

## Laboratory Safety Rules, Procedures and Practices

Safety is the number one priority in all undergraduate chemistry laboratories at USF. Read all of the following items carefully. If you have any questions do not hesitate to ask your instructor for clarifications.



### **I. Personal protective equipment and proper attire basics**

**1. Lab Coat (Thigh Length):** Wear your lab coat at all times in laboratories (including lab presentations or examinations) to prevent incidental and unexpected chemical exposures to your skin and clothing. The lab coat must be wrist-fitted. Keep the lab coat buttoned at all times.

**2. Scrub Pants:** Wear your scrub pants at all times in laboratories (including lab presentations or examinations) to prevent incidental and unexpected chemical exposures to your skin and clothing. Scrubs must completely cover the entire leg from the waist to the ankle (no skin showing between your shoe and the scrub pant) no ankle fitted scrub pants allowed.

**3. Eye Protection:** Splash goggles that meet OSHA approved ANSI Z87.1 standard must be worn over by all persons at all times in the laboratory while students are working with chemicals. *Safety glasses, with or without side-shields are not an acceptable substitute.*

- 4. Foot wear:** Shoes must be worn at all times while in the laboratory, regardless of the experiment or curricular activity. Shoes must totally cover your feet up to the ankles, no skin should be shown. Socks do not constitute a cover replacement for shoes. Sandals, backless and open toed shoes are unacceptable.
- 5. Clothing:** Clothing like shirt, blouse, etc. must be worn which completely covers the torso from the waist to the neck. Shoulders must be completely covered and sleeves must be worn that cover the arm from the shoulder to at halfway to the elbow. Tank tops, halters, shorts, cutoffs, etc. are not acceptable.
- 6. Hair:** if hair is long it must be tied back.
- 7. Accidents:** report all accidents including minor incidents to your instructor immediately.
- 8. Work space:** Working spaces must be kept neat at all times and cleaned up before leaving. Equipment must be returned to its proper place. Keep backpacks or bags off the floor as they represent a tripping hazard.

**9. Open flames:** open flames of any kind are prohibited in the laboratory, unless specific permission is granted to use them during an experiment.

**10. Emergency equipment:** know the location and use of all safety equipment and exits.

**11. Chemicals:**

- a. If you spill chemicals in your hands or body, immediately flush the affected area liberally with water. Get further directions from your instructor.
- b. Use chemicals that generate harmful vapors in the fume hood.
- c. Do not remove reagent bottles from their location, cap the reagent bottles after use.
- d. Never pour unused chemicals back into the reagent bottles or lab sinks.
- e. Change your gloves regularly to prevent permeation of chemicals into your hands.

**12. Waste disposal:** Chemicals and used materials must be discarded in designated containers. Keep the container closed when not in use. When in doubt, check with your instructor.

**II. General safety principles.** All students are required to know and comply with good laboratory practices and safety norms; *otherwise they be will asked to leave the laboratory*. Make sure you understand all of the safety precautions before starting your experiments, otherwise ask your instructor. The following are some general guidelines that should always be followed:

- a. Bring your personal protective equipment (PPE) in good condition to the lab, including a basic wrist-fitted lab coat, scrub pants and splash-proof goggles.
- b. Do not wear open-toed shoes, sandals, flip-flops, etc.
- c. Check the Safety Data Sheets (SDS) for every chemical used in the laboratory. Documents can be found in each laboratory
- d. Keep the sash of the hood closed when not in use or to the proper level when working with chemicals. (see hood marking for reference)
- e. Do not casually pour chemicals down the drain.
- f. Do not taste or sniff chemicals in the laboratory.
- g. Do not eat or drink in the laboratory.
- h. Do not apply makeup while in the lab.
- i. Do not hazardously mix chemicals.
- j. Do not pipette by mouth.
- k. Do not fool or play around in the laboratory.
- l. All backpacks, skateboards, or other items are off the floor where they could be a tripping hazard. There is a specific location for those items in each laboratory. Ask your instructor
- m. Do not wear headphones in the lab.
- n. Avoid the use of personal items like cellphone, computers, notebook, pens etc. when wearing gloves. Cross contamination may occur while performing those activities and you and others may result affected. Remove your gloves and wash your hands before you use the items mentioned above.
- o. Wear your safety splash proof goggles at all time while performing experiments (handling chemicals) or while other students in your laboratory are still handling chemicals.

## Student Laboratory Agreement

Read all of the following items and initial in the blank next to each statement to indicate that you understand and agree to abide by it. If you have questions about the items, please ask your instructor for clarification. Once you read all items, complete the information at the bottom of the sheet.

\_\_\_\_\_ **1.** I have received a copy of the Laboratory Safety Rules, Procedures and Practices. They have been explained to me by the laboratory instructor. I understand these rules and recognize it as my responsibility to follow at all times.

\_\_\_\_\_ **2.** I recognized that my instructor may give me additional safety instructions, either verbally or in writing, during the laboratory period. I agree to follow these additional instructions and accept this as my responsibility.

\_\_\_\_\_ **3.** I accept the authority of the laboratory instructor, the laboratory coordinator, Safety coordinator, laboratory manager, stockroom personnel or any other official of the University of South Florida (Faculty or Staff). I understand that failure to follow the safety rules, procedures and practices presented to me may result in dismissal from the laboratory session or, for repeated offences, dismissal from teaching laboratories with the consent of the Department of Chemistry.

\_\_\_\_\_ **4.** Check-in Day: I have inspected the equipment provided in the BIN assigned to me and my group and I acknowledge that all equipment is in good condition. I consulted with my instructor to replace damaged equipment, if any.

### Check-in Day

Name (Print): \_\_\_\_\_

University ID Number: \_\_\_\_\_

BIN Number: \_\_\_\_\_

Course Number: \_\_\_\_\_ Lab Section Number: \_\_\_\_\_ Room Number: \_\_\_\_\_

Lab Schedule (Day/time): \_\_\_\_\_/\_\_\_\_\_

Date: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ Signature: \_\_\_\_\_