. Several problems will be selected for grading from each set.
Classroom Policies
For the benefit of your fellow students and your instructor, you are expected to practice common courtesy about all course interactions. For example:

- Be considerate toward your classmates and instructor and arrive to class on time.
- Do not leave class early and do not rustle papers in preparation to leave before class is dismissed.
- Avoid classroom distractions. Be attentive in class: stay awake, browse social media, etc.
- If you are late to class or must leave early, please inform your instructor in advance.
- Cell phones and other communication devices must be turned off during class.
- Be kind and respectful to your fellow students and your teachers.

Academic Integrity (A-9.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Students Counseling Center
Rusk Building 3rd Floor, Phone: (936) 468-2401; Email: counseling@sfasu.edu
The Student Counseling Center is available free of charge to students and is staffed with professional therapists to meet a variety of needs. All interactions with the Student Counseling Center are guaranteed confidential. Licensed Counselors are available from 8:00a.m.-5:00p.m. Monday-Friday. The department is closed on certain holidays, Spring Break and Winter Break when the university is closed. If you need assistance after hours or on the weekend, please call: University Police: (936)468-2608 or MHMR Crisis Line: (800)392 -8343. If the situation is life threatening, please dial 911.
**Acceptable Student Behavior**
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Please read the complete policy at [http://www.sfasu.edu/policies](http://www.sfasu.edu/policies)

**Program Learning Outcomes (PLO) or ABET Student Outcomes (SO)**
There are no specific program learning outcomes for the physics program addressed in this course.

**Student Learning Outcomes (SLO) or ABET Course Learning Objectives (CLO)**
By the end of the course, successful students will be able to:

1. Demonstrate the ability to analyze and solve introductory physics and engineering problems.
2. Demonstrate the ability to communicate analysis of problems in a professional manner.
3. Exhibit the ability to work in teams/groups effectively.

**General Education Core Curriculum Objectives/Outcomes (EEO)**
This course is not included in the general education core curriculum. Therefore, please see the learning outcomes above rather than any Exemplary Educational Objectives (EEOs).

**Course Objectives**
The course objectives are to develop basic introductory level problem solving skills in prospective engineers and physicists and to have students become familiar with Newton’s laws and associated conservation principles. A cooperative problem-solving approach is taken where students develop time management skills and teaming skills. This course along with analytic geometry will prepare the student for the rigors of the PHY 240 series. The calendar (at the end of this syllabus) outlines the tentative course of study.

**Email Communication**
All official course communication will be made using your SFA Jacks account. You must use your SFA email account for all communications. You will be notified via your SFA Jacks email account about grades and attendance. It is important to practice good email communications in college courses. Use “PHYS 1308” in the subject of your email messages. Use complete sentences and capitalization when appropriate. The body of your email messages should begin with your instructor's name and end with your name.
# Physics 1308

## Fall 2020

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