

# Physics 6A

## Syllabus

### Fall 200X

**Lab TA:** Mike Griffo  
**Email:** MGriffo@physics.ucsc.edu  
**Office Hours:** 4pm -6pm Wednesday  
**Office Hours Loc:** 360 EMC

**Grading:** 25% Pre-labs  
75% Laboratory Notebook

#### **Preparation:**

Everyone is expected to have read the lab before coming in. In order to help you prepare for lab, there are pre-lab questions in the lab manual at the end of each experiment. These will be due at the BEGINNING of lab each week. It is extremely important that you complete and turn in these questions as they are instrumental in understanding the lab, completing the lab, and in my evaluation of your performance.

#### **Lab Notebooks:**

Please keep a complete record of what you did during lab in your notebook. This should include information about all the equipment that you used, the measurements that you made (and errors associated), the calculations that you made, and the results. Essentially it is a record of each thing you did in lab, written in a step-by-step process so that if you or anyone else wanted to complete the lab in the manner that you did it in, they could.

It should also include the mistakes that you made and what you did to correct them. If errors are made, then draw a single line through them so that if you if it turns out they were correct the information is not lost. For this reason and others I require that you write in blue or black ink and in a bound graph paper style notebook.

One essential part of the lab notebook is to show that you were thinking. Lab notebooks that have results that are not within the errors of the accepted values can still get high marks if the author shows that he/she understands the experiment, followed it to the best of their ability, and thoroughly tried to understand what errors might have occurred. On the other hand if I see a lab notebook that has no mistakes shown and poor results, I will assume that the author did a half hearted attempt at the lab and it will be marked down accordingly.

This record is important for you to keep because it will help in several ways:

- 1 Contain a coherent record of your thoughts and ideas during the data taking
- 2 Provide a clear record of the step by step process that you went through because there might be a lab report (on a lab of my choosing) due towards the end of the quarter.
- 3 And lastly, your grade is based on the Notebook.

If there is a follow-up question for the lab, it is required that it is completed at the end of lab, so it should be included in your lab notebook at the end of your lab notes for that day. Your solutions to the pre-lab questions should not be in your lab notebook, but turned in on a separate sheet of paper at the beginning of lab.

### **Lab Conduct:**

It is required for you to complete every lab. When you come into lab, drop off your pre-labs on the front desk, pick up any handouts that might be there, and your lab notebooks. Be careful with the equipment and if something does break let me know. There is to be no eating or drinking in lab. We should still have fun though, just without food. When you leave lab you should take everything that you brought in with you (leave no trace) and turn off all equipment that you used.

### **Lab Schedule:**

<u>Date:</u>	<u>Experiment</u>
Oct 3, 5	1) Oscilloscope
Oct 10, 12	2) Kinematics
Oct 17, 19	3) Dynamics
Oct 24, 26	4) Energy Conservation
Oct 31, 2	5) Forms of Energy
Nov 7, 9	6) Rotating Reference
Nov 14, 16	7) Rotational Dynamics
Nov 21, 23	Holiday
Nov 28, 30	8) Harmonic Oscillator

It is required for you to attend every lab. If you know that you will not be able to attend a lab, then you will have to attend another lab section. Because the equipment is put away and the labs for the following week are set up on Fridays you can only make up a lab by attending another section on the **same week** that you were unable to attend. To do this, you must contact me and the TA of the section that you want to attend before you show up to that section. You must also turn in your pre-lab to my mailbox before the date of your regular lab time. If there are extenuating circumstances, one missed lab might be permitted, but it will be reflected in your evaluation. **More than one missed lab will result in a failing grade, as required by the department.**