

General Chemistry Laboratory Regulations

General Regulations

The following rules will be strictly enforced. They are designed to preserve your well-being.

1. Eye protection must be worn at **all times** in the laboratory. Regular glasses do not provide sufficient protection and therefore splash proof safety goggles will be required in addition to regular glasses. Do not wear contact lenses in the lab; vapors can be trapped behind the lens and cause irreparable corneal damage. Safety goggles are available for purchase in the stockroom.
2. No one is allowed in the laboratory at any time without proper supervision; i.e., qualified lab assistant, paraprofessional person, or faculty member must be present.
3. No unauthorized experiments shall be performed at any time.
4. No smoking, beverages, or food are allowed in the laboratory.
5. Shoes must be worn in the lab at all times. Sandals are not recommended because they do not provide enough protection against falling equipment and chemical spills.
6. Long hair should be secured behind the head to prevent it coming near equipment, chemicals, or flames.
7. Report any broken or malfunctioning equipment to the Instructor, Paraprofessional.
8. Do not retrieve any chemicals, glassware or equipment from the Chemical Stockroom without supervision.
9. Properly label all containers, even those with soap or water.
10. Notify someone immediately of any chemical spills.
11. Hazardous waste should only be disposed in the proper hazardous waste receptacle. Do not put anything down the sink unless instructed to do so.

Safety Precautions

1. Know the location and use of the fire extinguisher, fire blanket, eye wash, safety shower, and first aid kit. If you have never operated a CO₂ fire extinguisher, see the instructor.
2. Be careful about smelling chemicals. Generally avoid breathing any vapors. Work in a ventilation hood whenever possible, especially when carrying out reactions involving volatile substances or gases. If you must smell a compound, fan the vapors toward your nose and sniff cautiously. Do not taste any compounds. Some are highly toxic, or may contain toxic impurities.
3. Avoid prolonged exposure (inhalation or absorption through the skin) of organic compounds. Common organic solvents such as acetone, methanol, chloroform, carbon tetrachloride, benzene, aniline, nitrobenzene, phenol, etc., are toxic. Use the fume hood whenever possible.
4. When heating a container such as a test tube, do not point the mouth of the container at your neighbors or at yourself. The liquid may suddenly boil or bump, causing the liquid to shoot out of the mouth of the container.
5. Always make sure that the apparatus set-up used in an experiment does not involve a closed system. In other words, make sure you have made provisions for the escape of air as your equipment is heated.
6. Never pour water into concentrated acid. Always pour the acid slowly into the water with constant stirring. Large amounts of heat are released when an acid, such as sulfuric, undergoes hydration. Steam could be generated, thus blowing the acid out of the container.
7. Avoid the use of strong oxidizing agents with organic compounds when cleaning glassware; for example, the combination of nitric acid with organic residue can be explosive.
8. Always protect your hand with a towel when cutting glass tubing or inserting it into a stopper. Most laboratory accidents are lacerations caused by a failure to observe simple precautions when handling glassware. When inserting glass tubing into a stopper, always lubricate the tubing with glycerol. Glycerol is available at the reagent shelf or in the stockroom.
9. If you have an injury or accident, please notify the Instructor or Paraprofessional.
10. In the event of evacuation of building, all students will exit the building in an orderly manner and meet by Jackson House (across Nevada Avenue to the East). Students **MUST** check in with their instructor.

I have read the above regulations and safety precautions, have discussed them with the professor, and have signed a copy of this form. This form will remain on file in the Chemical Stockroom. You may request a copy for your personal records.

Signed _____

Date _____