

## **Recommended Teaching Laboratory Safety Instructions**

### **Instructions to the Faculty:**

Recommended general laboratory safety procedures and rules to provide to students taking courses using biological hazards in a teaching BSL-1 laboratory. Biological substances (biohazardous) include medical waste, microorganism, tissues, cell-lines, nucleic acids and plant.

**It is required that all instructor keep a log with the students signature affirming that he/she/they have being trained and are ready to work in the laboratory.**

The primary objective of this document is to provide a general guide for training students to work in laboratories. Wherever the scope of hazards is not adequately addressed by this general document, the principal investigator or laboratory coordinator must develop specific Standard Operating Procedures and address them with the students.

### **Instructions to the Students:**

#### **General Laboratory Safety Procedures and Rules for           (course name)           Laboratory Course (*indicate course code*)**

**Location:** Indicate laboratory location (e.g. Campus Center 222)

**Primary Contact:** Professor Full name  
(Principle Investigator) Office: Location (e.g. Campus Center 222)  
Office: phone number

**Secondary Contact:** Lab Coordinator name  
(Laboratory Coordinator) Office: Location (e.g. Campus Center 222)  
Office: phone number

**Security Department:** Campus Security  
407-353-4002

**EHS Office:** Environment, Health and Safety Office  
Office: 407-303-7747 ext. 1103936

**Fire/Police/Ambulance:** **911**

# General Laboratory Safety Procedures and Rules

## Laboratory Safety

All students must read and understand the information in this document with regard to laboratory safety and emergency procedures prior to work in the laboratory. Your personal laboratory safety depends mostly on you. Effort has been made to address situations that may pose a hazard in the lab but the information and instructions provided cannot be considered all-inclusive.

With good judgment, the chance of an accident in the laboratory is very small. Nevertheless, research and teaching workplaces are full of potential hazards that can cause serious injury and or damage to the equipment. Working alone and unsupervised in laboratories is prohibited.

Safety training and/or information should be provided by a faculty member, teaching assistant, or staff member knowledgeable on this duty to all new students that will have access to this laboratory.

## Emergency Response

- It is your responsibility to read safety and fire alarm posters and follow the instructions during an emergency.
- Know the location of the fire extinguisher, eye wash, and safety shower in your lab and know how to use them.
- Notify your instructor immediately after any injury, fire or explosion, or spill.
- Know the building evacuation procedures.

## Common Sense

Good common sense is needed for safety in a laboratory. It is expected that each faculty, staff and student will work in a responsible manner and exercise good judgment and common sense. If at any time you are not sure how to handle a particular situation, ask the Laboratory Instructor for advice. **DO NOT TOUCH ANYTHING WITH WHICH YOU ARE NOT COMPLETELY FAMILIAR!** It is always better to ask questions than to risk harm to yourself or damage to the equipment.

## Personal and General Laboratory Safety

1. Never eat, drink, or smoke while working in the laboratory.
2. Prior to using any reagent, read labels carefully.
3. Do not use any equipment unless you are trained and approved as a user by the laboratory supervisor.
4. Wear safety glasses or face shields when working with hazardous materials and/or equipment if instructed by lab supervisor.
5. Wear gloves when using any biohazard or toxic material.
6. Clothing: When handling dangerous substances, wear gloves, laboratory coats, and safety shield or glasses. Shorts and sandals are not be worn in the lab at any time.
7. If you have long hair or loose clothes, make sure it is tied back or confined.

8. Keep your lab space clean and organized. Keep the work area clear of all materials except those needed for your work. Extra books, purses, etc. should be kept away from equipment that requires air flow or ventilation to prevent overheating.
9. Disposal – You are responsible for the proper disposal of used material if any in appropriate containers provided by your laboratory supervisor. Dispose of sharps in the sharps containers provided in the lab.
10. Equipment Failure - If a piece of equipment fails while being used, report it immediately to your laboratory supervisor. Never try to fix the problem yourself because you could harm yourself and others.
11. Never pipette anything by mouth. Never taste anything.
12. Clean up your work area before leaving.
13. Wash hands before leaving the lab.
14. Turn off heat block when not in use.
15. Keep all pieces of equipment together (e.g. gel apparatus)
16. Do not take anything out of the lab, unless authorized by your instructor.
17. If a reagent bottle is empty, return it to the instructor. Do not put in the trash.
18. If you are missing an item from your lab station, ask for a replacement – do not just take one from another lab station or laboratory storage.
19. If you break something, let the lab supervisor know immediately.
20. Never do unauthorized experiments.
21. Never work alone in laboratory.
22. Do not leave an on-going experiment unattended.
23. Always inform your instructor if you break a thermometer. Do not clean mercury yourself!!
24. Never use open flames in laboratory unless instructed by your laboratory instructor.
25. Check your glassware for cracks and chips each time you use it. Cracks could cause the glassware to fail during use and cause serious injury to you or lab mates.
26. Maintain unobstructed access to all exits, fire extinguishers, electrical panels, emergency showers, and eye washes.
27. Clean your lab bench and equipment, and lock the door before you leave the laboratory.
28. Discuss with your instructor the location and use of the MSDS. Discuss potential hazardous chemicals that will be used in lab.
29. Discuss the location and appropriate use of biohazard bins, sharp boxes, and broken glass boxes.
30. Discuss the location and appropriate use of fire extinguisher(s), fire blanket(s), flammables cabinet, first aid kit, and spill kit.
31. Discuss the location of appropriate storage of your belongings including backpacks and books while taking the lab.
32. Discuss with your instructor about all the additional policies pertaining to this laboratory discussed in the “Laboratory Safety Manual, Hazardous Waste Management Manual, and Biological Safety Manual” provided by the Environment, Health and Safety office.