

Syllabus

Physics 1308: General Physics II

Fall 2018

Course Webpage: <http://www.physics.smu.edu/cooley/phy1308/>

When/Where: Tuesdays and Thursdays 9:30 pm - 10:50 pm
158 Fondren Science Building

Instructor: Dr. Jodi Cooley
151 Fondren Science Building
214-768-4687
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Teaching Assistant: Ms. Jasmine Liu
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Office Hours: TBD

Prerequisite: PHYS 1303 or PHYS 1307, MATH 1337 or MATH 1340

Course Objective:

The specific learning goals of this course are as follows. Upon successful completion of this course, students will be able to:

1. Explain the nature of electrical charge, force, potential, and fields and describe the behavior of electrical phenomena; explain the basic components of electrical circuitry, including conductors, batteries, resistors, and capacitors; explain the nature of magnetism and describe the behavior of magnetic phenomena; explain the nature of light and its connection to electricity and magnetism; explain the basic working of optical systems; explain how the study of electricity, magnetism, and light set the stage for a 20th-century revolution in our understanding of the universe;
2. Setup and solve quantitative problems in the areas described above, and thus be able to apply their understanding of electricity, magnetism, light, and optics to areas other than physics, such as medicine, biology, chemistry, electronics, and everyday life;
3. Demonstrate, through performance on homework, quizzes, in-class exercises and discussion, and exams, a clear understanding of the principles and application of electricity, magnetism, light, and optics.

Student Learning Outcomes:

Pure and Applied Sciences Level 1 [PAS1] Student Learning Outcomes:

1. Students will be able to demonstrate basic facility with the methods and approaches of scientific inquiry and problem solving.
2. Students will be able to explain how the concepts and findings of science or technology in general, or of particular sciences or technologies, shape our world.

Quantitative Reasoning [QR] Student Learning Outcomes:

1. Students will be able to develop quantitative models as related to the course subject matter.
2. Students will be able to assess the strengths and limitations of quantitative models and methods.
3. Students will be able to apply symbolic systems of representation.
4. Students will be able to test hypotheses and make recommendations or predictions based on results.
5. Students will be able to communicate and represent quantitative information or results numerically, symbolically, aurally, visually, verbally, or in writing.

Textbook:

Required: WileyPLUS Fundamentals of Physics by Halliday & Resnick (10th edition online) See course website and additional handout on information for obtaining the course learning system.

Homework: Homework will be assigned through WileyPLUS and must be submitted before 9:30 am on the due date. **NO CREDIT WILL BE GIVEN FOR LATE HOMEWORK.** I encourage you to discuss your work with a study group and use office hours if you have difficulty.

Exams: There will be three mid-term exams (Midterm Exam 1: Thursday, September 20th, Midterm Exam 2: Tuesday, October 16th, Midterm Exam 3: Thursday, November 15th) and a final cumulative exam (Friday, December 7th from 8:00 - 11:00 am.)

Grading: Your course grade will be based on in-class quizzes (5%) homework (15%), midterm exams (20% each) and cumulative final exam (20%).

University Honor Code: The student code of conduct can be found in the 2018 - 2019 Student Handbook which is available on the SMU website (<http://smu.edu/catalogs/>). All students will be expected to adhere to it. Any student found cheating or plagiarizing another's work will be given a zero for that assignment and a complaint will be filed through the Vice President for Student Affairs Office.

Disability Accommodations: Students needing academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit <http://www.smu.edu/Provost/ALEC/DASS> to begin the process. Once registered, students should then schedule an appointment with the professor as early in the semester as possible, present a DASS Accommodation Letter, and make appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement.

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (See 2018-2019 University Undergraduate Catalogue)

Additional Information: In accordance with Texas Senate Bill 11, also known as the "campus carry" law, following consultation with entire University community SMU determined to remain a weapons-free campus. Specifically, SMU prohibits possession of weapons (either openly or in a concealed manner) on campus. For more information, please see: http://www.smu.edu/BusinessFinance/Police/Weapons_Policy.

Important Dates:

Please see the University Calendar: http://smu.edu/registrar/academic_calendar.asp