

U.C. Davis Department of Chemistry Chem 2 Series
Standard Operating Procedures
Safety Rules For Teaching Laboratories

The following rules are designed for your safety in the laboratory. The Laboratory Instructor (LI = TA, Laboratory Supervisor, and/or Course Instructor) is required to enforce these rules and has the full backing of the Department of Chemistry Staff and Faculty. The LI is also required to enforce all laboratory experiment-specific safety procedures in carrying out the laboratory work. Violations of these rules will result in expulsion from the laboratory.

1. **No one is allowed in the laboratory without the supervision of a LI. No laboratory 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. **Approved safety goggles must be worn by all persons at all times.** At NO TIME are safety glasses of any kind acceptable in the laboratory. Goggles must be worn by EVERY person in the lab until EVERYONE has finished with the experimental procedure and has put away ALL glassware. Safety goggles may not be modified in any manner.
3. **Closed-toe, closed-heel shoes which completely cover the feet must be worn at all times.**
4. **Clothing (baggy sleeves and pant legs are NOT allowed) that completely covers your arms and legs must be worn at all times in the laboratory** (long skirts, tights, or leggings do NOT qualify). Inadequate protection often leads to injury. Avoid wearing expensive clothing to lab as it may get damaged.
5. **Lab Coats of 100% cotton are REQUIRED upon entering lab.**
6. **Absolutely NO food or drinks are allowed in the laboratory.** This prohibition applies to the storage of food and the consumption of food, beverages, medicines, tobacco, and chewing gum. Contact lenses and cosmetics are not to be applied while in the laboratory. Infractions will result in expulsion from the laboratory. Because cell phones or other personal electronic media can easily be damaged in the laboratory, use of such devices is at the student's own risk.
7. **Learn the location and how to operate the nearest eyewash fountain, safety shower, fire extinguisher, and fire alarm box.** First aid for acid or base in the eyes is to wash with copious amounts of water using the eyewash fountain for 15 minutes; then go immediately to the Student Health Center for further treatment. First aid for acid or base on skin or clothing is to wash thoroughly with water for 15 minutes. Use the emergency shower if appropriate, removing contaminated clothing for thorough washing. If the safety shower or eyewash is activated, the exposed person must be accompanied to the Student Health Center for further evaluation.
8. **All operations in which noxious or poisonous gases or vapors are used or produced must be carried out in the fume hood.**
9. **Confine long hair while in the laboratory.** Hair can catch on fire while using open flames.
10. **Mouth suction must never be used to fill pipets.** Always use a bulb to fill pipets.
11. **All accidents, injuries, explosions, or fires must be reported at once to the LI.** In case of serious injury, the LI or Lab Supervisor must call 911 for an ambulance. In cases where the LI and Lab Supervisor decide the extent of an injury warrants evaluation/treatment, the student must be accompanied to the Student Health Center. Students are also encouraged to seek medical attention if the student deems it necessary. The student must always be accompanied to the Student Health Center.
12. **Horseplay and carelessness are not permitted and are cause for expulsion from the laboratory. You are responsible for everyone's safety.**
13. **Keep your working area clean – immediately clean up ALL spills or broken glassware.** Exercise appropriate care to protect yourself from skin contact with all substances in the laboratory. Clean off your lab workbench before leaving the laboratory. Skateboards, rollerblades, and other such personal equipment must be stored outside of the laboratory. Personal electronics are only permitted when needed for the laboratory.
14. **Put all toxic or flammable waste into the appropriate waste container(s) provided in your laboratory.**
15. **Containers of chemicals may not be taken out of the laboratory except to the dispensary for refill/replacement or to exchange full waste jugs for empty ones.** All containers must be CAPPED before you take them into the hallway to the dispensary. Never take uncapped glassware containing chemicals into the hallways or other public areas.
16. **Laboratory doors must remain closed except when individuals are actively entering or exiting the lab. DO NOT** prop the door open with chairs, stools, or any other objects.
17. **The student must have at least ONE UNGLOVED HAND when outside the laboratory.** Only use the ungloved hand to open doors. Gloves are presumed to be contaminated and must not come into contact with anything outside the laboratory except chemical containers.
18. **Specific permission from your LI is required before you may work in any laboratory other than the one to which you have been assigned.** Only laboratory rooms where the same laboratory course is operating may be used for this purpose.
19. **If you have a special health condition (asthma, pregnancy, etc.) or any personal health concerns, consult your doctor before taking chemistry lab.**
20. **If you come to the laboratory with non-compliant goggles, shoes, or clothing, you will not be allowed to work in the laboratory. In that context, note that THERE ARE NO MAKE-UP LABORATORIES.** Your course grade will be significantly lowered or you may fail the course if you do not meet the dress code.

You must sign the Safety Acknowledgement sheet before you may work in the lab. If you have questions about these rules and procedures, please ask your LI before starting any laboratory work in this course.