**UNDERGRADUATE LABORATORY SAFETY INSTRUCTIONS**

To avoid injury to yourself and fellow students you are required to read and understand the following laboratory regulations and guidelines. These rules and regulations are in place to protect you, your peers, and our chemistry department personnel. Read these regulations carefully. **Failure to comply with them** can result in a reduction in your laboratory score(s) and/or dismissal from the laboratory for the day or the semester.

**PART A: DRESS CODE and LABORATORY BEHAVIOR.** In order to minimize the possibility of injury you are expected to dress sensibly and behave responsibly.

**A1. YOU MUST WEAR APPROVED SAFETY GOGGLES AT ALL TIMES WHILE WORKING IN THE LABORATORY. NO CONTACT LENSES** are to be worn in the laboratory.

**A2. YOU MUST WEAR FOOTWEAR THAT FULLY COVERS ALL PARTS OF YOUR FEET.** This means clogs, sandals or any other type of “pumps” or “flats” that do not cover your toes, the top of your feet, and/or the back of your feet are forbidden in our undergraduate teaching laboratories**.** Socks are not a substitute for proper footwear.

**A3. YOU MUST WEAR LONG PANTS THAT FULLY COVER YOUR LEGS AND SHIRTS THAT FULLY COVER YOUR TORSO.** This means cloths such as half-shirts, short pants, capri pants, and skirts are forbidden in the laboratory.Note:It is strongly encouraged that you wear long sleeves.

**A4. Long hair** must be secured.

**A5. MOVE CAREFULLY TO PREVENT ACCIDENTS.** It is important not to engage in any activities or behavior which might confuse, startle or distract another student. Be careful not to bump into another student. Never run in the laboratory.

**A6. DO NOT EAT or DRINK** in any laboratory. Smoking and chewing tobacco or gum are also forbidden.

**A7. DO NOT TOUCH CHEMICAL REAGENTS WITH YOUR HANDS**. Avoid touching your face and eyes while you are working in the laboratory. Wash your hands often and especially before leaving the laboratory.

**PART B: CAUTIOUS HANDLING of CHEMICALS and LABORATORY EQUIPMENT:** An instructor must always be present for students to work in any laboratory. No unauthorized experiments are permitted.

**B1.** Assume all chemicals are toxic. Also assume all organic liquids are flammable.

**B2**. Do not touch any chemicals. Use a spatula to transfer solids and wear gloves when required. If you are using gloves remove them before leaving the laboratory, using any instruments, or using the computer.

**B3**. Never remove chemicals from the laboratory.

**B4**. You must use secondary containment when transporting chemicals from the stockroom to the laboratory. A standard bucket works well for this purpose.

**B5.** Exercise great care when noting the odor of fumes, and avoid breathing fumes of any kind.

**B6**. Ask your Lab Instructor about the proper disposal of all chemicals EACH week. All organic waste or excess organic chemicals must be placed in specific waste containers. Only use waste containers that are inside secondary containment. You may be instructed to flush environmentally safe aqueous solutions down the drain.

**B7.** REPLACE stoppers***,*** lids, covers**,** *etc*. on the proper containers immediately after use.

 **B8**. Do not return unused chemicals into the stock bottles from which they were obtained. Check with your instructor about proper disposal.

 **B9.** Never force glass rods or tubing into rubber stoppers. Ask the laboratory instructor for assistance. Always use a lubricant (grease or glycerin) and protect hands with a towel.

**B10.** Throw away cracked or chipped glassware immediately. Only utilize the specialized “glass waste” container for glass disposal*.*

 **B11.** Always leave your work area clean when you finish your laboratory. Always leave the balance area clean.

**PART C: Emergency and/or Accident/Spill Response**. Notify your laboratory instructor immediately in the case of any spill, accident, or injury. Your instructor will determine the proper procedure for handling an incident.

 **C1.** In case of any accident you and your laboratory instructor are required to fill out an INCIDENT REPORT FORM within 24 hours of the incident. INCIDENTS are not limited to events that cause injury.

 **C2.** Eye injuries, whether chemical or physical, must always be considered serious. **CHEMICAL INJURIES TO THE EYE(S) MUST BE IMMEDIATELY AND CONTINUOUSLY FLUSHED WITH WATER** (15-20 minutes)at an eyewash fountain. Eyes must be forced open for effective rinsing. Medical attention is required.

 **C3. IF YOUR SKIN COMES IN CONTACT WITH ANY CHEMICAL IMMEDIATELY FLUSH THE AFFECTED AREA WITH RUNNING WATER.** Clothing soaked with strong acid or alkali must immediately be removed. This is no time for modesty. The safety shower in the hallway is intended to be used in cases where corrosive chemicals are spilled or splashed over a large body area

 **C4.** For treatment of any laboratory related injury you must go to UPMC Presbyterian Hospital Emergency Room. Transportation will be provided by calling Campus Police (x4-2121).

 **C5.** Should the **FIRE ALARM SOUND** immediately turn off Bunsen burners. Unplug all electrical equipment, especially heating mantles. Immediately vacate the building via the nearest exit. Do NOT use the elevator.

 **C6.** If you have a medical problem or condition that may affect your performance or safety in the laboratory you must discuss it in private with the laboratory coordinator. This information will be held in strict confidence.

 **C7.** Except in very unusual circumstances, all medical claims are the responsibility of the student. **THUS,** **PERSONAL INSURANCE COVERAGE** by either yourself or a family plan is strongly encouraged.

**My signature below indicates that I have read the above rules, have been informed of these rules by my lab instructor, and that I will observe and abide by these rules. I understand that I can be dismissed from the laboratory for non-compliance.**

Student’s Name **(Please Print)**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructor’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Chem. Course #\_\_\_\_\_\_**

Instructors must individually sign all safety sheets.