

Guidance  
Revision: 0

# Laboratory and Academic Shop Safety Work Practices for Equipment

Origin Date: 4/3/2024  
Revision Date: None

## INTRODUCTION

Operator manuals should be available for all equipment and instrumentation. Equipment manuals should be available and accessible to laboratory and shop personnel. Workers using the equipment should know where such manuals can be found and should review the manuals prior to using the equipment.

## IMPORTANT SAFETY PRACTICES

Although each will have its own specific safety requirements, some general guidelines for operating any lab equipment and instrumentation include the following:

- Always wear PPE recommended by the manufacturer when using the equipment and instrument (i.e.: hearing protection, face shield, etc.).
- Always keep the manufacturer's operating manual with the instrument.
- Follow and document recommended maintenance procedures outlined in the manual.
- New operators should be trained by qualified lab/shop personnel and familiarize themselves with the operating manual, including all pertinent safety information.
- Never remove hazard-warning labels from an instrument.
- Ensure that all equipment is grounded.
- Have a certified technician perform or supervise repairs.
- Disconnect equipment from the power-source whenever conducting maintenance on the instrument. Also, discharge any stored energy sources.
- Electronic or mechanical equipment should not be repaired and put into service unless a certified technician for that equipment, or a certified electrician can do repairs.
- Any modifications must be done through the manufacture, manufacture representative, certified to do the work, or a certified engineer.
- Do not bypass or modify any safety devices for any equipment.
- Experimental modifications of equipment for research which bypass or modify any safety devices can only be used by that researcher or their team with the approval of the department, the dean, risk management and EH&S with consolidation of the manufacture or a certified engineer.
- Modifications must be certified by a nationally recognized testing laboratory (e.g., UL, CSA, etc.).
- Do not modify any EWU infrastructure (fume hoods, lights, water distribution, gas distribution, ceilings, ventilation, electrical lines, outlets or circuits, walls or flooring, or install room dividers) without consulting EWU Facilities Maintenance and obtaining approval from EWU Construction and Planning.
- Ensure that routine maintenance is conducted and that maintenance records are maintained.
- If the equipment is used near (within six feet) any source of water, ensure that it is plugged into an outlet with a Grounding Fault Circuit Interrupter (GFCI). Note: do not plug continuous

Guidance  
Revision: 0

---

## Laboratory and Academic Shop Safety Work Practices for Equipment

---

Origin Date: 4/3/2024  
Revision Date: None

running equipment such as freezers, into GFCI outlets.

- Do not daisy chain strip plugs or electrical cords.
- Do not plug high energy equipment into strip plugs (microwaves). Use wall outlets.
- Do not overload outlets or strip plugs.
- If you are tripping the breaker using your equipment contact the workorder desk (x2245) for assistance.
- Be aware of and be trained in the unique hazards of your instrument or equipment. (i.e.: lasers, UV light, radiation sources, etc.).