Safety Practices in the Introductory Chemistry Laboratory

Safety in the chemistry laboratory involves a cautious attitude and an awareness of potential hazards. Usually potential accidents can be anticipated and prevented. If safety precautions are followed, fewer accidents will occur. The number of laboratory accidents can be reduced if every student follows all of the directions given for the experiment and by the instructor. Special note should be taken of specific instructions that are given in an experiment to eliminate recognized potential hazards.

A. General Regulations

1. The University is not responsible for damage to personal effects.

2. Whenever students are performing authorized experiments in the laboratory, an instructor is expected to be present.

3. Any breakage of glassware or other breakable laboratory equipment is to be immediately reported to the laboratory instructor. DO NOT CLEAN UP THE BROKEN GLASS. Your laboratory instructor will clean up and dispose of all broken glassware and equipment.

4. Failure to comply with laboratory rules and regulations will result in expulsion from the laboratory and referral to the Department Chair for further action.

B. Student Responsibility

1. LOCATE THE SAFETY EQUIPMENT. Find the eyewash, safety shower, fire extinguishers, fire blanket, first-aid kit and all exits that are to be used in an emergency.

2. PROTECT YOUR EYES. Eye protection (safety goggles) are to be worn at all times while working in the laboratory room.

3. LONG HAIR NEEDS TO BE PULLED BACK.

4. SHOES WORN TO LAB MUST COVER YOUR FEET COMPLETELY. Since broken glass and spilled chemicals are all too common occurrences in lab, your feet will need more protection than that afforded by open-toed shoes or sandals.

5. WEAR CLOTHES THAT WILL PROVIDE YOU WITH THE MAXIMUM PROTECTION AND COVERAGE AS POSSIBLE. OLD JEANS OR SLACKS ARE TO BE WORN TO THE LABORATORY.

6. FOOD AND DRINK ARE NOT ALLOWED IN THE LABORATORY ROOM.
7. **DO NOT TASTE ANY CHEMICAL.** To prevent the entry of any chemical substance into your mouth, it is best not to put any object in your mouth such as pens, pencils or fingers in the laboratory room. After lab is finished, hands should be washed with soap before leaving the laboratory room.

8. **DO NOT SMELL CHEMICALS DIRECTLY.** Use your hand to waft the odor to your nose if you are directed to note an odor in an experimental procedure.

9. **THE USE OF ANY PERSONAL ENTERTAINMENT DEVICE IS PROHIBITED IN THE LABORATORY.**

C. **Housekeeping Rules**

1. **REPORT ALL CHEMICAL SPILLS TO YOUR LABORATORY INSTRUCTOR. CLEAN UP ALL SOLID AND LIQUID SPILLS IMMEDIATELY.**

2. **DO NOT POUR ANY CHEMICALS INTO THE SINK OR DISPOSE OF ANY CHEMICALS IN THE TRASH WITHOUT PRIOR AUTHORIZATION.**

3. **BEAKERS FROM YOUR LABORATORY DRAWER SHOULD BE USED TO OBTAIN STOCK MATERIALS.** If, when dispensing stock solutions you obtain too much, **DO NOT RETURN EXCESS STOCK SOLUTIONS BACK INTO THE STOCK SOLUTION CONTAINERS.** This will contaminate the stock solution.

4. **READ THE LABEL ON ALL STOCK SOLUTIONS AND CHEMICALS CAREFULLY.**

5. **DO NOT INSERT A DROPPER OR PIPET INTO A STOCK SOLUTION CONTAINER.** Pour a small amount of the stock solution into a beaker and then insert your dropper or pipet into the beaker.

6. **TAKE NO MORE OF A CHEMICAL THAN THE EXPERIMENTAL PROCEDURE REQUIRES.** Carefully read the procedure and determine the quantity of each stock solution and/or chemical you need. Obtain only that amount. If you take too much, share it with your neighbor. **NEVER RETURN THE EXCESS TO THE STOCK CHEMICAL BOTTLE.**

7. **DO NOT PUT PAPER OR SOLID WASTE INTO THE SINKS.**
D. Accident and Emergency Procedures

1. Each individual is to report any accident, no matter how small, to the laboratory instructor. If necessary, the laboratory instructor will give a written report of the incident to the Department Chair.

2. Should an incident occur and a staff or faculty member is not immediately available, follow the procedures outlined in the Emergency procedures for students needing medical aid, which is posted in the laboratory room.

E. Medical or Hospitalization Insurance Information

You are not covered by medical or hospitalization insurance through Armstrong Atlantic State University. If you are involved in an accident, all medical expenses will be your responsibility or your guardian's responsibility. If appropriate, please check with your guardians to see whether you are covered by medical insurance.