

EASTERN SHORE COMMUNITY COLLEGE
ACADEMIC AND STUDENT AFFAIRS POLICIES
HIGH RISK INSTRUCTIONAL PROGRAM SAFETY POLICY

Policy Number:

Last Reviewed: April 22, 2015

Responsible Department: Vice President of Academic and Student Affairs

I. PURPOSE

This policy addresses student, faculty, staff, and guest safety when using machines, equipment, and power tools in shops or other academic training facilities of Eastern Shore Community College (ESCC). This policy defines requirements that must be addressed by each shop.

II. AUTHORITY

The President has given the Vice President of Academic and Student Affairs the responsibility and authority to establish and enforce the college's High Risk Instructional Program Safety Policy.

III. APPLICABILITY

This policy applies to all employees, students, and guests when in a high risk instructional program shop.

IV. DEFINITIONS

A **shop** is a room or set of rooms with machine tools or other fabrication equipment, including equipment for woodworking, metal machining, metal forming, sand blasting, and/or welding.

Academic shops include shops that directly support the teaching functions of the College. Shops related to maintenance and service activities or reporting to maintenance or service departments are not covered by this policy.

Machines are mechanical device with moving parts that do work when given power from electricity, gasoline, etc.

Equipment are tools, machines, etc. that are needed to do a particular job or activity such as fabrication, processing, or preparation of products from raw materials and commodities.

Tools include:

- Machine tools such as fixed and bench top powered equipment used for cutting, drilling, milling, sanding, blasting, shearing, punching, or otherwise forming solid materials such as metal, plastic, and wood. Examples include but are not limited to table saws, band saws, drill presses, lathes, belt sanders, bench grinders, pedestal grinders, and metal shearing equipment.
- Welder's tools include electrode holders for welding with manual electrodes, welding torches, cleaning tools, such as hammers for slag removal, pneumatic hammers, wire brushes, and grinding machines, tools for fitting the parts to be joined, tools for moving and turning hot work pieces, tools for aligning welding equipment, jigs, and fixtures, and measuring instruments, such as gauges and micrometers. Data on equipment for special welding methods, such as resistance, ultrasonic, and diffusion welding, are given in the articles dealing with these methods.
- Portable power tools include circular saws, routers, drills, nail guns, and other powered tools that are typically held in place by the operator rather than being fixed in place or positioned on a bench top.

V. POLICY

A. Safety Manual Requirements

Colleges within the Virginia Community College System (VCCS), such as ESCC, that have high risk academic programs with shops where students, faculty, staff, and guests use machines, equipment, and/or portable power tools shall ensure that each shop has a written manual related to safety. The manual must be kept current, shared with anyone using the shop and/or its machines, equipment, and/or tools, and followed by all. It must address the five components and subtopics listed below. Additional components may be added as appropriate, particularly those that reflect OSHA or industry standards.

1. Code of Conduct

Each high risk instructional program must create a code of conduct listing rules of behavior for students in industrial programs. Each student must sign the code of conduct to indicate that they will follow and practice all safety policies taught in class. The code should include requirements related to student behavior in general and be consistent with existing college policies. The code should also include sanctions, beginning with intermediate sanctions and progressing to dismissal from a class period, class, or program if warranted. Instructors must be able to enforce such sanctions in order to make the code effective.

2. General Safety

Each high risk instructional program must have general rules in place to ensure the safety of students, faculty, staff, and guests in the shop. At the minimum, those rules must include the following:

- No one is allowed to be in the shop and use the machine, equipment, or tools therein without permission of the instructor.

- No one is allowed to work in the shop alone. Students must always be supervised when working in the shop. If the instructor must step-out of the room for any reason, students must stop working and power-down machines, equipment, and tools.
- No students may use machinery, equipment, and tools on which they have not been trained.
- The shop, and its equipment and tools, may not be used outside of established hours.
- All machine guards must be in place when equipment is in use.
- The operator must remain near equipment while it is running.
- Damaged equipment, or equipment that does not appear to be operating normally, must not be used.
- College shops, machines, equipment, and tools may not be used for personal projects. All projects must be performed under the supervision of an instructor and provide a learning experience for the entire class. Work on these projects is to be used to monitor a student's progress and be evaluated for a grade in a course.
- Untrained persons in the shop or work area must be informed of these basic safety rules before observing the use of the machines, equipment, or tools.
- Untrained individuals may not use the machines, equipment or tools.
- Incidents or problems must be reported to and investigated by the Vice President of Academic and Student Affairs or his/her designee.
- The instructor may remove any student, faculty, staff, or guest from the shop for unsafe practices or unsafe behavior.

3. Personal Protective Equipment (PPE)

Each high risk instructional program must require students, faculty, staff, and guests to wear Personal Protective Equipment to be protected from exposure to work place hazards and the risk of injury when working in the shop. All personal protective clothing and equipment must be of safe design and construction and appropriate for the work to be performed. The instructor will provide the students with a list of the required PPE for each course. Two sets of PPE will be kept in each shop for the use of administrators or guests.

4. Safety Training

Each high risk instructional program must provide safety training for any students, faculty, staff, or guest that may use the shop. For students, a competency measure to qualify students to practice safety in the shop is required. Students must be held accountable for passing the safety test before operating any machines, equipment, or tools in the shop. When possible, safety tests should be promulgated by industry governing bodies or professional organizations. For critical safety questions missed, or when a test is failed, instructors should either require re-taking of the test or questions or work with the student one-on-one to understand the core concept. If

the instructor chooses to work with the student rather than utilize a written re-test, results should be documented to provide evidence that the student understands the concept.

The training program must include the following:

- Tour of the shop, including the location of safety equipment, MSDS sheets, and other relevant materials
- Review of general safety rules and practices
- Safe operation of the specific machines, equipment, and power tools in the shop that the students will be using
- Emergency training and awareness of specific risks of fire, electrocution, or injury to reduce the likelihood of confusion and panic during extreme situations. Student should be trained on the use of fire blankets, fire extinguishers, emergency kill-switches, conduits in the case of an electrocution, and other necessary materials and methods to provide safe, immediate protection of students, instructors, staff, guests, and the facility. Basic first aid should also be included, such as use of an AED. Training in basic response to specific industry risks can be helpful in the classroom (and ultimately on the jobsite) and increase student preparation for jobs after completing the program.
- Building evacuation route, emergency procedures and emergency telephone location
- Develop a mechanism for corrective reinforcement of safety rules and how this will be accomplished.

5. Facilities, Equipment, and Tools

Each high risk instructional program must reduce common hazards associated with the use of a shop that contains machines, equipment, and tools. The following will reduce the likelihood of accidents.

- Ensure that the shop is kept organized, neat, and clean to meet OSHA standards.
- Ensure that safety signage is properly displayed.
- Ensure that all machines, equipment, and tools are inspected before and during the semester by the instructor and that each inspection is documented.
- Ensure that any machines, equipment, and tools that are not in good working order or not equipped with effective guards are not be used.
- Ensure that all machines, equipment, and tools get regular maintenance.
- Maintain written safety procedures for each machine. (This may be a document prepared by the manufacturer.) These written procedures should address safety precautions for routine risks such as changing cutters, as well as more significant risks that may require full lock-out tag-out.
- Schedule an audit with the OSHA or VOSH at least every three years.

B. Instructor Safety Requirements

College instructors engaged in teaching courses considered “high risk” within the VCCS must demonstrate a requisite knowledge and skill set through a combination of training and experiences. They are therefore required to:

- Stay current in their industry so that students may be provided with a relevant, quality, and safe learning experience through one or more of the following options:
 - Obtain and keep current industry specific certifications and credentials in their field
 - Participate in continuing professional education related to their field
 - Read and study textbooks that are written or endorsed by industry organizations
 - Maintain a business related to the program in which they are teaching
 - Utilize advisory councils for support and information
- Take a safety course by a certified professional no less frequently than every four years. Other circumstances, such as new equipment or infraction of safety rules, may warrant interim training.
- Be familiar with emergency equipment and how to use it.
- Provide information on and stress the importance of safety in course syllabi. Make safety part of the student’s grade through the use of lessons, tests, and general practices to ensure safety is emphasized. Furthermore, the syllabi should indicate where safety standards originate, such as professional organizations and governing bodies. This enhances the student’s knowledge and allows them to tie classroom procedures to those practiced in industry.
- Provide a list of the required safety equipment in course syllabi.
- Enforce practices written in course syllabi.
- Schedule at least one annual meeting (two is preferred) of the program advisory council to allow them to provide input on curriculum and discuss safety topics relevant to current industry. In addition, they should examine the safety manual and provide feedback on safety-related topics in current industries.

Instructors will be evaluated on whether they are teaching and practicing current, appropriate safety standards, as well as receiving current professional training in their field in their performance evaluations. In addition, instructor performance in meeting safety requirements, enforcement of safety policies, and compliance with the requirements above will be assessed in the student evaluations of instruction.

VI. PROCEDURES

VII. SANCTIONS

The college considers violation of this Policy to be a serious offense. Violations of this policy will be referred to the Vice President of Academic and Student Affairs for enforcement and sanctions.

VIII. INTERPRETATION

The authority to interpret this policy rests with the President, and is generally delegated to the Vice President of Academic and Student Affairs.

Approved:

Linda Thomas-Glover, President

Date