# SAFETY REGULATIONS FOR THE LABORATORY

# WASHBURN UNIVERSITY DEPARTMENT OF CHEMISTRY

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The following regulations are intended for the safety and well being of all persons entering a designated laboratory room. These regulations contain the information required for anyone conducting or observing laboratory experiments to maintain and aid in the prevention of accidents. Persons need to completely understand the following regulations and note that total cooperation is required to successfully carry them out. If any part of the information provided is unclear please consult your instructor.

## INTRODUCTION

The information contained in this handout should be read and followed before ever entering the laboratory. It contains information that is vital to everyone's safety, including you.

Each student should have thoroughly read and have a complete understanding of the laboratory exercise they will perform. This will give them an awareness of the hazards that may be involved in the experiment.

# **CLOTHING AND SHOES**

Proper laboratory apparel should be worn to ensure optimum safety. Clothing should cover as much body area between neck and feet as possible. Shorts, skirts, tank tops, mid-drifts, lo-rise jeans, etc., are examples of unsafe laboratory clothing. It is wise to avoid wearing loose fitting clothing, particularly long sleeves, which pose additional safety risks in the lab.

Shoes should cover the foot entirely. No open shoes, such as flip-flops are allowed. The Lab Supervisor reserves the right to refuse entry to lab class to anyone wearing inappropriate attire.

# **EYE PROTECTION**

Approved safety goggles should be worn at all times while in the laboratory. If you wear contact lenses, please do not wear them while in the lab. Contact lenses can trap harmful chemicals against the eye and cause more damage than without.

# SAFETY EQUIPMENT LOCATIONS

Each person should take the time to familiarize themselves with the locations of all safety devices such as eye washes, safety showers, fire blankets, fire extinguishers, first aid kits, and exits.

## **FOOD AND BEVERAGES**

At NO time are food or beverages allowed in the laboratory. Chemicals and their vapors are readily absorbed into food or beverages and can cause serious chemical poisoning.

# **WORKING HOURS**

Lab work should be done during designated lab periods and under the supervision of the laboratory or research instructor.

# **BEHAVIOR**

Working in the laboratory should be taken seriously and an awareness of the dangers involved should not be forgotten. Avoid any type of horseplay or practical jokes while in the lab.

## **HOUSEKEEPING**

Keeping your work area free from clutter will prevent most accidents from occurring. To prevent someone from tripping, don't place your book bags or personal items in the aisles between lab benches.

#### **EXPERIMENTS**

Only do authorized experiments and follow the directions of the professor. Even changes in quantities of reagents can alter the safety of the experiment.

## HANDLING CHEMICALS

All chemicals should be treated as hazardous or potentially flammable. This will ensure that careless mistakes will be prevented.

# **PIPET USAGE**

Use the provided rubber bulbs for pipetting. Never use your mouth to pipet reagents.

## **GLOVES**

Use nitrile gloves for general laboratory use, unless otherwise specified by your instructor. If a chemical gets spilled on your glove, wash the glove before removing. Then thoroughly wash your hands before putting on a new pair of gloves. Remember that whatever gets on your lab gloves can be transferred to other items such as pencils, door handles and computer keyboards.

## **CHEMICAL SPILLS**

Report all spills immediately so that your instructor can advise you on the proper methods of clean-up.

## **EMERGENCY ACTIONS**

If someone has been splashed with a corrosive chemical or a burning solvent, the person closest to the victim should take immediate action to help them thoroughly wash the injured area to avoid further damage. If the chemical was splashed in the eye, the victim should be led to the nearest eye wash station where the eye can be flooded with water for 15-20 minutes. Proper safety actions such as using the eye wash, fire blanket and safety shower will be explained further by your instructor.

# REPORTING ACCIDENTS

ALL accidents, no matter how minor, should be reported to your lab instructor who will have you fill out the proper accident form.

## **WASTE DISPOSAL**

All waste products and excess chemicals should be placed in the containers provided. NO CHEMICALS SHOULD BE POURED DOWN THE SINK, unless otherwise specified by your instructor or the Lab Supervisor.

# RETURNING ITEMS TO THE STOCKROOM

All items returned to the stockroom should be completely clean and dry.

# **CONCLUSION**

None of the above items are meant to scare anyone away from the laboratory. However, use of these guidelines and a bit of common sense will help maintain a safe learning environment for all.