Instructional Laboratory and Student Shop
Safety Guidelines
Department of Mechanical Engineering
Georgia Southern University

Introduction
To ensure safe practices in our laboratories, the Department of Mechanical Engineering has adopted the following guidelines. These guidelines will be consistently enforced and non-compliance will result in suspension from the laboratory. We believe that having an understanding of inherent hazards and learning how to be safe should be an integral and important part of the education process.

All students must understand and agree to the information in this document and must sign the declaration prior to undertaking any work in the laboratory.

Personal Protective Equipment
• Wear appropriate eye protection when working in the laboratory
• Wear closed-toed shoes that cover the entire foot and long pants.
• Securely fasten or tie back long hair.
• Secure loose clothing and jewelry.

Food and Beverage
• No food or beverages may be consumed, stored, or prepared in laboratory areas.
• Laboratory refrigerators may never be used to store food or beverages for human consumption.
• Ice makers must be labeled “Not for Human Consumption.”

Hazard Communication and Signage
• Safety Data Sheets (SDS) must be made available for all chemicals used and stored in the lab.
• The laboratories’ chemical inventory must be reviewed and updated annually.
• Hazard warning signs must be posted and up to date.

Housekeeping
• The laboratory room aisles, hallways, and pathways should not be cluttered, block travel, or create tripping hazards.
• The laboratory workbenches, floors, and fume hoods should be free of oil, grease, liquids, broken and uneven surfaces, tripping hazards, and sharp objects.
• The laboratory workbenches, fume hood, or biosafety cabinet should be adequately organized and clean to provide for sufficient workspace for operations without spills, accidents, and other preventable incidents.
• Laboratory trash should be properly segregated and in the appropriate container.
Chemical Storage
- All chemical containers should be properly labeled.
- Chemical should be separated by their hazard class or compatibility.
- All chemical containers should have caps, lids, or stoppers that completely seal the container.
- Hazardous chemicals should not be stored on the floor, under the sink, or near heat or ignition sources.
- Flammable and combustible liquids should be stored in quantities within the regulatory storage limits for the lab.

Fire Safety
- Fire extinguishers should be available, easily accessible, and free of obstructions.
- All fire doors should be self-closing and kept closed.
- Excess combustible materials such as boxes and shipping containers should not be stored in the laboratory or block aisles and doorways.

Compressed Gas Cylinders
- Compressed gas cylinders should be properly marked to identify content.
- Compressed gas cylinders should be properly restrained and segregated.
- The number of compressed gas cylinders secured together with one restraining device should not exceed allowable limits.
- Empty cylinders should be labeled “EMPTY” with caps in place.
- Pressured container relief valves, venting devices, and gauges should be functional.

Electrical Safety
- Extension cords and power strips may not be used as permanent wiring.
- Power strips may not be plugged into an extension cord or daisy-chained.
- Circuits should be properly loaded.
- Electrical panels inside the laboratory should remain accessible and unobstructed.

Operating Machinery
- All points of operation, rotating components, and other moving parts of machinery should be properly guarded.
- Shields should be available for experiments that can produce projectiles or potentially explode.
- Machinery that may vibrate should be securely mounted to prevent movement.
- Do not operate any machinery until trained to do so and approved for use by the instructor.
- Operate only the machinery authorized by the instructor.

Accidents
- For medical emergencies please dial 911.
- Spillage of hazardous chemicals should be reported to the Public Safety Department at 478-5234 or the Environmental Safety Department at 478-7161.
If a large fire appears uncontrollable, activate the building alarm, contact 911 and the Public Safety Department at 478-5234 and close all doors while exiting the building to reduce oxygen and slow the spread of fire – do not lock the doors.

If a minor fire appears controllable, contact the Public Safety Department at 478-5234 and promptly direct the charge of the fire extinguisher toward the base of the flame.

Accidents, no matter how minor, should be reported immediately to the faculty or staff member responsible for the laboratory.

MECHANICAL ENGINEERING LABORATORY SAFETY AGREEMENT

I have read the Instructional Laboratory Safety Guidelines and understand its contents. I understand the safety guidelines in this document may not be comprehensive. I agree to abide by all of its rules at all times in any Mechanical Engineering Instructional Laboratories. I also understand that I may not perform experiments or operate machinery without supervision. I understand that violation of safety regulations may result in my expulsion from the laboratory, and that continued infractions may result in my being withdrawn from the course.

Student Signature: _____________________________ Date: _______________________

Student Name (PRINT): _____________________________________

Faculty/Instructor Signature: _____________________________ Date: _______________________

Faculty/Instructor Name (PRINT): _____________________________