

UC Davis Department of Chemistry Standard Operating Procedures
Safety Rules for Teaching Laboratories

The following rules are designed for your safety and it is your responsibility to follow these rules. The Laboratory Instructor (LI = TA, Laboratory Supervisor, and/or Course Instructor) must enforce these rules, approved by Department of Chemistry Staff, Faculty, and Department Safety Manager. The LI must also enforce all experiment-specific safety rules pertaining to laboratory work, including rules not explicitly mentioned here. Violation of these rules will result in expulsion from the laboratory.

1. No one is permitted in the lab without the supervision of an LI. No lab work will be done without supervision. Perform only authorized experiments, and only in the manner instructed. Do *not* alter experimental procedures, except as instructed.
2. Specific permission from your LI is required before working in any lab section other than the one assigned to you. Only lab rooms where the same lab course is operating may be used for this purpose.
3. If you have a special health condition (asthma, pregnancy, etc.) or any personal health concerns, consult your medical professional before taking chemistry lab. If you require accommodations such as wheelchair access, service animals, or other, consult with the Department Safety Manager.
4. Students must come to the lab with appropriate lab attire and personal protective equipment (PPE). Without either, you will not be allowed to enter or make-up the lab, and your course grade will be affected. If you cannot wear the required PPE or lab attire, you must meet with the Department Safety Manager before you are allowed to enter the lab.
5. The appropriate PPE requirements include the following:
 - a. Properly-fitted white 100% cotton lab coats. Lab coat sleeves must cover your wrist and should cover your thighs when seated. Disposable, flimsy, short, or dyed lab coats are *not* allowed.
 - b. Approved safety goggles must be worn at all times. Safety goggles may not be modified in any manner. Visorgog, safety glasses, swimming goggles, or similar eyewear are not acceptable in the lab.
6. Lab attire must be made of durable material to protect from incidental chemical splash. Appropriate lab attire includes:
 - a. Clothing that completely covers the legs - including the skin between the top of the shoe and the bottom of the pant leg - must be worn at all times in the lab. Leg coverings must extend to the shoes. Socks must be long enough to cover the ankles while seated. Tights, leggings, joggers, yoga pants, pants with holes, pants with slits, etc. are *not* suitable leg covering regardless of material. No-show socks are *not* allowed.
 - b. Closed-toe, closed-heel shoes that completely cover the entire foot (including the top of the foot) must be worn at all times. Crocs, jellies, boat shoes, low-heel slippers, slides, slip-ons, etc. are *not* allowed. Socks are not suitable replacements for shoes or leg coverings.
 - c. Because inadequate protection often leads to injury, it is recommended to ensure all skin below the neck is covered.
 - d. Avoid wearing expensive clothing or jewelry to the lab as it may get damaged.
7. All students must adhere to safe lab practices, including the following:
 - a. Horseplay and carelessness are not permitted and are cause for expulsion from the lab.
 - b. You must be fully attentive and aware of your surroundings, and remove distractions as directed by your LI.
 - c. Skateboards, rollerblades, motorized scooters, bicycles, and other transportation devices must be stored outside of the lab. Personal electronics are only permitted when needed for the lab. Cell phones or other personal electronic media can be damaged or contaminated in the lab. Use of such devices is at the student's own risk.
 - d. Tie back long hair, loose hair, or hair that blocks your vision. Pin back loose headwear.
 - e. Absolutely *no* food or drinks are to be stored or consumed in the lab. Contact lenses and cosmetics (hand lotion, lip balm, etc.) are not to be applied, and medications are not to be consumed while in the lab.
 - f. Lab doors must remain closed except when individuals are actively entering or exiting the lab.
 - g. The student must have at least *one ungloved hand* when outside the lab. Gloves are presumed to be contaminated and must not come into contact with anything outside the lab except chemical containers. Only use the ungloved hand to open doors, hold on to stair rails, or push elevator buttons.
8. Follow all instructions on safe chemical handling and safe equipment handling, including the following:
 - a. Mouth suction must never be used to fill pipets.
 - b. All activities in which toxic gases or vapors are used or produced must be carried out in the fume hood.
 - c. Containers of chemicals may not be taken out of the lab except to the dispensary for refill/replacement or to exchange full waste jugs for empty ones. All containers must be closed with the appropriate cap before you take them into the hallway to the dispensary. Always use a bottle carrier when transporting chemicals and waste.
 - d. Put hazardous waste into appropriate waste container(s) provided in your lab. Do not overfill waste containers.
 - e. Keep your working area clean – immediately clean up *all* spills or broken glassware. Dispose sharps in the appropriate container. Do not dispose pipette tips in regular trash. Clean off your lab workbench before leaving the lab.
9. Learn how to respond to emergencies and report incidents promptly to the LI:
 - a. Learn the location and how to operate the nearest eyewash fountain, safety shower, fire extinguisher, and fire alarm box. Basic first aid for any chemical splash is to wash the affected area for at least 15 minutes and seek medical attention. Use the emergency shower if appropriate, removing contaminated clothing for thorough washing. If the safety shower or eyewash is activated, the exposed person should be accompanied to the Student Health Center for further evaluation.
 - b. All incidents, near misses, injuries, explosions, or fires must be reported at once to the LI. In case of serious injury or fire (even if the fire is out), the LI must call 911. The student must always be accompanied to the Student Health Center.

Students must sign the Safety Acknowledgement sheet before working in the lab. If you have any questions, please ask your LI before starting any lab work.