

**Physics 110 Laboratory  
Spring 2014  
General Laboratory Policies**

Please bring the following items with you to each lab:

- \* a laboratory notebook
- \* a ruler (preferably clear- in metric)
- \* a calculator

The tentative laboratory schedule for this term is:

<i>week</i>	<i>date</i>	<i>laboratory</i>
<b>1</b>	<b>April 1</b>	<b>No Lab</b>
<b>2</b>	<b>April 8</b>	<b>Kinematic Graphs</b>
<b>3</b>	<b>April 15</b>	<b>Velocity, Acceleration, and Force</b>
<b>4</b>	<b>April 22</b>	<b>No Lab</b>
<b>5</b>	<b>April 29</b>	<b>Hooke's Law &amp; Oscillations</b>
<b>6</b>	<b>May 6</b>	<b>Projectile Motion</b>
<b>7</b>	<b>May 13</b>	<b>Karate Board</b>
<b>8</b>	<b>May 20</b>	<b>Ballistic Pendulum</b>
<b>9</b>	<b>May 27</b>	<b>No Lab</b>
<b>10</b>	<b>June 3</b>	<b>Standing Waves</b>

**Important: You need to attend all 7 labs and you must turn in all lab reports in order to pass the course!** Please note that although your lab grade is part of your course grade (20%), you need a passing lab grade in order to pass the course and you must do all labs and turn in all reports to pass the lab!

There are few excuses for missing your scheduled laboratory meeting, and almost none for doing so without giving advanced notice. If you have an important conflict, inform your lab instructor **before** the lab meeting and arrange to make up the lab as soon as you can. If you are ill the day of the lab, contact your instructor as soon as possible to arrange a make-up (e-mail is helpful for that). The laboratory set ups are involved and change from week to week, so it may be difficult to make up an unplanned absence. It is very important that you not just make it up on your own without your instructor's knowledge.

You are encouraged to work with others in the lab to perform the experiments, collect common data, and work in a group to analyze your results. However, ***the laboratory work that you turn in to be graded must be your own work***, i.e. your lab reports must be in *your own* words. Any lab report that has wording nearly identical to that of another report will be considered plagiarized.

Here are a few pointers to remember when writing your lab.

- Always specify **units** when writing down a number
- Always include your lab partner's name.
- Always label the axes on your graphs, and title the graph with a descriptive title. Be sure to plot the independent variable as x and the dependent variable as y and to write 'y vs x' and not 'x vs y' in your text. This is a common pitfall.
- Always indicate *both* the uncertainty estimate in numerical quantities resulting from your measurements, as well as a comparison of the measured results with theoretical model predictions or known values. This means that each measured or derived quantity should have a  $\pm$  uncertainty, while the final results should be compared to the theoretical predictions by finding the % difference.
- Finally, if you determine that your answer is wrong because you made a mistake, don't just hand in a lab which says "I made a mistake". Find the mistake, or come and ask for help and then fix it !!