



TENNESSEE COLLEGE  
OF APPLIED TECHNOLOGY  
MEMPHIS

# Health and Safety Plan 2020

## TCAT at Memphis

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## Message from the President

A major goal of public agencies and units is to provide safe and efficient services to residents of the State of Tennessee. Each employee must help to accomplish this purpose through safe and efficient work practices. Employee safety is vital to our success as is the safety of our student body. We accept the moral and legal responsibility of providing safe and healthy work conditions. Our objective is to implement a comprehensive safety plan that meets all federal, state, and local safety codes, and establishes and maintains safe and healthy conditions in our offices, facilities, and grounds.

Regarding safety, it is the policy of the Tennessee College of Applied Technology at Memphis to:

- Provide efficient occupational training in a safe structured instructional environment.
- Provide instruction in and encourage the development of safe working practices by the student; emphasize the "**SAFE WAY**".
- Stimulate general interest in occupational safety and prevention.
- Promote safety awareness.

This objective can be reached if all employees accept personal responsibility for their own safety and well-being. A safe working habit is an essential element of satisfactory job performance. Each employee is responsible for immediately reporting potentially unsafe conditions and work practices and taking effective temporary actions to minimize the risk to himself / herself and others.

Each individual is responsible for helping us reach our loss prevention goal of preventing personal injury and loss of property because of accidents. Accordingly, each member of the faculty and staff is expected to support this policy fully and enthusiastically and to discharge his/her responsibility for safety and accident prevention as assigned with diligence and imagination.

Each supervisor will be held accountable for the actions of his employees. Supervisors are responsible for ensuring both they and their employees follow all safety rules, policies, and regulations.

It is our intention to provide good supervision, effective training, and safe equipment on the job. The success of our safety and loss prevention program depends on the efforts of all employees to minimize and eliminate all potential hazards.

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Roland Rayner –President

## Forward

At the center of any effective safety program is a clear understanding of what safety is. Webster defines safety as freedom from harm. The term occupational safety then implies prevention of harm to employees while working on the job. Since an employee or a student may be harmed as a result of an accident, the prevention of accidents must necessarily be the central theme of any safety program.

Accidents can occur anywhere. Campus shop accidents are generally caused by unsafe conditions or unsafe acts. An **unsafe act** is defined as an action by an individual, which results in an accident; e.g., using a grinding wheel without wearing protective eyeglasses, or smoking in a non-smoking area where flammable materials are stored. An **unsafe condition** is defined as a physical condition in the work or teaching environment that results in an accident; e.g., the upper guard on a circular table saw is not in place. Experience in industry has shown, however, that there seldom is a single, clear-cut cause of an accident. Both unsafe acts and unsafe conditions are involved in at least four out of five accidents. These can often be lessened or eliminated by insisting proper work procedures be followed at all times.

A major segment of accident prevention is a well-established safety program designed to prevent injury, promote health, and prevent or reduce the possibility of legal involvement. To that end, informational materials and supplies are provided throughout the campus on **ISH** boards. These large orange boards provide **Information, Security, and Health** materials gathered in a central location. The boards contain Emergency and evacuation procedures, First Aid kit, BBP & CPR kit, eye wash, and SDS binder, in addition to other important institutional information. Brochures detailing the features of the **ISH** boards are available.

The protection of students from personal injury is a primary responsibility for all faculty and staff of TCAT Memphis. The instructor is the main figure responsible for seeing this accomplished. Instructors must provide proper training, supervision, enforce all shop operations, and set a good example by their own actions. The ultimate goal is to educate students to perform activities in campus shops in a safe and efficient manner. All of us in the TCAT system have the obligation not only to offer our students a safe place in which to learn the occupational skills needed but also to prepare them to work safely in their chosen field upon graduation. Safe work habits developed here immediately translate to the work environment.

### 1.0.0 Safety Committee

The President appoints an employee representative to Chair the Safety Committee. The TCAT Safety Committee is comprised of a broad representation of faculty and staff with student participation encouraged at every meeting. The President or designee appoints and approves the safety committee. One Chair directs the committee which is comprised of the Vice President, Facilities Manager, and no less than 6 faculty & staff members. One representative (selected by the chair) is responsible for the scribing of minutes. The minutes are maintained at the school as part of ordinary administrative recordkeeping. The Safety Committee is responsible for annual review and evaluation of the Safety Plan. Upon completion the Plan is submitted to the President for approval. Employees (and students) have access to the Safety Plan upon approval.

Safety Committee meetings are held regularly to facilitate communication of safety problems and to provide general information as well as to stimulate interest and motivation in the safety program of the Tennessee College of Applied Technology at Memphis. The Safety Committee meets no less than twice per year. All committee members are encouraged to bring a current student with them to attend the meetings. The Aviation Campus has representation on the main campus. This representative also conducts safety meetings as needed at the Extension campus.

Members of the Safety Committee regularly present information to the entire body of TCAT employees during faculty and staff meetings scheduled by administration. Safety topics are integrated with scheduled faculty and staff institutional meetings. Time limits for the meetings are left to the discretion of the presenter. All faculty and staff members attending safety meetings sign the meeting form. It is recommended that student led safety meetings, within training programs, be encouraged.

## 2.0.0 Safety Rules

Safety rules are the means by which instructors and College administrators communicate a distinction between acceptable and unacceptable performance. Safety rules must be enforced and are a necessary part of an overall safety program. This responsibility rests squarely on the shoulders of instructors. Instructors understand enforcement of safety regulations is enhanced by setting a good example. If an instructor performs a particular operation in a dangerous manner, the students will assume that this is an acceptable behavior.

Any continuous or flagrant violation of these rules by students or employees may result in termination. These rules of personal conduct have been established to maintain a safe work environment for employees and students at the Tennessee College of Applied Technology at Memphis. An employee or student violating any of the following rules may be subject to dismissal:

- Consumption of alcohol or unauthorized drugs is strictly prohibited on campus.
- Reckless operation of personal vehicles on campus will not be permitted.
- Flagrant disrespect for campus property and safety of personnel and other students will not be permitted.
- Horseplay will not be permitted.
- Each employee and student will abide by the rules and recommendations described in the Safety Program.
- Unauthorized possession of fire arms or weapons on TCAT property will result in immediate expulsion and police will be notified.

### 3.0.0 Responsibilities

#### 3.1.0 College President

The College President is ultimately responsible for safety on the campus. This responsibility is demonstrated by emphasizing that safety and teaching go together, setting a good example for the staff, attending safety meetings, reviewing accident reports, and motivating employees toward safe work practices. The following are also considered the responsibility of the College President:

- Establish a safety program to monitor and audit operational activities.
- Provide leadership in safety program planning and policy implementation.
- Designate a safety officer who reports directly to the College President.
- Verify that safety training is conducted on a continuing basis for employees and students.
- Verify that reported incidents or violations are investigated.
- Provide a budget adequate for the achievement of all safety objectives.
- Ensure that all record keeping requirements are being observed faithfully.
- Maintain an active, effective interest in the safety effort.

#### 3.2.0 College Administration

The following are also considered the responsibility of the campus safety officer:

- Develop and administer the campus safety program:
  - A. Implement a complete safety program.
  - B. Stimulate and coordinate the work of others.
  - C. Take the lead in developing safety policy.
- Inspect and locate unsafe conditions or unsafe practices.
- Investigate all injuries, reported hazards, and incidents.
- Ensure that corrective action is taken to provide prevention or avoid recurrences.
- Analyze records for clues for prevention of future injuries and illnesses.
- Prepare reports as requested on the current safety experience of the campus and justify safety measures.
- Act as an advisor on other safety matters.
- Publicize safety materials.
- Verify compliance with federal, state, and local regulations regarding work safety and health.
- Act as an aid in all aspects of safety training.

### 3.3.0 College Faculty / Staff

The faculty and staff are responsible for monitoring safety activities including the following:

- Ensure good housekeeping practices are maintained at all times.
- Ensure vehicles and equipment are operated within designated limitations.
- Inspect new equipment to ensure all desirable safety features and devices have been provided and installed.
- Identify safe operating procedures to students and other personnel.
- Prepare detailed emergency procedures.
- Ensure access to equipment components during maintenance, repair, or adjustment does not expose personnel or students to hazards.
- Maintain continuing on-the-job supervision of all potentially hazardous activities.
- Ensure students are taught the nature of possible hazards, how to avoid exposure, the importance of maintaining good health, and actions necessary if a mishap occurs.
- Conduct periodic training with appropriate testing.
- Ensure students discontinue work if students are found to be unqualified, unsuitable, or incapable.
- Review potentially hazardous operations to ensure suitable procedures and safeguards are provided.
- Report any unsafe condition.
- Require training drills to ensure high proficiency of students during emergencies.
- Encourage students to report any defective PPE, safety devices, controls, equipment, or materials.
- Require the buddy system be used for tasks that involve considerable danger.
- Keep informed of new and accepted safe practices for accident prevention.
- Set a proper example for students.



### 3.4.0 Student Responsibility

Students must assume responsibility for their safety and that of others. Student responsibilities are as follows:

- Work within school policies and safety regulations.
- Develop desirable behavioral patterns and attitudes by accepting directions, advice, and counsel.
- Accept personal responsibility for assisting in the safety program and in working toward its success.
- Ask questions concerning proper operation of tools and equipment.
- Ask permission before operating any tools or equipment.
- Inspect equipment and/or tools prior to each use.
- Report any unsafe actions or condition to the instructor.
- Utilize and wear PPE (personal protective equipment) as needed.

### 4.0.0 Safety Inspections

The President, faculty, and staff conduct persistent inspections and evaluations of facilities, relevant policy, and procedures to assure Tennessee Colleges of Applied Technology provides a safe learning environment for students. Inspections are conducted to uncover physical hazards and assure compliance with federal, state, and local requirements. Safety awareness and observation are consistently ingrained in the daily activities of all employees and students at TCAT.

#### 4.1.0 Instructor

The instructor is directly responsible for observing environmental conditions affecting student safety and is responsible for locating and reducing hazards. Observations by instructors are the first line of defense in the TCAT Safety Plan. Analysis of all new equipment, material, and processes is performed before equipment is placed into operation. All instructors conduct informal inspections. During these informal inspections, notes may be taken on unsafe conditions or activities in order to ensure accurate documentation for corrective action. The instructor reports any deficiencies located through the online work order system. If conditions warrant, equipment or machinery is tagged, disconnected from power source, and locked out to prevent the possibility of injury.

#### 4.2.0 Students

Students conduct operating inspections on all machinery and equipment before beginning any assigned project just as they would in industry. If machinery and equipment are found to be faulty or unsafe, the student immediately informs the instructor of the unsafe condition. Students assigned to tool room duty will assume responsibility for inspection of all hand tools and equipment checked out. Safety committees, consisting of at least four capable students, are recommended for each program to monitor daily activities of their peers and improve general safety awareness.

#### 4.3.0 Maintenance and Custodial

Maintenance and custodial personnel conduct safety inspections as part of their ordinary duties. Any deficiencies located are reported through the online work order system.

#### 4.0.0 Corrective Action

When an unsafe condition is identified, a report is submitted through the online work order system. The work order system includes designation of priority and the departmental team required. Estimates of cost and the severity of the unsafe condition are determined and priorities accordingly assessed by the assigned departmental team. In the event of an emergency or extremely urgent condition, personnel are contacted via radio or cellular phone and immediately dispatched.

#### 4.0.0 Preventive Maintenance

Instructors, maintenance, and custodial personnel are responsible for development and implementation of routine preventive maintenance procedures for each piece of equipment of machinery listed in their inventories. Routine preventive maintenance is necessary for effective training programs and for prevention of injuries and costly breakdowns of equipment and machinery. Furthermore, routine maintenance may identify unsafe conditions overlooked during other inspection processes. Failure to maintain equipment or anticipate, report, or correct equipment defects could promote hazardous conditions, exposing students and school personnel to possible injuries.

#### 5.0.0 Safety Training

Many accidents and injuries result from oversight or failure to abide by written policies and procedures described in an existing safety program. These unsafe practices can often be attributed to inadequate orientation and training. The open enrollment practices of TCAT provides a steady influx of new students. Consequently, students are occasionally unaware of policies regarding safety and procedures developed to protect them from hazards. Safety orientation and follow-up training receives priority in every training situation.

The student safety training experience begins in the Student Services Office (SSO) prior to actual registration. The SSO will orient each student in regard to general safety policies and procedures adopted by Tennessee College of Applied Technology at Memphis.

After an initial orientation with the SSO, students will report to their instructors for further study of safety requirements of the school and their specific instructional area. This study can encompass appropriate portions of the school's safety plan, specified readings, audiovisuals, and oral, written, or practical evaluative tests.

Safety tests are administered to all students and kept on file throughout the duration of their training. All students will be required to attain a score of 100% on all safety tests. Tests are repeated until a score of 100% is attained.

Each student is required to read safety rules describing specific rules and recommendations unique to their training program. Students with reading comprehension problems will be assisted by the instructor. Students are urged to refer to this manual during training to further reinforce safety awareness. Students will verify understanding of the safety rules by signing the appropriate acknowledgment forms. All forms are filed for future reference.

After proving proficiency in safety regulations, students are allowed to progress through their training outline according to prescribed procedures. In pursuing their employment objectives, students will receive additional safe operating rules and recommendations for each specific type of equipment relevant to their training. Additional written tests will be utilized to evaluate proficiency.

#### 6.0.0 Record Keeping and Documentation

The Tennessee College of Applied Technology at Memphis maintains a complete set of records, including accident investigation reports, minutes of safety committee meetings, training records, test results, and parental permission forms.

Most documents are reprocessed and stored electronically. These are available by request through the administrative offices.

- Accident/Incident Report - The Online Incident Report will be maintained by the Administrative Office. Accidents, incidents, and emergency drills are reported on this form. A more descriptive narrative may be attached if necessary.
- Acknowledgment of Safety Instructions - This form is maintained in the files of the shop instructor and is a component of the student orientation. Students will acknowledge receipt of safety instructions by their signature before they are allowed to enter the shop.
- Safety Meetings - The Safety Meetings record consists of the sign-in sheets and accompanying minutes from the meeting. The sign-in sheet will be signed by all in attendance.
- Field Trip - This form must be completed and turned in to the administrator for approval at least a week in advance of the planned field trip. This form will be signed prior to participation in any College-sponsored field trip. Any student under the age of 18 must have this form signed by a parent or guardian. Copies of this form will be maintained by both the instructor and the Administrative Office.

#### 7.0.0 Care and Maintenance of Facilities

Instructors and students have an obligation to implement proper housekeeping techniques. Shop materials and supplies should be properly stored. Waste materials, tools, scrap, and grease on floors or workbenches and around machines should be removed regularly. Instructors and students should maintain daily cleaning and maintenance schedules.

Campus maintenance personnel will be on duty at all times when the buildings are open for use during normal daytime operating hours. During evening classes, instructors would assume the duties of the custodial employees. While custodial workers usually do not supervise the activities of students and instructors, they will have definite authority to check any actions or activities which may decrease building safety.

#### 7.1.0 Housekeeping

Adequate housekeeping practices are important factors in overall safety and fire protection. The removal of rubbish and dirt eliminates many hazards. Most fires start small. Removal of rubbish may aid in preventing the start of a fire or in retarding its spread. Dry grass, weeds, or rubbish near the building should be removed. Poorly maintained storage sheds and grounds endanger the employee, students, and buildings.

- Keep floors free of oil, grease, or any other liquid. Clean up spilled liquids immediately; they are slipping hazards.
- Aisles should be clear at all times to prevent tripping or other accidents.
- The use of extension cord should be minimized as much as possible.
- Store materials in such a way that they cannot become hazardous.
- Put tools away when not in use.
- Place all scrap in scrap boxes.
- Daily and periodic cleaning activities eliminate many existing and potential safety and fire hazards, thus encouraging elimination of the hazards.
- Waste paper should not be permitted to accumulate. Waste baskets should be emptied daily.

#### 7.2.0 Program Machinery and Equipment Guarding

Positive prevention of injury-producing accidents on machinery can be assured through the installation of safe guards or through revision or design. Injury-producing accidents are inevitable where equipment with dangerous moving parts is operated without guards or with ineffective guards. Guards and safety barriers protect against or prevent injuries from these sources

- Direct contact with exposed moving parts of a machine.
- Flying debris from tools or abrasive wheels.
- Machine failure which usually results from a lack of preventive maintenance, overloading, or abuse.
- Electrical failure which may cause malfunctioning of the machine or cause electrical shock, or burns.

- Operator error or human failure caused by lack of knowledge or skill, distraction, fatigue, or misunderstanding.

No equipment of any type is to be received and placed in use unless the equipment has been thoroughly inspected and necessary guards installed or physical changes made to the equipment. The department receiving the equipment will be responsible for complying with this requirement.

Similarly, guards will be placed on all equipment now in use where there is knowledge through experience or by inspection that certain precautions are needed. Such action is to be initiated and immediately followed up until all such changes have been completed. No equipment is to be placed in use because of “urgency of the need for it” when it is known that certain alterations or additional physical guards should be provided in order to insure that students or employees will not be injured while operating the equipment.

### 8.0.0 Property Security

TCAT-Memphis keeps a key inventory for all employees of the college. The purpose of management procedures for keys to college property is maximum campus security without infringing on daily operations.

Campus security also includes securing exterior doors of all buildings, interior doors for areas containing equipment and supplies, storage rooms, and closets. Campus security further takes into consideration human and property safety.

- Each instructor is responsible for locking and securing his/her own closets and classroom doors. These classroom doors are locked before the instructor leaves the campus.
- The maintenance worker, custodian, and campus security are responsible for checking all doors to assure these doors are locked at the close of each day.
- If the College holds any classes or activities other than during regular school hours, the Evening Administrator is responsible for verifying locking and securing of all doors.

### 8.1.0 Property Loss Procedures

Property Loss is investigated to determine the following details about the missing item(s): What, How, and When. When details have been identified, the corresponding procedure is observed. If the item was lost or stolen, an online Incident Report is completed by the department affected and a follow-up is done by Security and administration. A Police report is made when needed and a copy obtained for property records.

### 8.2.0 Property Damage Procedures

Property damage is inspected to determine severity and the effects on the use of the property. An online Incident Report is completed by all involved and the resulting reports are filed with administration. If the

item is school property and can be repaired to operational standards, then procedures are taken to bring it into compliance with the standards. If repair is not possible, actions are taken to replace the damaged property as soon as possible.

### 9.0.0 Training and Drills

Faculty and staff are trained to develop proficiency in building evacuations and in use of fire extinguishers. Periodic meetings are held to inform faculty and staff of the latest developments and policies affecting evacuation activities. The faculty pass this information on to the students.

Emergency drills for all types of emergencies are necessary for the safety of the students, faculty, and staff. Drills are conducted with regularity in compliance with all federal, state, and local requirements. Evacuation and other relevant information is posted in each classroom and on the ISH boards throughout the campus

- Emergency evacuation drills are unannounced.
- Evacuation routes are posted in all classroom/shop areas.
- Students will follow designated exit instructions, will keep in single file, will walk (not run), will refrain from talking, and will proceed to their designated safe areas.
- The instructor will call roll once the group has reached the designated safe area. For this reason, students must remain with their class after leaving the building. No smoking allowed at this time.
- When the ALL CLEAR signal is given, all will return to their departments in an orderly fashion.
- Instructors are to submit online incident reports concerning accountability of all students and staff members are to submit online incident reports detailing any problem areas identified. These findings are available to the President's office.

### 10.0.0 Fire Protection

This institution maintains fire containment and response equipment in keeping with normal industry practices and in compliance with all governing bodies.

#### 10.1.0 Training

- Floor plans for evacuation of the building are posted on ISH boards and in prominent places.
- Students and College personnel are informed of fire extinguisher and fire alarm activator locations.
- Instructors assume the responsibility for training students in the proper use of firefighting equipment and evacuation procedures.

#### 10.2.0 Fire Extinguishers

All fire extinguishers are inspected by an authorized contractor to ensure they:

- Are in their designated locations

- Have not been tampered with or activated
- Do not have corrosion or other impairments
- Are in compliance with all federal, state, and local requirements.

#### 10.4.0 Fire-Safe Housekeeping

- Combustible materials should be present in work areas in quantities required for the job and should be removed to a designated, safe storage area at the end of each work day.
- Quick-burning and flammable materials should be stored only in designated locations. Covered metal receptacles are good for storage of these materials.
- Passageways, fire exits, and fire extinguishers will be kept clear and unobstructed.

### 11.0.0 First Aid

First aid is defined by the American National Red Cross as the "the immediate and temporary care given a victim of an accident or sudden illness until the services of a physician can be obtained." First aid is required whenever an injury occurs and should be limited to doing what is necessary to preserve life. The primary concern is the care of the injured person and prevention of additional injury to that person.

#### 11.1.0 First Aid Supplies

A first aid kit with proper supplies will be maintained by each instructor. A regular inventory will be maintained and restocking kept up-to-date for disposable items.

#### 11.2.0 Primary Considerations

Primary considerations relate directly to the care and welfare of the injured party. The degree of care necessary is determined by the seriousness of the injury. Certain basic steps are recommended:

- Attempt to ascertain how seriously the party is injured.
- If medical assistance is needed, send for aid immediately by use of the most expedient means available.
- Apply only first aid which is essential and nothing further.
- If a party is seriously injured, request that administration notify parents/guardians/ spouse.
- Report all injuries, both major and minor, to administration.
- Use the online Incident Report to report all injuries and accidents.

#### 11.3.0 Secondary Considerations

After the immediate needs of the injured party are cared for, the instructor has additional responsibilities which stem directly from the accident. Recommended steps and procedures would include the following:

- Stabilize and reassure the other affected individuals.

- Analyze the accident in view of known facts.
- Ascertain cause of the accident.
- Outline steps to eliminate the possibility of a similar accident occurring.
- Review safety practices and procedures.
- Check progress of the injured party.
- Complete the online Incident Report.

#### 11.7.0 Compliance Methods

Universal precautions will be observed at this College in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or to minimize exposure to employees and students at this campus. When occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized. At this campus the following engineering controls will be utilized: sharps containers and thermometer sheaths.

Hand washing facilities shall be made available to employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure.

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Approved by: Roland Rayner, President

Date: \_\_\_\_\_