

3306 physics laboratories, Spring 2025

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<https://www.physics.smu.edu/saptaparnab>



Intro lab: Resources and third-week checklist

Resources

- Weekly worksheet with mandatory and graded pre-lab submissions and information for your required preparation, experiment introductions, uncertainty analysis summary and labs: <https://www.physics.smu.edu/saptaparnab>

Your learning outcomes today

Keep asking your instructor until you have thoroughly understood the concept of uncertainties.

- ☐ Measure the internal resistance of a battery
- ☐ Use the function generator to generate various waveforms
- ☐ Explain the various settings of the oscilloscope, check the manual and test as many features as possible
- ☐ Additional item if there is time: to show that you understand error propagation, propagate the uncertainty on the length and mass measurements to an uncertainty on the density

Additionally you will need to know how to

- ☐ work with jupyter-notebooks

Make use of your instructor's office hours and ask them about your graded worksheet/report or about your preparation for the following week's experiment.

Notes: