

# Physics 11A – Mechanics – Fall 2020 - Online

## LAB SYLLABUS – Section 11,14,15 – Eiteneer

### INSTRUCTOR

**Dr. Daria N. Eiteneer-Harmon**

I go by Daria or Dr. Eiteneer, or Professor Eiteneer.

**Contact:** Send me a message on Canvas, give me 24-48 hours to respond before sending another message. Once Canvas course goes live, I will not respond to any email communication, unless I specifically direct you to email me.

**Email:** [eiteneer-harmon@csus.edu](mailto:eiteneer-harmon@csus.edu) (just in case)

**Office Hours:** Fridays, 2-3 pm

### CLASS TIME AND LOCATION:

All three of these lab sections will be taught ASYNCHRONOUSLY. What that means is that I am going to post material for each week early during the week, and you will work on this material throughout the week (with your group – see below), and then on Fridays I will briefly go over the experiment and answer your questions during office hours. Office hours will be recorded, and recording will be posted on Canvas.

### COURSE FORMAT

We will perform one laboratory per week, roughly following the “Physics 11A Experiments in Physics” lab manual (available in the book store). The lab manual is MANDATORY. For the list of lab experiments, see schedule below. First lab meeting (Friday, September 4<sup>th</sup>) is MANDATORY.

Each Monday, I will publish some videos and/or description of the experiment. Each laboratory experiment, together with watching videos, reading all the necessary information, performing the experiment (virtually) and answering all the questions on the accompanying worksheet, should take about 3 hours. Lab reports (usually in the form of a worksheet will be due on Sundays, at 11:59pm. You will turn in one lab report per group (3 or 4 students per group). No late lab reports will be accepted. **No make-up labs are allowed, for ANY reason.** Each lab report will count the same, and I will drop one lowest lab report grade at the end of the semester.

**Groups:** Each week I will break you up into groups (by random draw), with no more than 4 students per group. Please do not try to rearrange the groups or attempt to make your own. For that week, you will work with your group, and it will be your responsibility to get ahold of other group members (you can do so on Canvas, by clicking People tab on the left). **Do not give out your phone numbers to your group - use Canvas, Google Drive, or school email.** Try to get in touch with your groups early in the week, so you are not hard pressed for time to get all the work done. If, for some reason, you have a group member who is not responsive to other members' attempts to contact him/her/them, I need to know about it ASAP. Every person in the group needs to pull their own weight, or risk getting a zero. The group will be responsible for that week's laboratory experiments and report/worksheet, unless otherwise directed. It will be up to each group to divide the work between the group members, don't ask me for help in that – you can figure out among yourselves who is responsible for what part. I recommend meeting at least once on Zoom - create your own meeting room (use Zoom tab on the left). You will turn all assignments for that week as a group, with all the group members names submitted in the "comment" box and/or on top of the first page. The worksheets and the labs will be due Sundays, at 11:59pm, unless otherwise specified. I recommend setting aside a couple hours a week, once in the middle of the week, and once towards the later portion of the week (Tuesday and Friday? maybe), during which you can talk to your group mates, and figure out all the group stuff.

**Weekly quizzes:** There will be a quiz every week when there is an experiment (welcome week, project weeks, and “no lab” weeks excluded – see schedule). The quizzes will be based on your understanding and performance of the experiment (it's ok if you have not finished the experiment by the time of the quiz yet, but you at least need to read the lab manual and all the published material by that time). The quizzes will be given on FRIDAYS, due Fridays at 11:59pm. You will have 24 hours to access the quiz. Once opened, you have ONE attempt, lasting 15-20 minutes, depending on the difficulty of the quiz. You may use your lab manual and any lab material notes on the quiz (textbooks and calculators are ok too), but no outside help (outside help is someone else in this class, a tutor, google, internet, Chegg, etc.). While I generally encourage sharing, group work, and collaboration, a quiz is not a place for

that. Quizzes are your own work (see Honor Code statement below). No late quiz submissions will be accepted, but the lowest quiz score will be dropped. I will NOT discuss that week's quiz during office hours, but you are welcome to send me a message about it after you have taken the quiz.

**\*Note: if you have a disability with appropriate paperwork from SSWD, contact me early during the semester so I can give you additional time for the quizzes, as determined by SSWD.**

**Honor Code.** There will be an Honor Code statement included into each quiz. By initialing the Honor Code statement, you agree to not cheat on that quiz, to put it plainly. Cheating includes, but is not limited to, using resources that are not allowed (basically anything besides your textbook, lab manual, lecture notes, laboratory material posted on Canvas, and calculator), collaborating with other students, getting help from a tutor (online or otherwise), getting help from any online programs (such as Chegg, etc.), using google or internet to search for the answers. If the Honor Code statement is left blank, you will receive a zero for that quiz. If I suspect any cheating and/or plagiarism (and yes, I WILL KNOW), I will set up a Zoom appointment with you, which you will be required to attend, with a working microphone and camera. If you do not attend that appointment, I will fail you. If, during that appointment, you are not able to assuage my suspicions, I will fail you.

### **GRADING**

The lab is only a portion of the total grade for Physics 11A. Please note that per Physics/Astronomy Department policy, each student is only permitted to miss up to 2 labs during the semester and must achieve a lab score of 60% or better in order to pass the overall 11A class. Students who receive below 60% in lab or miss 3 or more labs during the semester automatically receive an F in the course, regardless of their performance in the lecture/discussion part of class. For details on the complete grade for the course, see the main syllabus for Physics 11A. The laboratory portion of your grade will be determined as follows: grading this semester will be based on a 5-point scale (4.01-5.00 is an "A", 3.01-4.00 is a "B", 2.01-3.00 is a "C", 1.01-2.00 is a "D", 0-1.00 is an "F").

- 70% of your lab grade will be based on the average of lab reports/worksheets (lowest one dropped).
- 20% for the quizzes (lowest one dropped).
- 10% for your friction project. This grade cannot be dropped

### **ATTENDANCE and PARTICIPATION**

- ✓ Please ask lots of relevant questions and thoughtfully contribute to class discussions during office hours! Work hard to get along, be considerate of the other group members, and contribute to your group's overall effort.
- ✓ This is a college class, and thus I expect you to behave appropriately.
- ✓ If you don't show up to the first mandatory Zoom meeting on September 4<sup>th</sup>, or do not participate in either of the first 2 labs, I will drop you from the course.

**TENTATIVE SCHEDULE (by week)** - \* Denotes a Labster (virtual) lab – more information will be published on Canvas

- 1- Welcome
- 2- Measurements
- 3- Vectors and Scalars\*
- 4- Projectile Motion
- 5- Forces\*
- 6- Friction Project
- 7- Friction Project
- 8- Friction Project
- 9- Work Energy
- 10- Energy\*
- 11- NO LAB (Veterans Day is Wednesday)
- 12- Linear Momentum
- 13- NO LAB (Thanksgiving is Thursday/Friday)
- 14- Angular Momentum
- 15- Gravitation\*