

Physics 50 Course Syllabus

- Instructor:** Ellen Judd
- Lecture:** Monday and Wednesday, 5:30 PM – 7:30 PM, on Zoom
- Office Hours:** Monday 1:00-2:00 PM
Monday 7:30-8:00 PM
Wednesday 7:30-8:00 PM
On Zoom
Make an appointment for other times using Canvas Calendar
- Contact Info:** Message me with Canvas Inbox, email juddellen@fhda.edu or text 650-248-8931
Please no texts after 10 PM. Feel free to email any time.
- Class Website:** Canvas: <https://deanza.instructure.com> or use the link on MyPortal
Use the same login ID and password you use for MyPortal

Required Text & Materials:

1. *College Physics*, OpenStax
Digital version is free: <https://openstax.org/details/books/college-physics>

Optional Materials:

1. Scientific Calculator. You can use your phone, but I find a calculator easier to use. You need one that can do trig functions and allows you to use parenthesis for longer expressions. It should cost about \$10. If you already have a graphing calculator that will work.
2. *Physics for Scientists and Engineers*, Serway and Jewett. This is a calculus-based book that is used for some sections of the Physics 4 series at De Anza.
3. *smartPhysics Classical Mechanics*, Gladding, Selen, and Stelzer. This book covers the same topics as the textbook more concisely.

Grading Policy: All assignments will be graded as complete or incomplete **X**. No points or percentages. If you complete all the B-level tasks for the quarter you'll earn a B. If you complete a couple of additional A-level tasks, you'll earn an A. Rubrics will be provided for each task to show what is considered complete.

B-level tasks:

Homework. There will be one homework assignment each week, including 2-4 practice problems and one longer more open-ended question. You will do the homework problems on paper and submit a picture of your work on Canvas. Working through these problems is crucial for understanding the material in this course.

Group Work. On Wednesdays during class time you will meet with your group and complete a group work assignment.

Labor Log and Participation. Each week, you will keep track of the labor you perform for this class as a way of reflecting on your learning process. I have provided a template for you to use to keep track of how long it takes to complete each task and how you felt while working on it. You will also record how you participate in class. The labor log and participation task will be considered complete for the week if you keep your labor log up to date and participate at least twice during the week. Options for participation are:

- asking or answer a question during lecture, using your voice or the chat.
- posting in Canvas Discussions
- asking me a physics question in office hours or by email or text

Check Ins. Twice during the quarter you will meet with me for 10 min to talk about the tasks you've completed. I'll ask you questions about the problems you've solved. You don't have to answer my questions perfectly, and you won't be graded on your answers. To pass the check ins you just need to convince me that you did the work you submitted and that you understand the work you did.

Practice Exams. There are no exams in this course! However, to prepare you for future physics classes, we will be doing two practice exams. The purpose of these practice exams is to assess your understanding up to that point, and to practice solving problems in a timed format. You will get credit for these practice exams if you make a reasonable effort at solving each problem. You will also submit a revised version of the solved exam problems.

Finding Physics Project. You will give a presentation to a group of your classmates in which you apply the physics concepts learned in the course to a real-world situation.

A-level tasks:

To earn an A in this course, you will complete all of the B tasks, and 1-3 additional projects, for a total of about 20 additional hours over the quarter. If you want to work towards an A, you will meet with me during the first two weeks of the quarter to plan your projects. You will also meet with me twice during the quarter to give me updates on your progress. Some examples of A level tasks are:

- Research a topic that interests you that relates to the course, and present your results to the class in the manner of your choice
- Conduct an experiment
- Plan a lesson for the class
- Act as a group leader

These are just suggestions. I want to hear your ideas. Consider your skills and interests when planning your projects. Or think about a skill that you want to spend time improving.

Final Grade Details:

- A Range
 - ◆ Complete all the B level tasks, except that you may miss one homework, one group work, and one week of participation.
 - ◆ Choose 1-3 A level tasks, for a total of about 20 hours of additional labor over the quarter. Write up a proposal, meet with the instructor to discuss, and get your proposal approved by the instructor. This step should be completed during the first two weeks of class.
 - ◆ Meet with the instructor twice during the quarter to discuss your progress.
 - ◆ Complete A level tasks.
- B Range
 - ◆ Complete all the B level tasks, except that you may miss one homework, one group work, and one week of participation.
- C Range
 - ◆ Complete at least $\frac{3}{4}$ of the B level tasks, including at least one check-in.

Office Hours: I enjoy working one-on-one with students in office hours. I can help with a problem you are stuck on, strategize about productive study habits, or discuss extensions and applications of concepts learned in class. I encourage you to come and meet with me during office hours. If the posted times don't work for you, you can make an individual appointment using the Canvas Calendar.

Class Norms: Treat your classmates and instructor with respect at all times. Use language that is appropriate for the classroom in all videos, discussion posts, chat windows, etc that are associated with this course. Keep in mind that humor can easily be misinterpreted in a virtual setting, so please use clear and direct language.

Academic Integrity: For each assignment, you will provide references for any sources you used, and any people that were helpful to you in completing the task. I encourage you to work with other students, visit the tutoring center, etc. However, it is not acceptable to simply copy someone else's work. In order to learn physics you need to do the hard work of learning. You will not receive credit for any copied assignments, or any assignments that are very similar to a published solution with no references given. Do not post the assignments from this class on any website or other publicly accessible place. Posting assignments for others to solve disrupts the learning process for you and the rest of the class.

Dropping and Changing Grading Options: It is the student's responsibility to drop if they no longer want to take the class. It is the student's responsibility to be aware of deadlines for dropping the class and for changing grading options.

Disability Statement: Any student who needs an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. I will work with the Disability Resource Center to coordinate reasonable accommodations for students with documented disabilities. For best results this should be addressed as soon as possible.

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 mechanics.