

## SAFETY ITEMS AND RULES FOR THE UNDERGRADUATE LABS

The University of Iowa and the Department of Chemistry is concerned about your safety in the laboratory courses. Therefore, all students enrolled in chemistry lab courses are required to complete a safety quiz at the beginning of each course.

The following summary items are provided to make your laboratory experience safe and to assist you with the quiz.

- Students are to take care of and be respectful of the new lab space. Equipment may not be in ideal locations so alert your TA if something is not functional or have suggestions. Your TA will pass that info on to Earlene Erbe, the Director of Undergraduate Laboratories, or other appropriate staff.
- Dress Code
  - Students not dressed appropriately for the laboratory will not be permitted into the lab.
  - Appropriate dress
    - Short-sleeved shirts are needed in the very least (no tank tops, no muscle shirts, and no bare midriffs meaning your shirt and pants must touch when arms are raised)
    - Long pants or very long skirts to the ankle are needed (no shorts, no Capri pants, no short skirts)
    - Feet must be completely covered. Laced shoes/sneakers or boots are required. (no sandals, no sandals with socks, no high heels, no ballet flats, no boat shoes, no shoes that do not cover the toes, tops and backs of the feet).
  - Safety goggles must be worn at all times.
- Trash Disposal and Broken Glassware
  - If you break glassware, do not throw any pieces into any trash can. Broken glassware is to be disposed of in the red SHARPS containers.
  - Do not pick up broken glassware with your bare hands. Alert your TA and appropriate cleanup equipment will be provided.
  - All items exposed to chemicals are to be disposed of in the red SHARPS containers. These include all gloves, pipets, capillaries, TLC plates, vials, paper towels used to clean up small spills, etc. If you are unsure where to throw something away ask your TA or a staff member.
- Chemical Spills
  - They chemicals you be using in lab have the potential to be hazardous. If you spill anything on your skin, it is important to wash it off immediately. Don't experiment by trying to run reactions on yourself or another student.
  - Alert the TA immediately using a loud voice to get their attention.
  - Tell the TA if the spill is on you!
  - TA may use the drench hose or pull you over to the shower if needed
- Eye Wash/drench hose
  - Has a gentle stream. To use hold right up to your eye (use like a garden hose)
  - Use to wash off chemical spills anywhere on your body or clothing
  - \*\*\*\*Student safety comes first, so don't worry about floors getting wet in the case of an emergency.
- Emergency eye wash/shower
  - Pull down to activate eye wash. Water turns on immediately.
  - Pull down lever on the right to activate shower.
- Fire extinguishers
  - Note the location and number of fire extinguishers.
  - Alert the TA immediately in the case of a fire.
  - It is not the student's responsibility to use the fire extinguisher, but if the student knows how to use a fire extinguisher, he/she is permitted to use it.
- Exits
  - Know the locations of all exits.
  - The two doors to the hallway are the main exits, but the exit to the Prep Room may be used in the case of an emergency when the other exits are blocked or smoke is in the hallway.
- Fire Alarm
  - The alarm will sound and a strobe light will show in the case of a fire. Exit into the hallway and proceed out of the building in a calm manner. Once outside and a safe distance from the building, stay with your lab section in a group so your TA can account for everyone.
  - Verify your nearest exit.
  - If you hear the alarm followed by a voice, please stay quiet and listen carefully for instructions.

- e.g. in the case of a tornado, students will proceed down the stairwell to the lowest level
- e.g. in the case of a lockdown, the students must stay in the lab room. Your TA will lock the doors. Await instructions from your TA.
- Power Outage
  - If the power goes out, stand quietly still for 5-10 seconds at which time the emergency power will come on. Your TA may then instruct you to safely store your experiment and unplug certain equipment before proceeding outside or into a lit area of the building.
- Lab Etiquette
  - It is the student's responsibility to keep the lab clean. This includes not only the student's hoods but also the chemical distribution hood, balances and all common use areas.
  - The chemicals you will be using are potentially hazardous and all spills must be cleaned up immediately so as to not put your fellow classmates and/or prep staff at risk for serious injury. If you spill and are not sure what to do notify your TA or prep staff and they will assist you.
  - Do not waste chemicals. The students should accurately measure what they need by taking solids to a balance and weighing out only what you need. If you take too much give the excess to the next person in line. Do not leave weigh boats containing chemicals anywhere in the lab. Liquids are to remain in hood and students should use a graduated cylinder or beaker to measure and transfer what they need back to their hoods.
  - Do not overfill chemical waste bottles. If a bottle is full do not continue to pour waste into it. Notify your TA or the prep staff and a new waste bottle will be provided.
  - Do not touch chemicals or begin working on an experiment until told to do so by your TA.
- Fume Hoods (high efficiency)
  - Labs will be performed in the fume hoods.
  - The sash can be raised to set up any apparatus you will need, however once chemicals go into the hood the sash must be lowered. Slide the doors side to side to access chemicals.
  - If you hear the alarm, alert the TA. Students do not silence the alarms.
- Eating, drinking, and chewing gum (includes no cough drops, etc) are all prohibited in the lab. Any water or beverage bottles brought into the lab must be stowed deeply inside one's backpack.
- Keep books, backpacks and coats out of the aisles and off of the bench tops. Store those items in the cubicles in the room.
- Do not sit on the countertops or the floors at any point during the lab. Students must stay in the lab room and are not permitted to sit outside in the hallway to complete any work.

**Please take the safety quiz. Your TA will provide you with instructions on how to access the quiz and provide a password. To pass the safety quiz, all questions must be answered correctly.**