

Methodist University EHS Laboratory Safety Guidelines

A laboratory can be a dangerous environment if appropriate precautions are not taken. Safety is common sense, but you must understand the hazards you face in the laboratory. If you come unprepared, you will not be permitted in the laboratory. **The instructor and Lab Coordinators have the authority, to enforce the safety rules by lowering grades and/or ejecting a student from the laboratory.**

Personal Safety

- Goggles - You must wear goggles at all times in the laboratory. Only ANSI Z87 approved goggles are to be worn in the laboratory. (Goggles may be purchased using your book slip at the university bookstore).
- Contact Lenses - Solvent vapors can partially dissolve the contact lens, leading to permanent eye damage. Contact lenses are very difficult to remove once a chemical has splashed into ' the eye, therefore they' should not be worn in the lab.
- Gloves - Wear latex gloves when handling chemicals. Remember that latex gloves react with sulfuric acid and give you limited protection from organic materials. When working with these compounds change your gloves frequently. Always wash your hands before leaving the lab. Do not leave the laboratory with the gloves on. If you are allergic to latex, please let your instructor know. Alternative gloves will be provided for you.
- Smoking, eating, drinking, chewing gum and applying makeup are prohibited in the lab.
- Mouth Pipetting - Is not permitted. Use a pipette pump or bulb.
- Never taste chemicals- To detect an odor, do not inhale the vapor, but gently waft your hand over the flask or beaker toward your nose.
- Laboratory Attire - Proper laboratory dress is important for safety. Open toed shoes or perforated shoes (i.e. sandals') and shorts or short skirts should not be worn. Tie back and secure long hair so that it cannot get caught in lab equipment. Wear clothes that you don't mind getting dirty or damaged. A laboratory apron is available if you choose to wear it.
- Injury - Any injury must be reported immediately to the instructor and a MU-EHS accident report form must be completed by the student and a witness. Completed forms must be filed with the Public Safety Office. An injured student requiring medical attention must be accompanied by another person to the college's Health Services Office. If emergency medical attention is required, dial 9-911 and call the security officer on duty at x7577 to alert them to the situation.
- Medical Condition - If you are suffering from an illness or taking medication you must inform the instructor at the beginning of the laboratory period. This information could be very important in an emergency. Outside an emergency situation, this information will be kept confidential.
- No unauthorized experiments are to be performed in the lab.

Equipment Safety

- Spills - All spills must be reported to the instructor and immediately cleaned up. The instructor will assist you. Do not walk by a puddle on the floor - clean it up before it causes an accident. Do not collect broken glass with your hands. Use a broom and dustpan
- Laboratory benches - An organized lab bench will avoid breakages, spills and other kinds of accidents. Do not crowd your work area with unnecessary glassware. Do not sit on the laboratory benches; always assume that the bench is dirty even if you cannot see any spilled chemicals. Keep backpacks, books, etc. off the bench tops and out of the aisles.
- Emergency Equipment-Your instructor will show you the location and explain the proper use-of the- shower, eye wash, fire blanket, fire extinguisher, emergency gas shutoff, and first aid kit.
- Hoods - Operations where flammable gas, toxic vapors, or noxious odors are given off must be performed in the hood. Your instructor will tell you exactly which steps are required to be performed in the hood.
- Hot Plates - Be careful not to burn the hot plate's electric cord when in use. Care should be taken to avoid personal burns. At the end of the experiment you must clean the hot plate heating surface and unplug it.

Handling Chemicals

- When measuring small amounts of a liquid that are stored in a large container, pour a small amount into a beaker first. Then pour from the beaker into a graduated cylinder.
- Always pour acid into water, never water into acid.
- Add a reagent in a reaction mixture slowly, never dump it in. Observe what takes place when the first amount is added and wait a few seconds before adding more.
- Carefully read the label before removing a reagent from its container, using the wrong substances can lead to accidents.
- Do not use more material than directed. Remove only approximately what is needed.
- Never return chemicals to their original containers. Dispose of unused reagents in the appropriate waste container.

Waste Disposal Guidelines

- Improper disposal of hazardous waste is unsafe, environmentally damaging and illegal.
- It is the responsibility of each student to know how their waste should be handled.
- Liquid organic waste must be disposed of in the labeled container under the hood. Never pour organic waste down the sink drain.
- Broken glass and other sharps (including needles) must be disposed of in the glass, waste box. Paper towels, gloves, etc. should NOT be placed in the glass waste box.

Use of Lab outside of schedule laboratory Class

- Any student wanting to makeup a lab or work in a Methodist University laboratory without direct instructor supervision must have a Permission for MU Laboratory Access (includes Release of Claims section) on file with the Office of Environmental Health and Safety and signed by their professor.

Also watch the Laboratory Safety Presentation on all of the information listed above. It can be found online. (www.methodist.edu/ehs) and click on Laboratory Training.

I have read and understood the guidelines above. I know the location of the safety equipment in the laboratory and understand its proper use. I understand that I am bound to follow these guidelines during any and all laboratory experiments.

Student Signature

Date

Student Print Name