

Physics 121 Laboratory

Meeting Times: Tuesday 1:00 – 3:30pm & 3:30 – 6:00pm
Meeting Location: Workman 115

Instructor: Tina Gueth
Contact Email: tgueth@nmt.edu
Office: Workman 327
Office Hours: Monday 11:00 – 1:00pm or by appointment

Materials: Physics121 Lab manual (handed out during the first lab session)
Calculator & spiral notebook

Lab Exercises: I will give a short introduction to each lab in the beginning of class. The lab report is due at the beginning of Tuesday's lab session, **unless** stated otherwise!
Late labs will be reduced by 15% each day, while lab reports turned in one week after the due date will not be graded and are an automatic zero. *Please proof read your lab reports.* It will help you, and your grade, to write complete sentences.

Grading: There will be a total of 12 graded labs, where each lab is scaled equally. Each lab is worth 20 points. At the end of the semester, the lowest lab grade will be dropped, **except** for any automatic zero received.

Attendance: Attendance is **mandatory!** I expect you to attend every lab session. If you want to use an absence as your drop grade, you need to inform me of your absence **well in advance**. If your absence was due to an emergency, I will require proof.

Policies:

1. Please be ON TIME.
2. Read the labs before coming to class. I reserve the right to give a pop-quiz about that day's lab!
3. A lab report that is turned in way past the above stated deadline, unless you obtained my permission, is an automatic zero and **cannot** be used as your drop grade!
4. No make-up labs are allowed. You need to bring any issue with a deadline to my attention ahead of time for any consideration.
5. Questions in class or out of class are always welcomed! You can email me, stop by my office, or come to my help session.

Lab Reports:

Attendance and raw data count 40% of the lab grade, while the lab reports count 60%. The report should be typed to avoid any issues with illegible writing. **Do not use bullet points!** Write complete sentences and paragraphs. Points will be taken off for incomplete sentences.

The following have to be included in each lab report:

- 1) At the beginning of the report, include the name of the lab, your name, the TA's name, the date, and the names of all your group members
- 2) Raw Data: your data recorded during that lab, which needs to be attached/stapled to the write-up. This is **NOT** considered the report itself but a required support for your lab report. **To receive full credit**, the raw data has to be checked and signed by me before you leave the lab that day!
- 3) Introduction: write several sentences that describe the purpose of the lab (consider what the lab is about and what you are trying to accomplish).
- 4) Methods: brief description of the lab set-up and procedures, including a sketch of the lab apparatus (label it accordingly)
- 5) Analysis and Conclusions: Organize the data in clearly labeled tables, and any graphs, which also need to be labeled clearly. Show all equations and corresponding calculations (include units!). Include your error analysis in this section of the lab report. Explain your results and compare them to those predicted by theory. Provide sources of error and explain how they can affect your results. Make sure to answer any questions stated in the lab in complete sentences. Also write 2 or 3 sentences explaining what you learned from the lab and its relevance to physics.

Plagiarism:

Please turn in your own work! Labs are a group effort but plagiarism will not be tolerated and dealt with according to NM Tech standards. Data obtained during lab session will be the same within each group, as well as some of the data analysis, but all other sections of the lab report *must be your own work*. The first offense of any plagiarized, cheated, or improperly collaborated work submitted will receive a zero (this grade **cannot** be dropped) and will be reported to the department chair. Any second offense will cause the automatic failure of the course and possible discharge from the university.

Simply put: Do not turn in anything that is not from your own mind without giving due credit, which does include the lab manual!