

LABORATORY PROTOCOL AND SAFETY

The chemistry laboratory is probably safer than your own kitchen. We have a number of requirements for you to follow while in the laboratory.

1. **Safety glasses must be worn over the eyes at all times** (available in laboratory).
2. **Closed-toed shoes must be worn on your feet at all times** (NO sandals or open-toed shoes).
3. **Your presence at the beginning of each laboratory is mandatory.** Lateness will not be tolerated and as a result you may be blocked from the laboratory with loss of points.
4. **NO food (including gum and candy) or drinks are allowed in the laboratory.**
5. You are responsible for reading the instructions for each activity BEFORE coming to the laboratory.
6. We strongly suggest protective clothing be worn (lab coat or apron).
7. Any common equipment must be cleaned and placed back where found.
8. Your laboratory station must be left clean when you are finished working.
9. Failure to abide by the safety requirements and rules may result in your removal from the laboratory with loss of points.

Here are some general safety rules to follow when handling chemicals, more specific instructions are typically given in each activity and will be reviewed by the instructor at the beginning of each laboratory period.

1. All solid waste is to be placed in the trash cans or appropriate labeled containers.
2. Liquid waste will be placed in labeled containers in the front of the laboratory unless otherwise instructed.
3. All broken glassware is to be placed in the glass disposal container.
4. Long hair must be tied back to avoid accidents with open flames and chemicals.
5. Open flames (Bunsen burners) must NOT be left unattended. Be sure gas valve is shut-off when you are finished using.
6. Flammable liquids must never be heated over open flames.
7. If you get any chemical on your skin, IMMEDIATELY start to rinse the chemical off

with cold water, then inform your instructor.

8. In the event of a chemical spill or thermometer breakage, IMMEDIATELY inform your instructor.
9. Know where the exits from the laboratory are located.

Location of exits: _____

10. The laboratory is equipped with the following items listed in the table. You should know their purpose or function and their location in the laboratory.

ITEM	PURPOSE/FUNCTION	LOCATION
fire extinguisher	chemical/paper/wood fires	
fire blanket	smother fire on burning human or small surface	
safety shower	burning human or large chemical spill	
eye wash	rinse chemical from eye	
first aid kit	cuts/burns	
flume hoods	use with toxic or noxious chemicals	
sodium hydrogen carbonate (powder and solution)	for acid or base burns on skin	

11. Avoid taking excess amounts of chemicals as it is wasteful. Any excess chemicals removed from containers must never be placed back in the containers (avoids contamination). Share the excess with another student or place in appropriate waste container.
12. Never heat glassware that contains a crack.
13. Be extremely careful when handling hot glassware and apparatus (ring stands and burners). Use appropriate heat handling equipment.

In the event of any laboratory accident (cut, burn, splash, spill, or fire) your instructor is the first person to inform. Your instructor will assess the need for any further actions.