### **Physics 50 Course Syllabus**

**Instructor:** Ellen Judd

**Lecture:** Monday through Thursday, 11:30 AM - 12:20 PM, on Zoom

Office Hours: Monday 1:00-2:00 PM

Thurs 12:30-1:30 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: <a href="https://deanza.instructure.com">https://deanza.instructure.com</a> or use the link on MyPortal

Use the same login ID and password you use for MyPortal

#### **Required Text & Materials:**

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

2. Scientific Calculator (should cost about \$10) – a graphing calculator is OK but not necessary

#### **Optional Materials:**

1. *smartPhysics Classical Mechanics*, Gladding, Selen, and Stelzer. This book covers the same topics as the textbook more concisely.

**Homework:** Homework problems will be assigned weekly. You will do the homework problems on paper and submit a picture of your work on Canvas. In addition to your written work, I will sometimes ask you to submit a video in which you explain how you did one of the homework problems. Working through these problems is crucial for understanding the material in this course, and for doing well on the exams. Students are encouraged to work together on the homework. However, it is not acceptable to simply copy another student's work. If asked, students should be able to explain how they reached their answer for each homework problem. The lowest homework score will be dropped. This is meant to allow some flexibility for personal emergencies. Late homeworks will be marked down by 25%. This is because I post homework solutions; it's not fair to give full credit to someone who submits after the solutions are published.

Attendance and Participation: You have two options for participating in this course.

Option A) Attend the Zoom classes and participate by asking and/or answering questions, answering polls, and working problems in groups.

Option B) View lectures or read relevant textbook sections and work lecture practice problems. Participate in Canvas discussions and/or come to office hours. You could, for example, ask a question about the lecture material, answer another student's question, post a video of something you saw that relates to the concepts we're studying, or post links to videos or websites that helped you understand a topic.

Participation will be graded on the effort and engagement shown, rather than on correctness of answers. Students may miss one week of participation without affecting their participation grade.

**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.

**Exams:** There will be three midterm exams, each lasting 1 hour, and a final exam lasting 2 hours. Exams will happen during scheduled class times. You will be on Zoom with your camera on during exams. Exams will include short-answer questions and calculations similar to homework problems. You may use your notes during exams. You may not use the internet or communicate with other people during the exam. **If you are not able to attend class on Exam days, please contact me as soon as possible.** To allow for personal emergencies, I will drop your lowest exam score.

Academic Integrity: A score of zero will be given on any assignment/test where cheating is involved. Any cheating will also result in a referral to college administration. For this class cheating means: (1) providing to other students answers or partial answers exam questions (2) obtaining from other students answers or partial answers to exam questions, (3) obtaining information or direct answers from unauthorized materials during exams. (4) Uploading any homework or exam problems to Chegg or other websites. Students who need help in understanding exam questions should consult with me to avoid the appearance of cheating. Please note that you are encouraged to work with your fellow students on homework assignments and labs, but should not copy their work. If you receive a zero on an assignment because of cheating, that score will not be dropped.

**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.

**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, let me know and we can arrange a time to meet.

I know that you can all be successful in this course if you attend lectures, work homework problems, participate strongly in class, work additional problems, ask questions, and work more problems. I am looking forward to a great quarter!

**Course Grade:** Your final grade will be based on the total number of points you receive for the following:

<u>Item</u>	<u>Points</u>
Homework	200
Class Participation/Attendance	120
Exam 1	120
Exam 2	120
Exam 3	120
Finding Physics project	200
Final Exam	120

I may adjust the curve based on the class results. However, I strive for:

A+: for extraordinary achievement A: 93% - 100% A-: 90-92%

B+: 88-89% B: 83-87% B-: 80-82%

C+: 78-79% C: 73-77% C-: 70-72%

D: 60-69% F: < 60%

Dec 7

# Schedule of Classes – Exam dates are fixed but the topics covered each day are subject to change

Sept 21-24	Newton's laws, forces, vectors
Sept 28 – Oct 1	Newton's Laws, Kinematics
Oct 5 – 8	Kinematics, Exam 1 Thurs Oct 8
Oct 12-15	Projectile motion,
Oct 19-22	Circular motion, friction
Oct 26-29	Applications of Newton's laws, Exam 2 Wed Oct 28
Nov 2-5	Work and Energy
Nov 9-12	Energy Conservation
Nov 16-19	Energy Conservation, Exam 3 Tues Nov 17
Nov 23-26	Momentum Conservation
Nov 30- Dec 3	Momentum Conservation

Final Exam 11:30 AM – 1:30 PM

## **Student Learning Outcome(s):**

<sup>\*</sup>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.