3306 physics laboratories, Spring 2025

Prof. Saptaparna Bhattacharya
https://www.physics.smu.edu/saptaparnab



Intro lab: Resources and fourth-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.

- \Box Measure the internal resistance of a battery
- $\hfill\square$ Use the function generator to generate various waveforms
- $\hfill\square$ Explain the various settings of the oscilloscope, check the manual and test as many features as possible
- □ Install capstone and record data for the fluid flow and differential and absolute pressure based on Bernoulli's principle

Additionally you will need to know how to

- \Box work with jupyter-notebooks
- $\Box\,$ install capstone

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: