PHYSICAL SCIENCES STAFF
LABORATORY SAFETY CONTRACT
CENTRAL CAMPUS

BROWARD COLLEGE

_____

Potential hazards exist in all chemical laboratories and some can cause serious accidents. Fortunately, most accidents can be prevented if each person in the lab observes a set of common sense precautions and uses proper experimental procedures. The following rules are to be observed at all times.

Please read the following carefully and be sure that you understand the contents completely prior to filling in the information and signing.

Protective Clothing and Dress

Wear sensible clothing in the laboratory. Sandals are prohibited, as are shorts, short skirts, and bare midriffs. All personnel **must** wear safety goggles, gloves, and protective clothing (e.g. lab coat or apron) at ALL TIMES when in the Chemistry Labs. Long hair must be pulled back and only closed-toe shoes are allowed.

Personal Safety Equipment:

A. Goggles must meet **ANSI Z87.1-1989 standards** for chemical splash and impact resistance. *Safety glasses are prohibited.* You will be provided goggles by the Laboratory Manager.

B. You must wear **gloves** at all times in the laboratory (unless otherwise instructed). When done, the gloves are to be disposed of and hands washed before exiting the labs or prep areas. More than one pair of gloves may be required during the preparation.

C. You must wear a **lab coat or apron**. You will be provided a reusable apron. The Laboratory Manager will provide you with a titled laboratory coat.

D. You must wear **closed-toe shoes** at all times. Leather shoes are suggested for best protection.

Handling Chemicals and Equipment

Never put anything in your mouth in the laboratory. **No eating, drinking, gum chewing, candy, or smoking** permitted in the laboratory.

Flammable solvents such as ether, acetone, toluene, alcohols, etc., must be kept well away from open flames.

All chemicals should be handled with care using goggles and gloves and be considered toxic, corrosive, flammable and/or pungent unless informed otherwise. Read all labels carefully.

Use only what is needed. Never pour unused reagent back into the reagent bottles.

Return chemicals immediately to their proper places. **Replace lids on all containers immediately after use.** Leaving containers open increases everyone's exposure to the substances within them. Spills are also more likely when a container is open. In addition, some reagents can be ruined by excessive exposure to air.

If you spill a chemical, contact the Laboratory Manager and seek data from the MSDS.

No chemical container must be found in the lab without the chemical name on it. Contact the Laboratory Manager if containers are missing labels or improperly labeled.

Keep all chemical containers covered to prevent contamination of the laboratory with fumes.

Never heat a closed container.

The chemical fume hoods are to be used for mixing of all chemicals that produce either toxic or irritating gaseous substances that may be easily inhaled.

Make certain the sash is lowered to a safe level, as shown on the side of the hood. The vertical glass panels on the fume hoods should only be opened to load the fume hoods and do not provide any protection from splashes or fumes. To use the fume hoods raise the sash horizontally.

Clean up any spills you create. If you are uncertain as to how a spill should be cleaned, ask the Laboratory Manager.

Use only equipment that is in good condition. Report broken or malfunctioning equipment (Meltemps, hot plates, etc) to the Laboratory Manager. Do not use broken glassware; replace it.

Do not force glass tubing (or thermometers) into rubber stoppers, do not force tubing onto flasks or other equipment, etc.; lubricate the glass with glycerine. Protect your hands with towels when inserting glass into a stopper or use the tool in the prep room drawer. Handle all **glassware and equipment** properly and according to safety regulations to avoid cuts and burns. Never struggle with the equipment, if you are unsure or need assistance, ask the Laboratory Manager for details on the proper procedure.

Waste

You may dispose of dilute acids with plenty of water in the sinks in the laboratories and sinks in the fume hoods. All other **chemicals should be disposed of in labeled waste containers** located in the fume hoods or on the front counter. Never put any chemical waste in the trash, down the drain, or in any container not labeled as waste. Check with the Laboratory Manager or MSDS for proper disposal information.

Accidents

Check and memorize the location of the fire extinguisher, safety shower, and eye wash station. Be prepared and know how to use this equipment in case of an emergency. Learn and memorize the locations of the building exits and evacuation routes.

Each laboratory has an eyewash station to be used if a chemical has come in contact with your eyes. Just place your face between the two fountains and press the lever to activate the water. Try to keep your eyes open as best you can, as this flushes them much more effectively.

Report any accident or injury to the Laboratory Manager immediately. Contact Campus Safety personnel and/or call 911 in the event of an accident or injury.

In case of fire, alert the Manager and/or instructors in chemistry labs immediately and exit the laboratory in an orderly fashion, if instructed to do so. Never attempt to extinguish a fire by yourself.

Working Cleanly and Efficiently

Never begin any chemical preparation without reading the complete procedure first.

Keep aisles and work areas clear and drawers and cabinets closed.

Keep your laboratory bench and all other working areas clean at all times and free of items not related to the procedure.

Balances must be kept clean. Do not put any chemicals directly on the balance pans. Clean up all spills immediately. Close all containers tightly, and clean up the surrounding area. Use beakers or weighing paper unless otherwise instructed.

When finished, clean your glassware and put everything away. Clean your countertop and other working areas.

All labels must be removed from all glassware including tubes, beakers, flasks, etc. when you are done with them.

Place all broken glassware in the appropriately labeled red broken glass bins.

Tighten the lids on all jars and bottles of chemicals. Do not leave any container open to the air.

Gas Jet Procedure

When lighting the burner, open up flow valve on burner, turn on gas, use striker to light the burner.

When shutting off, turn the burner off first then turn the gas jet to the off position by turning clockwise all the way. Turn off the gas (burner and jet) immediately after finishing with it.

Other

Report any unsafe laboratory condition or situation to the Laboratory Manager immediately.

Eating and drinking in the lab is not allowed. Smoking is not permitted in the science building.

Put things back where you found them. This includes reagents, aprons, special equipment and anything non-disposable.

Dispose of broken glass, used pipets, and capillaries in the red broken glass containers beside the front counter.

Never look directly into lasers or UV lamps.

As a matter of routine, **always wash your hands** thoroughly before leaving the lab. Arms and face may require washing if chemical contact is made with these surfaces.

If you are unsure of any of the above procedures, discuss this matter with the Laboratory Manager.

For more information see the Handbook, “Chemical Technician’s Ready Reference”, in the Laboratory Procedure area of Room 213 or view the books and materials in the Science Laboratory Safety Library in Room 257 or the materials in the Compliance Centers.

I have read the above and agree to uphold these procedures. I have had training in the **Florida Right-to-Know Law** and will apply this information during performance of my job duties. I understand that failure to comply with any of the procedures above may result in the termination of my employment.

_____ _____

Technician signature Date of signature

_____

Technician name, printed

_____

Employee ID Number