Shop Safety Guidelines

Environmental Health, Safety, and Risk Management Department

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SHOP SAFETY

The Stephen F. Austin State University is structured around a firm framework of academic standards, policies, rules and regulations that provide for effective and efficient administration and operation of the education process. Safety rules and regulations are also necessary aspects of the University's structure to those areas identified as shops. These are areas that are devoted to manipulative procedures involving tools, machines and other hazardous equipment or materials for the purposes of maintenance, repair, production, research and/or instruction.

The Environmental Health, Safety and Risk Management (Safety Department) prepared the shop safety rules and regulations presented in this booklet. These rules and regulations are based on recommendations of the National Safety Council and are required by the State of Texas.

Enforcement of these rules is the responsibility of department heads; however, specific responsibilities may be delegated to teachers, shop supervisor, foreman, and instructors.

Personal Protection
1. Horseplay or practical jokes of any kind are prohibited.
2. Approved and appropriated safety goggles or glasses will be worn at all times by all personnel, including visitors or spectators, who are engaged in, or are in the area of known dangers created by:
   - The use of hot liquids, solids or gases or
   - Caustic or explosive materials, or
   - The milling, sawing, turning, shaping, cutting, grinding, or the stamping of solid materials, or
   - The tempering, heat treatment of kiln firing of metals and other materials, or
   - Gas or electric welding.
3. Applicable hand, foot, or leg protection will be worn at all times by all personnel who are engaged in activities involving:
   - Handling materials with sharp edges such as sheet metal, castings, etc., or
   - Working with acids, caustics, solvents, or other such products, or
   - Operations where the main hazard is friction, that may cause blisters, or
   - Any type of work involving hazards to the hands, feet and legs.
4. Work clothing worn by personnel will be appropriated to the specific activity of the shop area.
   - Dress for the job. Loose-fitting clothing is dangerous around moving parts of machinery.
   - Wear sturdy shoes that are in good condition and suited for your work.
   - Avoid wearing oil soaked clothing that may catch fire or cause skin irritation.
   - Avoid wearing metal jewelry near electric equipment or machinery (bracelets, rings, etc.)
5. Approved and appropriate respirators will be worn where harmful dust, fumes, gases, mists, or vapors are present.
6. Approved and appropriate head protection will be worn by all personnel engaged in shop activities that warrant protection of the head.
7. Approved and appropriate hearing-protection devices will be worn by all personnel engaged in shop activities involving intense and/or harmful sound levels.
8. Personnel involved in material handling requiring lifting lowering procedures will be provided with instructions in performance of such operations.
**General Safety**

1. Visitors must obtain the necessary approval before entering a shop area.
2. Safety inspections will be made of the shop area at prescribed intervals and a written report prepared.
3. Non-skid floor covering materials will be provided for areas where required.
4. Alternate yellow and black stripes will be applied to protruding parts, low beams, tripping hazards, and loading docks.
5. Compliance with all recognized safe practices is required of all Stephen F. Austin State University employees and students.
6. Signs and signals constitute safety rules and must be obeyed.
7. Unsafe conditions in the area will be reported to the immediate supervisor.
8. Gas cylinders will not be used as rollers or to support work and must be secured.
9. All ladders will be inspected at regular intervals. Grease or oil will not be permitted to accumulate on the ladder.
10. Use of the top section only of an extension ladder as a ladder is prohibited.
11. It is the responsibility of the supervisor or his delegated leader to account for each employee in his group before leaving jobs at quitting time, for meals, or for any other reason.
12. All accidents resulting in personal injury will be reported to the Safety Department at extension 4514 by the injured person's supervisor immediately regardless of nature or severity of the injury.
13. Running in any shop area is strictly prohibited.
14. Personnel will not be permitted to work alone in shops where hazards exist.
15. All exits shall be clearly identified and kept unobstructed at all times.
16. All unauthorized personnel will be kept away from any machine that is in operation.

**Equipment Safety**

1. The use of defective tools, machines, or other equipment is prohibited. Report to your supervisor.
2. Point of operation guards must be used for all operations involving machine cutting, drilling, shaping, or forming.
3. Standard color-coding must be used on all hazardous equipment to emphasize danger areas.
4. Specific safety rules must be posted at or near each hazardous machine or danger area.
5. Strict supervision must be maintained of all students and employees using hazardous machines and tools.
6. All individuals will be prohibited from operating any machine in a shop until such individuals are trained by authorized supervisors.
7. Appropriate warning signs will be placed on equipment that is under repair or otherwise inoperative.
8. Approved traffic or aisle lines will be applied to the floor around each hazardous item of equipment.
9. All power machines will be fastened securely to the shop floor, or if bench mounted they will be securely attached to the bench.
10. Operation, adjustment, and repair of any machine tool must be restricted to experienced and trained personnel, or learners under close supervision.
11. Chips will be cleaned from a machine with a brush or chip hooks (NOT with a rag, the hand, or compressed air).
12. Distracting or talking to an individual operating power equipment is absolutely prohibited.
13. Unless you have been taught how to operate a machine, don't use it.
14. When oiling, cleaning, adjusting or performing any work on an electrical driven machine be sure the electrical service (or disconnect) is "locked-out" and taped as "maintenance being performed - do not operate."
15. The removal of machine guards and safety devices, even for a brief interval, without proper authorization, is strictly prohibited. After making repairs or adjustments to a machine, REPLACE GUARDS before machine is started.
16. Before starting to work on a machine that has a dangerous point of operation, make sure the guard is in place and properly adjusted.
17. All gears, belts, and other power transmission devices must be enclosed with permanent guards or barricades. Guards are installed for your protection; don't render them inoperative.

**Small Tools:**
1. Use only tools that are in good condition. REPORT DEFECTIVE TOOLS.
2. Burred or mushroomed heads on cold chisels, hammers, etc. must be dressed off before using.
3. Replace splintered, broken, rough or loose tool handles before using tools.
4. Equip files with handles before using them.
5. Wrenches with sprung or spread jaws should not be used.
6. Keep the points of screwdrivers shape properly; don't use screwdrivers with broken or rounded points or bent shafts.
7. When using a screwdriver, place the work on a bench or some solid object; NEVER hold the work in the palm of your hand.
8. Sharp edge tools shall be stored in a safe place. When such tools must be carried about, cover points or sharp edges with shields, and never carry unshielded sharp tools in your pockets.
9. Always use the proper tool for the job.

**Housekeeping**
1. A standard procedure is to keep floors free of oil, water, and freight materials.
2. Overhead storage areas for supplies, equipment or similar items must meet safety standards and be properly marked.
3. The daily removal of all sawdust, shavings, metal cuttings, and other waste material must be provided.
4. Marked boxes or bins will be provided for the various kinds of scrap stock.
5. Oily rags will be deposited in closed metal containers specifically provided for them.
6. Good housekeeping is required of all shop personnel.
7. Caustic soda will not be used for cleaning floors.
8. All walkways (aisles) will be kept clear of materials, tools, and equipment.
9. Access to and from stairs will be kept free from slipping and tripping hazards.
10. Floor areas under material and storage racks will be kept free of stored materials as well as debris, re-fuse, scrap, and other foreign matter.
11. Materials in supply bins will be maintained in an orderly manner with no materials projecting over the edges of the bins.
12. Tools and portable equipment will be stored in approved racks, bins, or shelves when not in use.
13. Tools and equipment will be kept reasonably free of oil, grease, dirt, and other accumulations that may render them hazardous to use.
14. Work bench tops will not be used for storage purposes and will be swept clean after work with unneeded materials and tools removed.
15. Walls will be kept free of unsightly accumulations of oil, grease, and other splashed material.
16. Items such as lumber, pipe, etc., will not be stored by merely leaning up against a wall. A proper storage facility will be provided.
17. Corners will not be permitted to become "catchalls" for miscellaneous storage. Where practicable, such corners will be brightly painted to discourage their use as disposal areas.
18. Bases of building columns will not be used as storage places. Where practicable, such bases will be brightly painted to discourage their use as disposal areas.
19. Windowsills will be kept free of all storage.
20. Storage of materials or objects of any description under stairs or in stairwells is strictly prohibited.