

Transportation Technology

OVERALL EXPECTATIONS:

By the end of this course, students will:

- D1.** demonstrate the use of professional work practices and procedures and compliance with occupational health and safety regulations and standards.

Specific Expectations:

By the end of this course, students will:

- D1.1** identify and explain the importance of legislation and regulations related to procedures and operations used in transportation technology facilities (e.g., Occupational Health and Safety Act [OHSA]; regulations and standards outlined in the Workplace Hazardous Materials Information System [WHMIS]; Apprenticeship and Certification Act [ACA]);
- D1.2** demonstrate good housekeeping and safety practices in the work environment (e.g., cleaning up spills and leaks, keeping areas clean and clear of obstructions);
- D1.3** use protective clothing and equipment (e.g., eye protection, gloves, breathing mask) as required to ensure their own and others' safety in the work environment;
- D1.4** identify potential health risks (e.g., brake dust, fumes from brake fluid and brake cleaner) when servicing vehicles or craft, and demonstrate the use of safe procedures to mitigate these hazards (e.g., use appropriate ventilation and breathing protection);
- D1.5** describe and demonstrate the ability to follow appropriate safety precautions required for new technologies when working on vehicles, craft, or power equipment (e.g., precautions regarding high current and voltage, capacitor discharge rate of supplemental restraint systems, extreme temperature of exhaust systems);
- D1.6** demonstrate an understanding of professional responsibilities in the transportation industry with regard to personal and public safety (e.g., quality workmanship, integrity, customer service, compliance with manufacturers' standards).

Technological Safety Checklist

Transportation Technology	Comments
<ul style="list-style-type: none"> • Sufficient and appropriate personal protective equipment (PPE) such as safety glasses, ear protection or latex gloves for handling chemicals is available for all students. • PPE is in good condition (e.g., safety-glass lenses are not scratched or deformed). • Safety glasses are stored in an organized fashion (i.e., not left randomly in a bin). • Aprons or shop coats are clean and organized so the students are encouraged to wear them. • Students and the instructor are dressed appropriately for working safely (e.g., closed toe shoes, sleeves are not rolled up, no rings or loose jewellery). • All materials or chemicals that are stored in secondary containers are clearly identified, as per WHMIS requirements. • Appropriate safety posters or notices that remind students of the use of PPE, health and safety regulations, possible hazards, or safeguards and precautions are prominently displayed. • Good housekeeping practices are evident e.g., the room is well-organized, there are no trip hazards, exits are clearly marked and clear of obstructions, the room is clean and inviting, etc. • All floor jacks are commercially-made products (i.e., not “home made”). • The overhead hoists have current inspection stickers. • All floor hoists have current inspection stickers. • All floor jacks have inspection stickers. • A record of all inspections is available. 	

Transportation Technology: Sample Student Safety Passport

Student's Name _____ Class and Year _____

Equipment	Date Competency Display	Student Signature	Teacher Signature
<p>The student safely assesses if electric, battery and pneumatic powered tools are in proper working condition and safe to use by ensuring that:</p> <ul style="list-style-type: none"> • the tool is disconnected from power source and switched "OFF" before assessing condition • cords, lines and hoses are free of frays or bulges • moving parts are properly lubricated • the air compressor is set to an appropriate pressure for tool being used • cutting tools are properly sharpened • regulators are properly inspected and in good condition. 			
Hydraulic Lift			
Floor Jack			
Tire Machine			
Glass Beading Cabinet			
Oxy Acetylene Torch			
MIG Welder			
TIG Welder			
Stick Welder			
Engine hoist			
Transmission Jack			
Bottle Jack			
Plasma Cutter			
Impact Wrench			
Vertical Polisher			
Ratchet Wrench			
Orbital Sander			
Finishing Sander			

Equipment	Date Competency Display	Student Signature	Teacher Signature
Palm Grip Impact Wrench			
Angle Polisher			
Air Chest			
Straight-line Sander			
Angle Head Impact Wrench			
Drill			
Spray Gun			
Angle Grinder			
Horizontal Grinder			
Vertical Grinder			
Cut-off Grinder			
Die Grinder			
Needle Scaler			
Metal Sheer			
Power Riveter			
Air Hacksaw			
Reciprocating Saw			
Air Compressor			