UNC Asheville

MACHINE SHOP SAFETY PROGRAM

This document sets forth the minimum safe work practice requirements for the use of machinery in University machine shops. It is the responsibility of each department that uses machinery for purposes of fabrication to designate a qualified Shop Supervisor(s) to implement a Machine Shop Safety Manual that complies with this Program to ensure a safe working environment for faculty, staff, and students. Shop Supervisor(s) must be experienced and competent in the safe use of all tools and machinery in the Shop. All Machine Shop Safety Manuals must be submitted and approved by the Scientific Laboratory Committee.

The Environmental Health and Safety (EH&S) Department provides technical support to Shop Supervisors by conducting annual assessments of University machine shops; monitoring and communicating proposed safety standards/regulations; assisting in the assessment of machine shop equipment; and investigating suspected unsafe conditions or accidents.

Machine Shop Safety Program components include:

- Posting Shop Supervisor(s) contact information and hours of shop operation
- Controlling Access to Shop space and equipment.
- Shop specific operating rules.
- Standard Operating Procedures (SOPs) for each piece of machinery.
- Documentation of training and authorizations for use of equipment.
- Documentation of auditing and shop inspection.

**Documentation must be made available for an internal or external regulatory agency inspection.**

Posting Shop Supervisor(s) contact information and hours of shop operation

Every Shop must post emergency contact information of the Shop Supervisor and hours of shop operation.

Controlled Access to Shops and Equipment:

Every shop must develop a method for controlling the access of unauthorized personnel into their shop. At a minimum, each shop must implement a means to prevent the unauthorized use of dangerous machinery and tools.
**Shop Specific Operating Rules**

Each shop must develop its own specific operating rules, in writing. At a minimum, these rules must address the following information:

- Notice that communicates only authorized users allowed
- Hours of operation
- Personal protective equipment (PPE) requirements
- Operating attire (i.e. tie back long hair, roll back sleeves, etc.)
- Safe shop practices (i.e. working alone, safe behavior, etc.)
- Safe use for equipment and tools
- General rules for housekeeping and safety
- Training requirements
- First aid and eye washing
- Contact information (shop supervisor and facility manager)
- Emergency contact information
- Enforcement of shop policies and procedures

**Standard Operating Procedures for Equipment**

Standard Operating Procedures (SOP's) must be maintained for each piece of machinery in the shop. SOP’s must be based on the recommendations of the manufacturer and should list the specific hazards associated with the machine, as well as, recommendations for safe use. SOP’s must be available at or near the machine and copies must be kept in the Machine Shop Safety Manual.

**Documentation of training and authorizations for use of equipment**

Each shop user must complete training commiserate with their use of the machine shop that ensures for the safe and proficient use of equipment/machines. The training sessions will be provided or coordinated by the Shop Supervisor. The training must include, at a minimum, the following topics:

- Review of this Machine Shop Safety Policy and the shop specific operating rules
- Dangers associated with specific tools and machinery in that shop
- Personal protective equipment requirements
- Safe use of shop equipment
- Hazards and limitations
- Guard placement and adjustments
- Cleaning and maintenance
- Equipment use demonstration
Documented Auditing and shop Inspections

The Shop Supervisor is responsible for conducting and documenting (inspection log) periodic machine, tool, associated equipment, and shop safety inspections. All machine tools and equipment that are deemed unsafe must be removed from service and locked out until properly repaired. The EH&S Department will conduct, at minimum, annual inspections of all machine shops.