

Construction Technology

OVERALL EXPECTATIONS:

By the end of this course, students will:

- D1.** demonstrate an understanding of and comply with health and safety regulations and practices specific to the construction industry.

Specific Expectations:

By the end of this course, students will:

- D1.1** describe hazards related to construction materials, processes, tools, and equipment (e.g., toxic or flammable fumes from solvents, paints, varnishes, and gasoline; explosion or burns from propane; lung damage from silica; tripping or falls in unfinished buildings; shock from damaged power tools or electrical equipment), and the precautions that should be taken to avoid these hazards;
- D1.2** outline and comply with health and safety legislation and practices for the construction industry (e.g. Workplace Safety and Insurance Board [WSIB] regulations, provincial labour legislation, Ontario Building Code, local by-laws);
- D1.3** use, handles, and store materials in accordance with Workplace Hazardous Materials Information System (WHMIS) guidelines;
- D1.4** describe the rights and responsibilities of employees (e.g., the right to know, the right to refuse, the right to participate, as outlined in the Occupational Health and Safety Act);
- D1.5** use protective clothing, gear, and equipment appropriately (e.g., dust mask, hard hat, safety glasses, safety harness).

Technological Safety Checklist

Construction Technology	Comments
<ul style="list-style-type: none">• Sufficient and appropriate personal protective equipment (PPE) such as safety glasses, hearing protection, and 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).• 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 facility is clean and inviting, etc.• 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., close-toed shoes, sleeves are not rolled up, no rings or loose jewelry).• The overhead hoists have current inspection stickers.• There is a record of all inspections available.• Exit, breaker panels and emergency power cut-offs are all accessible.	

Construction Technology: Sample Student Safety Passport

Student's Name _____ Class and Year _____

Equipment	Date Competency Display	Student Signature	Teacher Signature
<p>The student can safely assess if electric, battery and pneumatic powered tools are in proper working condition and safe to use if:</p> <ul style="list-style-type: none"> • the tool is disconnected from power source and switched "OFF" before assessing its 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. 			
The student understands the importance of, and can properly operate the dust collection system.			
Band Saws			
Bench Grinders			
Pedestal Grinders			
Jointers			
Planers			
Radial Arm Saws			
Router Table			
Sanders			
Shapers			
Table Saws			
Wood Turning Lathes			
Belt Sanders			
Circular Saws			
Drills			
Planers			
Routers			
Sabre Saws			

Equipment	Date Competency Display	Student Signature	Teacher Signature
Jig Saws			
Reciprocating Saws			
Pneumatic Tools			
Pneumatic Nailing Tools			
Stapling Tools			
Powder-Actuated Tools			