TA: Zack Draper
http://www.astro.uvic.ca/~zhd
A150

Classroom : Bob Wright Centre A107
Section B01 : Monday 2:30-5:20 PM

Policies:

- There are 10 labs taught each week (skipping over holidays or reading break). See the lab schedule for specifics. One lab is a night lab and will occur when we have good weather. It may be scheduled at a different time then the lab section itself.

- You must have a passing grade in this lab section to pass the class. If you miss a lab section, visit the course website to see a listing of all lab sections being taught that same week. Each lab is taught during a given week, so you should makeup the lab during the same week.

- Labs are always turned into your TA (me) and not the TA you sat-in with to make up the lab.

- Turn in your lab to the 1st floor of Elliott in the south physics lab wing, just outside room 139.

- There are no late labs. If a lab is not turned in on time it you get a zero for that lab. If there are extenuating circumstances, contact me before the due date.

- Lab write-ups are due one week from the lab. The latest possible time to turn in is at the beginning of the next lab section.

- If you have questions email me and if you'd like to meet outside of class just email me to set up a time.

Grading:

For each lab, you will turn in a lab report which will have the following sections. They must be in your own words and not a direct copy of the lab manual. Plagiarism gets a zero. The grading is mostly holistic and subjective to the given lab (out of 10 points). If you have a complete lab report expect a grade of 9-10. If 1-2 sections are incomplete then 7-8. If there are egregious errors or more then 2 sections incomplete then expect a

grade of 6 or less.

Lab Write-up:

The idea of the lab write-up is to get you thinking about individual aspects of the scientific method. Writing out each section in order, breaks the lab down succinctly to give clarity to what you know or don't know. Read the beginning of the lab manual for additional information and suggestions for writing a good lab write-up.

Objective or Purpose:
State what the point of the lab is in 1-2 sentences. *Always included in the lab write-up.*

Introduction:
What information would you need to know before carrying out the lab? What have you learned in class which is relevant to this lab? What expectations of the results do you have prior to doing the lab? Most importantly, what systematic assumptions are you making in order to do the lab? Define some key terms used in the lab. *Always included in the lab write-up. 2-3 paragraphs.*

Equipment:
List out everything you used in the lab. *Always included in a lab write-up. Bullet point.*

Procedure:
List out each step you did during the lab from the start to when you achieve a result. How was each piece of equipment listed previously used? State **how** you did the lab, not **what** you did in the lab. *Always included in the lab write-up. Bullet point. ~10 steps, but completeness matters more than number.*

Observations:
If there were sketches, drawings or diagrams made during the procedure, include them here. *Not always included in a lab write-up, depends on the lab.*

Tables/Measurements:
Record numerical information taken during your procedure. If you need data for your graphs or calculations, include them here. *Always included in the lab write-up.*

Graphs:
Any plot made during the procedure should be included here. Label axis with units and increments which are clearly legible. *Not always included in the lab write-up, depends on the lab.*

Calculations:
Show only an example calculation takes the data you measured to your results. Also include error propagation calculations here. *If you used a calculator, you should*

probably include this section.

Results:
What was the final product of the lab that you arrived at? Summarize observations and report values from your calculations. A*lways included in the lab write-up.*

Questions:
If there are question explicitly stated include their answers here. *Not* a*lways included in a lab write-up, depends on the lab.*

Conclusions/Discussion:
Do your results make sense? Compare to an expected value. Were the results within the derived uncertainty? What systematic errors occurred in the lab that would explain any discrepancy? Do your results match you expectations you had from the introduction? *Always included in the lab write-up.*

References:
If you use any work besides the lab manual put citations here. Wikipedia is a good starting point, but don't use it as a reference. Follow its citations to the original work and judge its content for yourself.

Evaluation:
Completely optional. Comment if you think the lab can be better and how.