

TECHNOLOGICAL EDUCATION

Course Expectations Regarding Occupational Health and Safety (OHS)

General Considerations for Program Planning: Health and Safety

Health and safety are of paramount importance in technological education programs. As part of every course, students must be made aware that health and safety are everyone's responsibility—at home, at school, and in the workplace. Before using equipment, students must be able to demonstrate knowledge of the equipment being used and the procedures necessary for its safe use. Personal protective gear should be worn as appropriate.

Classroom practice and the learning environment should comply with relevant municipal, provincial, or federal health and safety legislation, including the following:

- the *Workplace Safety and Insurance Act*
- the Workplace Hazardous Materials Information System (WHMIS)
- the *Food and Drug Act*
- the *Health Protection and Promotion Act*
- the Ontario Building Code
- the *Occupational Health and Safety Act*
- local by-laws.

	MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
		CHAPTER	SECTION & PAGE
Grade 11			
Communications Technologies (Grade 11, University/College) TGJ3M			
	Impact and Consequences OE: Demonstrate an understanding of the health and safety rules and regulations applicable to a communications technology program. <i>Safety and Legislation</i> SE: Apply safe work practices when performing communications processes. Identify potential hazards in their workplace by conducting safety audits and inspections.	Biological and Chemical Hazards	Section I: pgs. 2-23
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26

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	MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
		CHAPTER	SECTION & PAGE
Communications Technology (Grade 11, Workplace) TGJ3E			
	Impact and Consequences OE: Identify pertinent legislation and practices related to safety in a communications technology facility and in the workplace. <i>Safety and Legislation</i> SE: Identify hazards related to materials, processes, and equipment in a communications technology work environment.	Biological and Chemical Hazards	Section I: pgs. 2-23
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26
Construction Technology (Grade 11, College) TCJ3C			
	Impact and Consequences OE: Describe, and apply where appropriate, health and safety legislation; general shop and safety rules; and rules specific to the safe use of materials, tools, and equipment. <i>Health and Safety</i> SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
		Ergonomics	Section I: pgs. 2-10, 11-13
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26
Construction Technology (Grade 11, Workplace) TCJ3E			
	Impact and Consequences OE: Apply appropriate health and safety legislation; general shop and site safety rules; and rules specific to the safe use of materials, tools and equipment. <i>Health and Safety</i> SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
		Ergonomics	Section I: pgs. 2-10, 11-13
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26

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		CHAPTER	SECTION & PAGE
Health Care (Grade 11, College) TPA3C			
	Impact and Consequences OE: Describe health and safety procedures and their application to health care. <i>Health and Safety Procedures</i> SE: Identify problems in health care caused by potentially unhealthy or unsafe conditions related to equipment, instruments, or materials.	Biological and Chemical Hazards	Section I: pgs. 2-23, 29-38, 39-41
		Ergonomics	Section I: pgs. 2-10, 11-13, 14-18
		Physical Hazards	Section I: pgs. 2-22
		Societal Issues	Section I: pgs. 14-21
		Workplace Law	<i>optional</i> Section I: pgs. 4-26
Hairstyling and Aesthetics (Grade 11, Workplace) TPE3E			
	Impact and Consequences OE: Identify health and safety standards in the use of equipment, materials and techniques. <i>Health and Safety Standards</i> SE: Apply personal health and safety standards correctly.	Biological and Chemical Hazards	Section I: pgs. 2-23, 29-38
		Ergonomics	Section I: pgs. 2-10
		Physical Hazards	<i>optional</i> Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26
Hospitality (Grade 11, College) TFT3C			
	<i>Students will:</i> Learn about economic and environmental impacts, health and safety standards, and career opportunities related to the hospitality industry. Impact and Consequences OE: Identify and, where appropriate, apply health and safety standards in the hospitality industry.	Biological and Chemical Hazards	Section I: pgs. 29-38, 39-41
		Physical Hazards	Section I: pgs. 2-22
		Societal Issues	Section I: pgs. 22-27
		Workplace Law	Section I: pgs. 4-26

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		CHAPTER	SECTION & PAGE
Hospitality and Tourism (Grade 11, Workplace) TFH3E			
	<p><i>Students will:</i> Study the occupational health and safety standards and laws regulating the hospitality and tourism industry, explore the industry's social and environmental impacts, and identify possible career paths.</p> <p>Impact and Consequences OE: Describe and, where appropriate, apply industry standards of health and safety for the use of materials, tools, and equipment in the hospitality and tourism industry.</p>	Biological and Chemical Hazards	Section I: pgs. 29-38, 39-41
		Physical Hazards	Section I: pgs. 2-22
		Societal Issues	Section I: pgs. 22-27
		Workplace Law	Section I: pgs. 4-26
Manufacturing Engineering Technology (Grade 11, College) TMJ3C			
	<p>Impact and Consequences OE: Demonstrate the exemplary practices that are essential to safe work environments; identify the role of health and safety legislation in manufacturing technology programs in schools and in the manufacturing sector.</p>	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
		Ergonomics	Section I: pgs. 2-10, 11-13
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26
Manufacturing Technology (Grade 11, Workplace) TMJ3E			
	<p>Impact and Consequences OE: Identify pertinent legislation and practices related to safety; effectively implement safe work practices in the workplace.</p>	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
		Ergonomics	Section I: pgs. 2-10, 11-13
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26

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		CHAPTER	SECTION & PAGE
Technological Design (Grade 11, University/College) TDJ3M			
	Impact and Consequences OE: Identify concerns related to technical design, such as product safety, durability, costs, choice of materials, and ergonomics; identify actions that can be taken in response to environmental concerns. Follow safe operating procedures for tools and materials.	Biological and Chemical Hazards	Section I: pgs. 2-23
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26
Technological Design (Grade 11, Workplace) TDJ3E			
	Skills and Processes <i>Preparing Designs</i> SE: Fabricate models and prototypes for analysis and testing using standard safety procedures. Impact and Consequences OE: Identify environmental concerns related to the development, use, and disposal of manufactured goods; use tools and materials safely to fabricate products.	Biological and Chemical Hazards	Section I: pgs. 2-23
		Physical Hazards	Section I: pgs. 2-22
		Workplace Law	Section I: pgs. 4-26

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	MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
		CHAPTER	SECTION & PAGE
Transportation Technology (Grade 11, College) TTJ3C			
	<p>Impact and Consequences OE: Describe and apply, where appropriate, the exemplary practices that are essential to safe work environments; describe the role of health and safety legislation related to the transportation sector and to transportation technology programs in schools.</p> <p><i>Safety and Legislation</i> SE: Identify potential hazards in a workplace related to the transportation sector by conducting safety audits and inspections.</p>	<p>Biological and Chemical Hazards</p> <p>Physical Hazards</p> <p>Workplace Law</p>	<p>Section I: pgs. 2-23, <i>optional</i> pgs. 24-28</p> <p>Section I: pgs. 2-22</p> <p>Section I: pgs. 4-26</p>
Transportation Technology (Grade 11, Workplace) TTJ3E			
	<p>Impact and Consequences OE: Follow safe work practices in the transportation sector workplace, including safety procedures and practices and the use of protective clothing and gear; identify the legislation that applies to the transportation technology sector.</p>	<p>Biological and Chemical Hazards</p> <p>Physical Hazards</p> <p>Workplace Law</p>	<p>Section I: pgs. 2-23, <i>optional</i> pgs. 24-28</p> <p>Section I: pgs. 2-22</p> <p>Section I: pgs. 4-26</p>
Computer and Information Science (Grade 11, University/College) ICS3M			
	<p>Impact and Consequences SE: Use appropriate strategies to avoid potential health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain.</p>	<p>Ergonomics</p>	<p>Section I: pgs. 2-10</p> <p><i>optional</i> Section II: pgs. 35-37</p>

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MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
	CHAPTER	SECTION & PAGE
Computer Engineering (Grade 11, University/College) ICE3M (Grade 11, Workplace) ICE3E		
Impact and Consequences SE: Use appropriate strategies to avoid potential health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain.	Ergonomics	Section I: pgs. 2-10 <i>optional</i> Section II: pgs. 35-37
Grade 12		
Communications Technology (Grade 12, University/College) TGJ4M		
Impact and Consequences OE: Identify the role of health and safety legislation in schools and the communications sector. <i>Safety and Legislation</i> SE: Use safe work practices and model the most appropriate ways of accomplishing specific operations.	Physical Hazards Workplace Law	Section II: pgs. 30-37, 59 Section II: pgs. 38-46, 47-48
Communications Technology (Grade 12, Workplace) TGJ4E		
Impact and Consequences OE: Develop and conduct safety audits and inspections of the school's communications technology facility and implement a plan to address any deficiencies; describe the <i>Occupational Health and Safety Act (OHSA)</i> and identify its implications for the school communications facility and the workplace.	Physical Hazards Workplace Law	Section II: pgs. 30-37, 59 Section II: pgs. 38-46, 47-48

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	MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
		CHAPTER	SECTION & PAGE
Construction Technology (Grade 12, College) TCJ4C			
	<p>Impact and Consequences OE: Apply health and safety legislation; general shop and site safety rules; and rules specific to the safe use of materials, tools and equipment. <i>Health and Safety</i> SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.</p>	Biological and Chemical Hazards	Section II: pgs. 86-88, 89-92
		Ergonomics	Section II: pgs. 24-28, 38-40
		Physical Hazards	Section II: pgs. 30-37, 41-50
		Workplace Law	Section II: pgs. 38-46, 51-53
Construction Technology (Grade 12, Workplace) TCJ4E			
	<p>Impact and Consequences OE: Apply appropriate health and safety legislation; general shop and site safety rules; and rules specific to the safe use of materials, tools and equipment. <i>Health and Safety</i> SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.</p>	Biological and Chemical Hazards	Section II: pgs. 86-88, 89-92
		Ergonomics	Section II: pgs. 24-28, 38-40
		Physical Hazards	Section II: pgs. 30-37, 41-50
		Workplace Law	Section II: pgs. 38-46, 51-53

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	MINISTRY OF EDUCATION COURSE EXPECTATIONS	LIVE SAFE! WORK SMART!	
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Child Development and Gerontology (Grade 12, College) TPO4C			
	Impact and Consequences <i>Health and Safety Factors</i> SE: Identify health and safety standards in the workplace that pertain to child and geriatric care; demonstrate the use of safety techniques and devices that are important in the care of children and the elderly; explain laws and regulations related to health and safety regarding child care, gerontology and geriatrics; follow routines for hygienic food preparation and for food disposal.	Biological and Chemical Hazards Ergonomics Workplace Law	Section II: pgs. 75-78 Section II: pgs. 24-28, 29-32 Section II: pgs. 38-46, 54-56
Medical Technologies (Grade 12, College) TPT4C			
	Impact and Consequences OE: Describe the laws and regulations governing health and safety standards in the health care industry. <i>Legal, Environmental and Safety Issues</i> SE: Describe existing and potential hazards to themselves, to clients, and to co-workers; describe and, where applicable, follow health and safety procedures required to prevent injury or illness.	Biological and Chemical Hazards Ergonomics Workplace Law	Section II: pgs. 82-85 Section II: pgs. 24-28, 29-32 Section II: pgs. 38-46, 54-56

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		CHAPTER	SECTION & PAGE
Hairstyling and Aesthetics (Grade 12, Workplace) TPE4E			
	Impact and Consequences OE: Evaluate effectively and implement the exemplary practices essential in an efficient and safe work environment; identify the role of legislation related to health and safety for a cosmetology program and the beauty industry in general.	Biological and Chemical Hazards	Section II: pgs. 79-81
		Ergonomics	Section II: pgs. 41-43
		Workplace Law	Section II: pgs. 38-46, 47-48
Hospitality and Tourism (Grade 12, Workplace) TFH4E			
	Impact and Consequences OE: Identify health and safety standards for the hospitality and tourism industry. <i>Health and Safety Factors</i> SE: Describe food-borne illnesses and ways to avoid contamination; describe and, where appropriate, apply health and safety standards, codes, and legislation.	Biological and Chemical Hazards	Section II: pgs. 75-78
		Physical Hazards	Section II: pgs. 38-40
		Workplace Law	Section II: pgs. 38-46
Manufacturing Engineering Technology (Grade 12, College) TMJ4C			
	Impact and Consequences OE: Evaluate and implement safe work practices in performing manufacturing-related tasks; identify the role of health and safety legislation in manufacturing technology programs in schools and the manufacturing sector.	Biological and Chemical Hazards	Section II: pgs. 86-88
		Ergonomics	Section II: pgs. 24-28, 44-45
		Physical Hazards	Section II: pgs. 30-37, 51-54, 59
		Workplace Law	Section II: pgs. 38-46, 47-48

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		CHAPTER	SECTION & PAGE
Manufacturing Technology (Grade 12, Workplace) TMJ4E			
	Impact and Consequences OE: Develop and conduct safety audits and inspections of the school manufacturing facility and implement a plan to address any deficiencies; describe the <i>Occupational Health and Safety Act (OHSA)</i> and identify its implications for the school manufacturing facility and their workplace. <i>Safety and Legislation</i> SE: Use safe work practices in the manufacturing program.	Biological and Chemical Hazards	Section II: pgs. 86-88
		Ergonomics	Section II: pgs. 24-28, 44-45
		Physical Hazards	Section II: pgs. 30-37, 51-54, 59
		Workplace Law	Section II: pgs. 38-46, 47-48
Technological Design (Grade 12, University/College) TDJ4M			
	Impact and Consequences OE: Handle materials and tools safely.	Physical Hazards	Section II: pgs. 30-37
Technological Design (Grade 12, Workplace) TDJ4E			
	Impact and Consequences OE: Use tools and materials safely to fabricate products.	Physical Hazards	Section II: pgs. 30-37

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		CHAPTER	SECTION & PAGE
Transportation Technology (Grade 12, College) TTJ4C			
	Impact and Consequences OE: Effectively evaluate and implement safe work practices when performing transportation-related tasks; identify the role of health and safety legislation in transportation technology programs in schools and in the transportation sector.	Biological and Chemical Hazards	Section II: pgs. 86-88
		Physical Hazards	Section II: pgs. 30-37, 55-58, 59
		Workplace Law	Section II: pgs. 38-46, 47-48, 49-50
Transportation Technology (Grade 12, Workplace) TTJ4E			
	Impact and Consequences OE: Develop and conduct effective safety audits and inspections of the school transportation facility and implement a plan to address any deficiencies; describe the role of legislation related to the transportation sector and identify its implications for the school transportation facility and for the transportation sector generally.	Biological and Chemical Hazards	Section II: pgs. 86-88
		Physical Hazards	Section II: pgs. 30-37, 55-58, 59
		Workplace Law	Section II: pgs. 38-46, 47-48, 49-50

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		CHAPTER	SECTION & PAGE
Computer and Information Science (Grade 12, University/College) ICS4M			
	Impact and Consequences <i>Effects of Information Technology</i> SE: Use appropriate strategies to avoid potential health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain.	Ergonomics	Section II: pgs. 35-37
Computer Engineering (Grade 12, University/College) ICE4M			
	Impact and Consequences SE: Use appropriate strategies to avoid potential health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain.	Ergonomics	Section II: pgs. 35-37

NOTE: OE and SE: *Overall Expectations and Specific Expectations*
Where OEs are safety-specific, the list of related SEs has not been included.
Please refer to *The Ontario Curriculum Grades 11 and 12* book for the full list of SEs.