

GP I Lab

Fall 2020

instructor: Vinu Abeywick
email: vabe@nyu.edu
section 10: Wed 4.00-6.20pm
section 20: Thu 11.00am-1.20pm
location: Meyer 222
zoom office hours: Wed 1-2pm, Fri 2-3pm
web: https://physics.nyu.edu/~physlab/GenPhysI_PhysII/genphys1.html

Description

This course is intended to demonstrate the basic principles of mechanics and heat. All labs are offered both in-person and online. You decide at the beginning of the semester which mode you will take. You can find the lab manuals at the course website linked above.

Sep 16-17	Policy Review
Sep 23-24	Motion 1
Sep 30-Oct 1	Motion 2
Oct 7-8	Newton's 2nd Law
Oct 14-15	Work-Energy
Oct 21-22	Conservation of Energy
Oct 28-29	Collisions in 1D
Nov 4-5	Ballistic Pendulum
Nov 11-12	Centripetal Force
Nov 18-19	Human Arm
Nov 25-26	—
Dec 2-3	Absolute Zero

In-person students: you will perform the experiments individually. You should read the manual before the session so you know what to expect. Please bring a mask to class.

Online students: each week we'll post the relevant lab materials (data, videos, simulations, etc). You should base your report on data we provid. There will be two office hours each week where you can ask questions and get help. Asides from that you'll be working fairly independently, and it's your responsibility to manage your time and keep up with the schedule.

Assignments

Each week you will write a report on the experiment [you] performed that week. The report is due one week after the scheduled lab session. In the shared folder there are some references on how to write lab reports and perform error analysis. But don't feel you need to adhere strictly to these guidelines—different labs will have different requirements, and you should use your intuition for what to include in your report.

Reports will be graded out of 10. One point will be reserved as a bonus for people who do something beyond what's asked in the lab manual.

Please email me your reports in pdf format.

Attendance

Obviously, attendance is required for in-person labs. If you need to be absent please email me in advance. For online labs there are no “mandatory” meetings, but I encourage you to come to office hours and get help.