

GP I Lab

Fall 2020

instructor: Vinu Abeywick

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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 designed to demonstrate basic principles of mechanics in a laboratory setting. 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 all the lab manuals at the course website linked above.

In-person students: you will perform the experiments individually. Please show up to the classroom at the scheduled time and bring a mask. You must wear your mask and use the same lab bench throughout the semester. We'll also provide safety goggles and gloves for you to use if you wish. You should read the manual before the session so you know what to expect. You will write your lab report based on the experiment you perform.

Online students: an online folder with the lab materials will be shared with you. Each week we'll post a video of the lab manager performing the lab along with the data. You will write your lab report based on the videos and data provided. There will be no regular meetings for the online lab—it's your responsibility to watch the videos each week and keep up with the schedule. You can get help from the instructor during the zoom office hours.

Schedule

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	[No Labs]
Dec 2-3	Absolute Zero

Attendance

Obviously, attendance is required for in-person labs. If you need to be absent please email me in advance. For online labs there is no attendance requirement. The online office hour is optional and anyone can show up to ask questions.

Lab Reports

Each week you will write a lab report on the experiment you performed that week. The report is due one week after the scheduled lab session. In the shared folder we've posted some resources on how to write lab reports and perform error analysis on your data. If you're new to report-writing, you may want to read these over. But you don't need to adhere to them strictly. 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.