

# Laboratory Safety Rules, Procedures and Regulations

## Safety Rules

Ensuring laboratory safety is not just the responsibility of the instructor; it is the responsibility of everyone working in the laboratory. You are expected to be familiar with the safety rules and to conduct your laboratory work in a safe manner at all times. The laboratory instructor will review the following safety rules and regulations with you and will point out the location and operation of the safety equipment (e.g. emergency eyewash station) and other available safety equipment.

## Personal Protective Equipment and Proper Attire

1. You must wear **approved** safety goggles. It must always be worn while an experiment is in progress. The goggles must have indirect ventilation which conforms with ANSI Z87.1-2015 and with D3 marking. Contact lens are strongly discouraged. Safety glasses are not acceptable. The safety goggles are available from the bookstore (FAILURE TO WEAR SAFETY GOGGLES WILL RESULT IN EXPULSION FROM THE LAB FOR THAT DAY!).
2. 100% cotton lab coat and nitrile gloves are highly recommended. They offer additional protection against chemical splash or spill. They are either available from the bookstore or online stores.
3. Wear full-length pants or full-length skirt.
4. Wear a shirt that completely covers your torso. Exposed shoulders, backs, abdomens, and hips are not safe in the lab.
5. Wear close-toed shoes with back (e.g. sneakers). No open-toed shoes, flip-flops, or sandals
6. Long hair must be pulled back and properly restrained, and jewelry should be worn sparingly.

## Safety Precautions

1. If you are pregnant or plan to become pregnant, please check with your OB/GYN before enrolling in the lab.
2. If you have any medical condition that might be exacerbated by working closely with chemicals, please consult with your doctor before enrolling in the lab.
3. Cell phone use is not allowed in the lab. Please turn the cell phone to vibration, silent, or off. If you receive a call or need to make a call, please do so outside the lab.
4. Do not eat, drink, smoke or vape in the lab.
5. Always wipe down the counter area and stool with warm water before placing notebooks and sitting down.
6. Sweep up broken glassware immediately and dispose of it in the RED metal broken glassware receptacle. Do not take it to the Chemistry Stockroom.
7. Familiarize yourself with the experimental procedure before beginning work; take notes of any procedure that might pose a safety problem. Your instructor should point out all safety hazards before the beginning of each experiment.
8. No unauthorized experiments may be performed.
9. In case of an accident, summon the laboratory instructor immediately. If further assistance is needed, notify the Stockroom personnel (EH2320, telephone number 818-677-3371).
10. A First Aid Kit is available in the lab. Cover your wound(s) to avoid infection or inflammation.

11. Treat all chemicals as if they were potentially dangerous. If a chemical comes into contact with your skin or eyes, wash immediately with copious amounts of cold water. Ask another student to summon the instructor. Seek additional medical attention from the Student Health Center.
12. Thermal Burn (Heat): Rinse the affected area with cold water for a minimum of 15 minutes. Seek additional medical attention from the Student Health Center.
13. Non-thermal Burn (Cold): Rinse the affected area with lukewarm water for a minimum of 15 minutes. Seek additional medical attention from the Student Health Center.
14. Report spilled mercury to your instructor so proper clean-up can be done immediately.
15. Avoid distracting or startling other students. Practical jokes or horseplay will not be tolerated at any time.
16. Wash your hands regularly, and thoroughly before leaving the lab.

### **Conduct of Experiments**

1. When cutting glass tubing or inserting tubing into stoppers, protect your hands by using a towel. Glass tubing should be lubricated with glycerol or water to aid insertion of the tubing. To remove tubing from stoppers, cut the stoppers.
2. When heating or carrying out reactions in a test tube, never point the mouth of the tube at your neighbor or yourself.
3. Never taste a chemical; never smell a chemical unless instructed to do so. If instructed to smell a chemical, fan vapors toward your nose and inhale cautiously.
4. Never pour water into acid; slowly add the acid to the water with constant stirring in a Pyrex beaker or flask, not in a graduated cylinder. Pouring water into acid may result in a violent reaction!
5. Never place hot glassware directly onto the lab bench.
6. Never pipet liquids by mouth; use a mechanical or safety pipet bulb.
7. Each student is responsible for cleaning up all spilled chemicals at his/her bench, on the reagent shelves, in the hoods, and in and around the balances. Consult the instructor if uncertain about the method of cleanup.
8. Always return securely capped reagent bottles in the lab to their proper place immediately after use; never borrow chemicals from another lab. Never return unused chemicals to a reagent bottle to avoid contamination of the entire bottle.
9. Always consult your instructor for the proper disposal of chemicals. Every lab has a hood designated for the disposal of chemicals with a posted collection guideline. Make sure you dispose of each chemical in the proper bottle. Placing a chemical in the wrong bottle may result in undesirable chemical reactions (i.e. fire). **ASK if you are unsure!**
10. Use equipment only for its designed purpose. Consult with your instructor for proper handling procedure.
11. Wash your glassware at the end of the lab with hot and soapy water so that it will be ready for use at the next period.
12. Use acetone sparingly. Dispose of rinsed acetone into the appropriate waste container in the fume hood.

### **Stockroom Procedures**

1. The Stockroom will issue no chemicals or equipment other than those specified for a given experiment or stocked in the original student locker without a written request from the instructor. All requests for additional unknown sample must be accompanied by the written permission of the instructor.
2. Failure to check out of the laboratory on or before the last scheduled lab period will result in a penalty fee. Students who drop the course are responsible for checking out of the laboratory within one week of the time the course is dropped.