

De Anza College Physics 10 Syllabus

Winter 2024

Course Details:

Lectures: Tuesdays and Thursdays 5:30pm-7:45pm

Location: Online via Zoom

5 Units

Instructor: David Laubner

Email: laubnerdavid@fhda.edu

*This is the best way to reach me!

Office Hour: Wednesday 12:00pm-12:50pm or by appointment

Key Dates:

Jan 15th: Martin Luther King Jr. Day - No classes

Jan 20th: Last Day to add classes

Jan 21st: Last day to drop classes without a W

Feb 19th: Presidents' Day - No classes

March 1st: Last day to drop classes with a W

Final Exam Date: Tuesday, March 26th from 6:15 pm - 8:15 pm, held online

Prerequisites:

MATH 109, 114, 130 or equivalent; or a qualifying score on the Intermediate Algebra Placement Test.

Text:

Conceptual Physics by Hewitt 12th edition. This is simply the version of the text that I will be using for reference. You are welcome to use a different version of the text, or an online version if you prefer.

Attendance:

Attendance is required for this course. If you miss more than three lectures, then you may be dropped from the course. Written communication is required to excuse an absence.

Course Description:

This course will explore the structure of physics from a purely conceptual standpoint. Although few mathematical techniques will be used throughout the course, verbal logic and reasoning will serve as the primary method of expressing the rationale of our universe. Although it may seem easier to study physics without mathematics, this can be demanding, and it requires careful and precise use of language.

We will start with mechanics and study motion, Newton's laws, energy, and momentum. Other topics that we will discuss include electricity and magnetism, the structure of an atom and the nature of matter, oscillations and wave motion, heat and sound. We may touch on some special topics such as relativity and quantum mechanics if time allows.

Homework:

Homework will be assigned each week on Tuesday, and due the following Tuesday at 11:59pm. There will be 10 total homework assignments.

Quizzes:

Quizzes will take place every other week starting with week 2 except for week 6, when we will have our midterm. There will be four quizzes total.

Exams:

There will be one midterm and one final for the course. They will both be cumulative, covering all of the material leading up to them. The midterm will take place during week 6, and the final will take place during the date and time stated above.

Project:

There will be a project due during the last week of instruction. In addition to a presentation, a project report will be submitted.

Grade Distribution:

| Assignment | Percentage |
|------------|------------|
| Homework | 30% |
| Quizzes | 25% |
| Midterm | 15% |
| Final | 20% |
| Project | 10% |

Grade Scale:

Grades will be assigned according to the following chart.

| | |
|---|--|
| A | 88-100 |
| B | 75-88 |
| C | 60-75 |
| D | 50-60 |
| F | Not given unless an exam is missed, or attendance is unacceptable. |

Student Learning Outcome(s):

*Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of physics in general.

Academic Integrity:

The work that you submit must be your own. Cheating will result in a score of 0 for the assignment or exam in question. Further action will be taken for subsequent incidents of cheating.

Accessibility:

It is my firm belief that physics is a subject that everyone should have equitable access to learn. If at any point you feel as though you need additional support, academic or otherwise, or something is hindering your learning, then please let me know. Accommodations will be made for those with the appropriate paperwork.

Student Learning Outcome(s):

- Examine critically new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of physics in general.

Office Hours:

W 12:00 PM 12:50 PM Zoom