

Introduction to laboratory work

Lab Safety:

General lab conduct

The general rules of conduct for laboratory work as displayed on the laboratories news boards apply. It is good practice to learn from the beginning a lab conduct, which does not encourage dangerous habits:

- Use safety equipment where advised.
- Clean up trash before you leave.
- Switch appliances to “off” or “standby” whenever you are not using them.
- Do not leave an experiment behind in an unknown or unsafe state, eg. hot plates must be switched off and hot water must be emptied into the sinks.

The person who can ensure your safety the most is: **YOU**. The most important rule for laboratory safety is: **Be prepared** and do not behave in a careless manner. Put equipment back in the place where you originally found it and take special care to not leave behind any unidentifiable substances or spills – unknown substances present a safety concern for anyone who has to use the workspace after you. Note that not everyone, who may work in these labs, may use only harmless substances.

Call out policy: Whenever you see unsafe activities, speak out and stop it. Discuss your safety concern and seek for advices from TA.

Notify your TA about broken equipment!

General safety equipment

First Aid Kit	Room 130A at door
Emergency eye flush	Room 130A at door
Fire Extinguishers	at least one per lab, near exits

Special advice for PHYS 1220 lab

In the Thermodynamics and Electromagnetism Lab, room PS 135, equipment is in use that uses and produces electricity and magnetic fields as well as high temperatures.

You are advised to be cautious of electrical lines and other electrical. Otherwise, the electricity, which is used, is comparable to that of normal household exposure. That said: Most deadly accidents happen at home!

In the electromagnetism labs, the experiments use electricity at voltage and power levels that is potentially harmful, if not used properly. Some of the equipment is home built (especially lab 4 and lab 11) and may contain blank (not insulated) electric lines. Where this is the case, you will receive special advice about the potential hazards. Read the instructions of the relevant experiments carefully before you begin to work! Use safety equipment as advised!

In the thermodynamics labs, hotplates are used to heat liquids to the boiling point or to produce steam. Be cautious to not spill the liquids, stay out of the range of the escaping steam, and do not break the

glass beakers. If the beakers do break, be aware of the hot liquid escaping and of the hazard inherent in broken glass!

Students with special needs

Students with special needs have to inform the course instructor at the beginning of term or as soon as possible after a special need has arisen. Special needs are (but are not limited to) batter driven implants, medication which affects performance, illness, and pregnancy. As a result, we may clear you for lab only under enhanced safety supervision or may exempt you from certain labs.

Procedure: In case of emergency or accidents

Accident:

1. Inform your TA immediately.
2. If necessary, go directly to the student health center for emergency treatment. If in doubt about the severity of your injury, the TA shall assign a person to accompany you.
3. Inform me about what has happened as soon as possible.

Emergency:

1. Follow the emergency exit instructions right away (see lab blackboard) in case of alarm. Gather outside. The TA will sign you out so that there will be no doubt whether you have left the building.
2. Campus safety: UW-alert (terror or shooter incident): Follow the procedure of Wyo-alert immediately.
<http://www.uwyo.edu/uw/campus-safety>

Emergency contacts:

The Student Health Services (SHS) is located in the Student Health/Nursing Building, the second building east of Old Main on the south side of Prexy's Pasture.

<http://uwadmnweb.uwyo.edu/ShSer>

After hours – Nights and Weekends

Ivinson Memorial Hospital	742-2142 ext. 2222
Campus Police Department	766-5179
After Hours Nurse Advice Line	766-2130

Contact information for Lab Coordinator- Travis Laurance:

Office: PS106, email: travis@uwyo.edu

Contact information for TeYu Chien:

My office: PS224, telephone: 766-6534, email: tchien@uwyo.edu