

# Physics 405 Lab

## Policies and Procedures

### 1) Safety Issues

- a) Footwear – closed-toed shoes with a covered heel (tennis shoes, leather shoes, etc) must be worn at all times in the lab. Sandals, flip-flops, bare-feet, swimming shoes, crocs, bedroom slippers, etc. are not allowed in the lab. If you are not wearing proper footwear to work in the lab, you will not be allowed into the lab.
  - b) Electrical – some experiments use high voltage power supplies. When using these power supplies, caution is urged. Be aware of any frayed cables or faulty connectors and report same to the lab technicians for replacement or repair.
  - c) Radioactive sources – a few of the experiments will require the use of radioactive calibration/check sources. Prior to using the radioactive sources, you must attend a lecture which will be provided by the University's Radiation Safety Office. Your instructor will provide details of when the lecture will occur.
- 2) **No Food or Drinks are allowed in the lab** – self explanatory – no exceptions, not even water!!
  - 3) **Technician's Responsibility** – the lab technicians are available to assist with equipment problems only. All Physics related questions should be directed to the lab's instructors.
  - 4) **Broken or non-working equipment** – all broken or non-working equipment must be reported to the technicians as soon as possible so that repairs may be made.
  - 5) **Instruction manuals** – instruction manuals are available for each piece of equipment in the lab. Manuals are kept either in close proximity to the experiment or are housed in the second drawer of the file cabinet in Room #3210. If you can't find an instruction manual for the equipment you are using, please see one of the lab technicians.
  - 6) **Securing the rooms** – when you leave one of the lab rooms please be sure to close the door behind you. Even if you step away for a brief moment, please close the door. This is very important if one of the radioactive sources is in use in the lab – NEVER leave the room open and unattended when a radiation source is in use.
  - 7) **Lab Hours** – the lab will be open from 9am to 5pm, Monday through Thursday – 9am to 4pm on Friday. A technician will keep you advised of the time remaining in the lab day beginning about 1 hour prior to closing time. Students are asked to stop taking data by 4:55pm (3:55pm on Friday) as to allow the final 5 minutes of the day for data storage or transfer, and clean up. Please do not try to work until exactly 5pm (4pm on Friday) as there

will be no time remaining for clean-up or data transfer. The lab will close precisely at 5pm (4pm on Friday) – no exceptions!!

- 8) **Vacuum Experiments** – the lab features two experiments that use a vacuum system. These two vacuum systems are very temperamental and are sensitive to changes in room temperature and humidity. In order to achieve the proper operating pressure (vacuum), the systems take time to warm up. Plan your time accordingly, especially on Monday mornings, to maximize your usage of the vacuum systems.
- 9) **Online Lab Sign-up Sheet** - students must use the online lab sign-up sheet to schedule lab time for working on experiments. You must sign up for an experiment a minimum of 24 hours in advance to gain access to the lab. If you sign-up for a lab session, you are EXPECTED to attend the lab that day to work on the experiment. If you sign-up for a lab session and find you are unable to attend, please “unsign” yourself from the lab schedule. If you can not access the online sign-up sheet to remove your name, please notify the technicians via email or phone that you will not be able to attend the lab that day.

Office hours for the technicians are from 9am to 5pm daily. Their lunch hour is from 12pm to 1pm daily.

Lab Technicians:

- a) Tom Baldwin – Room 3202 – 301-405-6004 – Email: [tbald@umd.edu](mailto:tbald@umd.edu)
- b) Allen Monroe – Room 3331 – Grad Lab – 301-405-6002 – Email: [amonroe@umd.edu](mailto:amonroe@umd.edu)