

# FRESHMAN LABORATORY POLICIES, PROCEDURES, AND RULES

YOU ARE RESPONSIBLE FOR ALL THE MATERIAL  
CONTAINED IN THIS HANDOUT



Department of Chemistry  
The University of Akron  
2011

# EMERGENCY EVACUATION PLAN

“The fire alarm is a loud continuous buzzer. According to state law, everyone must leave the building when this alarm sounds.”

## FOURTH FLOOR

Exit via the **SOUTH STAIRWELL** and leave the building through the doorways that are located by the service drive at the rear of Whitby hall.

## THIRD FLOOR

Exit via the **BRIDGE LEADING TO AUBURN SCIENCE CENTER** and proceed to the plaza in front of the Auburn Science and Engineering Center (ASEC) in fair weather, or as far as ASEC lobby in inclement weather. **Do not remain on the bridge.**

## SECOND FLOOR

Exit via the **NORTH STAIRWELL** and leave the building through the exit facing Buchtel Avenue.

## FIRST FLOOR

Exit via the **NORTH EXIT DOOR** facing Buchtel Avenue.

# LABORATORY OPERATIONS

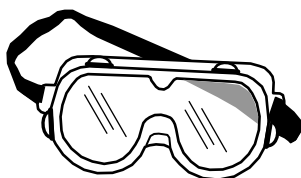
1. **CHECK-IN.** On the first day of lab, you will be assigned a drawer of standard equipment and issued a pair of safety goggles. You will be issued a drawer assignment card showing the drawer number and the combination to the drawer lock, and a list of the equipment that should be in the drawer. Check to see that all the equipment is present and in good condition. If anything is missing or broken, go to the stockroom for a replacement. After you have your equipment in order, read the section of this handout entitled “Safety Procedures.” Then read the statement on the drawer assignment card. Make sure you understand the rules and the statement, then **SIGN AND DATE THE CARD AND RETURN IT TO THE STOCKROOM.**
2. **LAB DRAWERS.** Most commonly, you will be the only person using the drawer. In certain courses, you and another student from your section will share the drawer as partners. Less frequently, another student from another lab section will be using the same equipment drawer that has been assigned to you. This is not an ideal situation, but is necessary when large numbers of students use the freshman labs. You will be made aware of which situation applies to you. Please be considerate of your drawer partner. Leave the equipment as clean and orderly as you would wish to find it when it is your own turn to use it. If you find your drawer in disarray, report it to your instructor or the laboratory supervisor.
3. **SECURITY.** Confirm that your drawer is securely locked whenever you leave the laboratory.
4. **STOCKROOM OPERATIONS.** You *must* be able to identify yourself as a registered University of Akron student whenever dealing with stockroom personnel. Present a valid ID (Zip Card, driver’s license) to stockroom personnel whenever
  - Confirming lock combinations,
  - Checking out equipment or glassware, or
  - Replacing broken or damaged equipment or glassware.

5. **HOUSEKEEPING.** When you have completed the day's experiment, you are responsible for the following before leaving the lab:
- Clean your bench area thoroughly and wipe up all spills with paper towels. Failure to do so is not only inconsiderate but also potentially hazardous as the next student to use your area could receive a chemical burn by coming in contact with the reagent spill you left on the bench.
  - Make sure there are no matchsticks, paper towels, broken glass, etc. left in your sink. Dispose of any debris in the proper receptacles.
  - Make sure all the water faucets in your sink are turned off and that the gas jet at your station is completely closed.
6. **CHECK-OUT.** You must check out of your drawer whenever you stop taking any laboratory course. This may be during the scheduled check-out period or earlier if circumstances require. Failure to do so will result in having your lab grade withheld.

**NOTE: If you drop the course at any time during the semester you should check out at that time.**

## SAFETY PROCEDURES & RULES

1. You must wear regulation safety goggles at all times while in the lab. The goggles must meet the ANSI Z87.1 standard for chemical splash protection. The goggles issued at the beginning of each academic term meet these standards. Safety glasses or spectacles with or without side shields are **NOT ACCEPTABLE**. If you do not have goggles or are not wearing them, you must leave the lab.



REQUIRED:  
Safety Goggles



NOT ACCEPTABLE:  
Safety Glasses

2. As a general practice, both casual and laboratory-related conversation with students at neighboring laboratory spaces is permitted as long as it is low enough in volume not to disturb other students.
3. Eating and/or drinking is not permitted in the lab.
4. Smoking is not permitted in the lab.
5. You may not bring friends or visitors to the lab. Only students assigned to the lab are allowed in.
6. Course manuals, lab notebooks, and calculators are the only personal items permitted at the lab bench. All other items such as outer clothing and book bags should be left by the coat rack near the door.
7. Your footwear and clothing must provide adequate protection. Shoes are required. Open-topped or open-backed footwear (sandals, open-toed shoes, clogs, or the like) are not allowed. Shorts or short skirts, especially those exposing the thigh, are also forbidden. Long hair should be tied back and loose or extra long sleeves should be avoided. **Students dressed in an inappropriate manner will be directed to leave the lab.** It is to your advantage to wear a lab apron or coat (although they are not required). Use common sense when choosing the clothing that you wear.

**NOTE: The suitability of a particular article of clothing or mode of dress will be determined solely by your instructor, the stockroom supervisor, or members of the Department of Environmental and Occupational Health and Safety.**

8. Dispose of broken glass only in the specially marked container—*not* in the waste paper basket.
9. Dispose of organic and other water insoluble materials in a labeled waste container—*not* down the sink. If you are in doubt, check with your instructor.
10. Do not use an open flame in the presence of open containers of combustible materials.
11. Know where the safety equipment (fire extinguishers, safety showers, etc.) is located in the lab or hall.
12. To support thermometers or glass tubing, use the split rubber stopper provided in your drawer equipment: pry apart the split and gently press the thermometer or tubing *sideways* into the split.  
  
If it is necessary to use an *unsplit* 1- or 2-hole rubber stopper, place a lubricant (glycerin, water) on the item first. Wrap the thermometer or tubing in a rag or paper towel and slowly push it through the hole. Do not use excessive force or the glass will break and possibly cut you.
13. **IF YOU ARE INJURED WHILE IN LAB, NOTIFY YOUR INSTRUCTOR IMMEDIATELY.** Follow your instructor to the stockroom for further treatment.
14. For acid or base burns, place the affected part of the body under a stream of running water in the sink or from the safety shower to flush all the chemicals off. If the acid or base is especially corrosive, *first* wipe off the main portion with a rag or paper towel and then follow up with the water treatment.
15. If you get something in your eye such as an acid or base, go to the eye wash station *immediately* and hold your eye in the running stream of water. This will tend to flush out the eye. Any hesitation will allow any chemicals to remain in contact with your eye longer, causing more damage.
16. Close reagent bottles after you use them even though there may be a lot of students after you waiting to use those bottles. This will minimize the chance of contamination or the release of corrosive vapors.
17. Never place your own eyedropper or pipet into a reagent bottle put out for general use. If an eyedropper or pipet is not made available for this purpose, pour out a *slight* excess of the reagent into your own container (beaker or test tube).
18. Once you have taken a sample of a reagent from a bottle (liquid or solid) *do not return it to that bottle*. If you have any excess reagent, share it with a neighbor in the lab or dispose of it properly.
19. **NEVER SUCK UP A LIQUID INTO A PIPET BY MOUTH. ALWAYS USE A PIPET BULB.**
20. In case of a mercury spill, such as might occur when a thermometer is broken, notify your instructor so that it can be cleaned up quickly and properly. Do not attempt to handle the mercury yourself.
21. Follow the experimental procedures carefully. If you are uncertain about any lab technique or use of any chemical, **stop**. Ask your instructor and make sure you understand thoroughly before proceeding.

# DRAWER LOCKS

3-Digit combinations are opened

$\hat{R} - \hat{L} - \hat{R}$

4-Digit combinations are opened

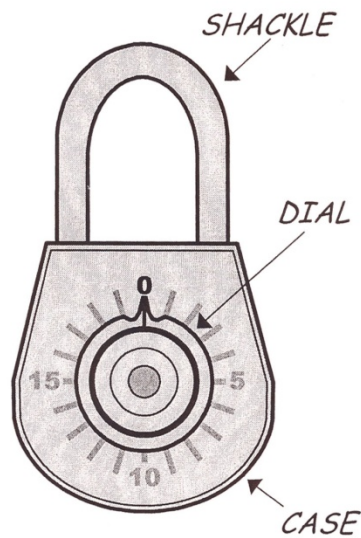
$\hat{L} - \hat{R} - \hat{L} - \hat{R}$

**EXAMPLE:**

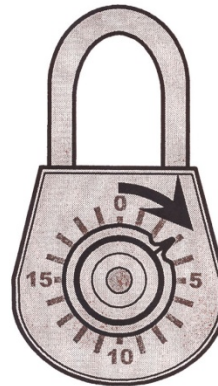
2 - 4 - 6

1. "Clear" the lock with several full turns in the initial direction determined by the number of digits in the combination... to the right or clockwise in this 3-digit example. STOP with the indicator at zero (0).

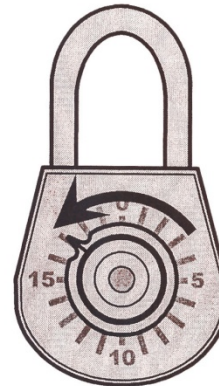
This is the *ONLY* time you will refer to the number scale.



2. Turn dial 2 "clicks" (*NOT* numbers) to the right.



3. Turn dial 4 "clicks" to the left.



4. Turn dial 6 "clicks" to the right.

A little tension on the lock as you do this will help free the shackle from the case.

