



# FREDERICK UNIVERSITY

## Health and Safety Regulations of SE Labs General and Personal Safety

### General

1. Do not work in the workshops without the attendance of the laboratory assistant / assistant.
2. Always behave responsibly within the laboratories.
3. It is forbidden to eat, drink or smoke in laboratories.
4. Know where and how the various types of protective equipment (safety equipment), including the first aid kit and the fire extinguisher, are located.
5. Read carefully the safety instructions and warnings on the devices and materials you are using.
6. If you have long hair or wearing loose clothing, make sure they are fast, so they cannot get caught on any machine or come into contact with your experiment. Long hair is tied to the back of the head.
7. Do not place your books or other personal items above any appliances, especially those that need ventilation.
8. Do not place heavy objects on shelves above the height of your head. Failure to do so may result in serious injury.
9. Keep your lab and workplace clean.
10. Ensure that there is always enough space in the hall to the exits and around the fire extinguishers. The floor of the lab must be clean and dry.
11. Do not run unnecessarily in the lab, do not gesture and do not disturb your co-students.
12. By entering the lab, do not touch any instrument / equipment, chemical, or other material until you are asked to do so.
13. If you wear contact lenses, if you have color blindness or if you have allergies, inform the teacher / laboratory assistant at the beginning of the academic year.
14. The use of crane and lifting equipment by students is not permitted.

### During the experimental process

1. Use protective equipment such as helmet, safety gloves, goggles, goggles or other protective equipment when working with hazardous materials or devices.
2. Remove from your workplace anything unrelated to the experiment.
3. Read labels and instructions for experimental devices carefully before using them.
4. Be well prepared for laboratory practice and be very familiar with the procedure you will follow. Carefully follow all written and oral instructions for assembling the laboratory device.
5. Do not use devices or materials that you have not been trained to use.
6. Check the glassware you use for cracks.
7. Do not taste or smell anything.
8. Always work in a well-ventilated area. Do not work with volatile substances or poisonous vapors if you can not use a hood and never put your head inside the hood.
9. If you use sharp tools, hold them by their handles and always carry them with the tip down and out.
10. Do not touch your face, eyes, mouth, and body with your hands in general while using chemicals.

### **Upon completion of the experiment**

1. Clean your workspace.
2. Any waste or scrap shall be placed in suitable containers, depending on their nature.
3. Wash your hands with soap and water.
4. Disconnect all devices and close the lab doors.

## Electric Hazards

1. Never interfere with an electrical circuit when it is leaking. Disconnect the power supply first.
2. Do not repair the electrical appliance you use without your authorization. If you notice that an electrical appliance or part of it has a problem, immediately notify the teacher / laboratory assistant. Do not try to fix it yourself.
3. Before switching on any electrical devices and circuits, call the assistant / laboratory assistant to check whether the assembly of the experimental device is correct.
4. You need to get the license of the lab responsible before using high-voltage devices. Never try to do any interventions on such devices.
5. When testing and adjusting devices powered by high voltage, make the settings with one hand, holding the other one in one of your pockets or behind your back, thus excluding the creation of a closed circuit through the body your.
6. Always ensure access to the mains switches.
7. Check if the cables are broken, if the wires are naked and the connections are loose.
8. Never operate damaged electrical appliances.
9. Ensure that no wire crosses a hallway, door, window or hangs from the ceiling.
10. If you want to pull a plug from the socket, pull the plug itself and never the cord.
11. Place electrical appliances on dry benches and use them with completely dry hands. Also, with completely dry hands touch any switch, plug or electrical appliance.
12. Do not operate electrical appliances when standing on a wet floor or when your shoes are wet.

## Mechanical Dangers

1. Wear safety glasses when using hydraulic machines and compressed air machines. Sudden movements of machinery during handling may cause accidents.
2. Wear safety glasses when operating pneumatic circuits.
3. Never blow compressed air on anyone, even yourself. There is a risk of serious injury.
4. Connect all piping and circuit components before opening the air supply. Any air line left free escapes in a dangerous way.
5. If you need to convert a circuit, disconnect the air supply (pump) before making any changes.
6. Keep your clothes and hands away from the moving parts.
7. If you detect any air leakage in the circuit, stop the flow immediately.
8. Avoid placing air lines on the floor or between the work surfaces. There's a danger of someone stumbling over them.
9. Examine thoroughly that all parts of the test assembly are properly connected before operating the compressed air pump