#### Teacher's Guide - Expectations

## 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.

### Grade 11

### Communications Technologies (Grade 11, University/College) TGJ3M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section I: pgs.
OE: Demonstrate an understanding of the health	Chemical	2-23
and safety rules and regulations applicable to a	Hazards	
communications technology program.		_
Safety and Legislation	Physical	Section I: pgs.
SE: Apply safe work practices when performing	Hazards	2-22
communications processes. Identify potential hazards in their workplace by conducting safety	Workplace Law	Section I: pgs.

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
audits and inspections.		4-26

### Communications Technology (Grade 11, Workplace) TGJ3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Identify pertinent legislation and practices related to safety in a communications technology facility and in the workplace.	Biological and Chemical Hazards	Section I: pgs. 2-23
Safety and Legislation SE: Identify hazards related to materials, processes, and equipment in a communications	Physical Hazards	Section I: pgs. 2-22
technology work environment.	Workplace Law	Section I: pgs. 4-26

## Construction Technology (Grade 11, College) TCJ3C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Describe, and apply where appropriate, health and safety legislation; general shop and safety	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
rules; and rules specific to the safe use of materials, tools and equipment. <i>Health and Safety</i>	Ergonomics	Section I: pgs. 2-10, 11-13
SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.	Physical Hazards	Section I: pgs. 2-22
	Workplace Law	Section I: pgs. 4-26

## Construction Technology (Grade 11, Workplace) TCJ3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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	Biological and Chemical Hazards	Section I: pgs. 2-23, 24-28
and equipment. <i>Health and Safety</i>	Ergonomics	Section I: pgs. 2-10, 11-13

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.	Physical Hazards	Section I: pgs. 2-22
	Workplace Law	Section I: pgs. 4-26

## Health Care (Grade 11, College) TPA3C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section I: pgs.
OE: Describe health and safety procedures and	Chemical	2-23, 29-38,
their application to health care.	Hazards	39-41
Health and Safety Procedures		
SE: Identify problems in health care caused by potentially unhealthy or unsafe conditions related to equipment, instruments, or materials.	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

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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 Ergonomics Physical	Section I: pgs. 2-23, 29-38 Section I: pgs. 2-10 optional
	Hazards Workplace Law	Section I: pgs. 2-22 Section I: pgs.

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
		4-26

### Hospitality (Grade 11, College) TFT3C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Students will: Learn about economic and environmental impacts, health and safety standards, and career opportunities related to the	Biological and Chemical Hazards	Section I: pgs. 29-38, 39-41
hospitality industry. <b>Impact and Consequences</b> OE: Identify and, where appropriate, apply health and safety standards in the hospitality industry.	Physical Hazards	Section I: pgs. 2-22
	Societal Issues	Section I: pgs. 22-27
	Workplace Law	Section I: pgs. 4-26

### Hospitality and Tourism (Grade 11, Workplace) TFH3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Students will: Study the occupational health and safety standards and laws regulating the hospitality and tourism industry, explore the	Biological and Chemical Hazards	Section I: pgs. 29-38, 39-41
industry's social and environmental impacts, and identify possible career paths. Impact and Consequences	Physical Hazards	Section I: pgs. 2-22
OE: Describe and, where appropriate, apply industry standards of health and safety for the use of materials, tools, and equipment in the hospitality	Societal Issues	Section I: pgs. 22-27
and tourism industry.	Workplace Law	Section I: pgs. 4-26

### Manufacturing Engineering Technology (Grade 11, College) TMJ3C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section I: pgs.
OE: Demonstrate the exemplary practices that are	Chemical	2-23, 24-28
essential to safe work environments; identify the	Hazards	

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
role of health and safety legislation in manufacturing technology programs in schools and in the manufacturing sector.	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

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Identify pertinent legislation and practices related to safety; effectively implement safe work practices in the workplace.	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

### Technological Design (Grade 11, University/College) TDJ3M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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 Physical Hazards Workplace Law	Section I: pgs. 2-23 Section I: pgs. 2-22 Section I: pgs. 4-26

### Technological Design (Grade 11, Workplace) TDJ3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
<b>Skills and Processes</b> <i>Preparing Designs</i> SE: Fabricate models and prototypes for analysis	Biological and Chemical Hazards	Section I: pgs. 2-23
and testing using standard safety procedures. <b>Impact and Consequences</b> OE: Identify environmental concerns related to the	Physical Hazards	Section I: pgs. 2-22
development, use, and disposal of manufactured goods; use tools and materials safely to fabricate products.	Workplace Law	Section I: pgs. 4-26

### Transportation Technology (Grade 11, College) TTJ3C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section I:
OE: Describe and apply, where appropriate, the	Chemical	pgs. 2-23
exemplary practices that are essential to safe work environments; describe the role of health and safety legislation related to the transportation	Hazards	optional pgs. 24-28
sector and to transportation technology programs in schools. Safety and Legislation	Physical Hazards	Section I: pgs. 2-22
SE: Identify potential hazards in a workplace related to the transportation sector by conducting safety audits and inspections.	Workplace Law	Section I: pgs. 4-26

### Transportation Technology (Grade 11, Workplace) TTJ3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Follow safe work practices in the	Biological and Chemical	Section I: pgs. 2-23,
transportation sector workplace, including safety procedures and practices and the use of protective clothing and gear; identify the legislation that	Hazards	optional pgs. 24-28
applies to the transportation technology sector.	Physical Hazards	Section I: pgs. 2-22
	Workplace Law	Section I: pgs. 4-26

# Computer and Information Science (Grade 11, University/College) ICS3M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
<b>Impact and Consequences</b> 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 optional Section II: pgs. 35-37

# Computer Engineering (Grade 11, University/College) ICE3M (Grade 11, Workplace) ICE3E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences SE: Use appropriate strategies to avoid potential	Ergonomics	Section I: pgs. 2-10
health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain.		<i>optional</i> Section II: pgs. 35-37

### Grade 12

### Communications Technology (Grade 12, University/College) TGJ4M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Identify the role of health and safety legislation in schools and the communications sector.	Physical Hazards	Section II: pgs. 30-37, 59
Safety and Legislation SE: Use safe work practices and model the most appropriate ways of accomplishing specific operations.	Workplace Law	Section II: pgs. 38-46, 47-48

### Communications Technology (Grade 12, Workplace) TGJ4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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 Occupational Health and Safety Act (OHSA) 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

### Construction Technology (Grade 12, College) TCJ4C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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.	Biological and Chemical Hazards	Section II: pgs. 86-88, 89-92
Health and Safety SE: Identify hazards related to the materials, processes, and equipment used in a construction work environment.	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

### Child Development and Gerontology (Grade 12, College) TPO4C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section II:
Health and Safety Factors	Chemical	pgs. 75-78
SE: Identify health and safety standards in the	Hazards	
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	Ergonomics	Section II: pgs. 24-28, 29-32

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
related to health and safety regarding child care, gerontology and geriatrics; follow routines for hygienic food preparation and for food disposal.	Workplace Law	Section II: pgs. 38-46, 54-56

### Medical Technologies (Grade 12, College) TPT4C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Describe the laws and regulations governing health and safety standards in the health care	Biological and Chemical Hazards	Section II: pgs. 82-85
industry. <i>Legal, Environmental and Safety Issues</i> SE: Describe existing and potential hazards to themselves, to clients, and to co-workers; describe	Ergonomics	Section II: pgs. 24-28, 29-32
and, where applicable, follow health and safety procedures required to prevent injury or illness.	Workplace Law	Section II: pgs. 38-46, 54-56

### Hairstyling and Aesthetics (Grade 12, Workplace) TPE4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section II:
OE: Evaluate effectively and implement the exemplary practices essential in an efficient and	Chemical Hazards	pgs. 79-81
safe work environment; identify the role of legislation related to health and safety for a cosmetology program and the beauty industry in	Ergonomics	Section II: pgs. 41-43
general.	Workplace Law	Section II: pgs. 38-46, 47-48

### Hospitality and Tourism (Grade 12, Workplace) TFH4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section II:
OE: Identify health and safety standards for the	Chemical	pgs. 75-78

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
hospitality and tourism industry.	Hazards	
Health and Safety Factors		Section II:
SE: Describe food-borne illnesses and ways to avoid contamination; describe and, where	Physical Hazards	pgs. 38-40
appropriate, apply health and safety standards, codes, and legislation.	Workplace Law	Section II:
		pgs.38-46

## Manufacturing Engineering Technology (Grade 12, College) TMJ4C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Evaluate and implement safe work practices in performing manufacturing-related tasks; identify	Biological and Chemical Hazards	Section II: pgs. 86-88
the role of health and safety legislation in manufacturing technology programs in schools and the manufacturing sector.	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

## Manufacturing Technology (Grade 12, Workplace) TMJ4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Develop and conduct safety audits and	Biological and Chemical	Section II: pgs. 86-88
inspections of the school manufacturing facility and implement a plan to address any deficiencies;	Hazards	Section III
describe the Occupational Health and Safety Act (OHSA) and identify its implications for the school manufacturing facility and their workplace.	Ergonomics	Section II: pgs. 24-28, 44-45
Safety and Legislation SE: Use safe work practices in the manufacturing program.	Physical Hazards	Section II: pgs. 30-37, 51-54, 59
	Workplace Law	Section II:

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
		pgs. 38-46, 47-48

### Technological Design (Grade 12, University/College) TDJ4M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Physical	Section II: pgs.
OE: Handle materials and tools safely.	Hazards	30-37

### Technological Design (Grade 12, Workplace) TDJ4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences OE: Use tools and materials safely to fabricate products.	Physical Hazards	Section II: pgs. 30-37

### Transportation Technology (Grade 12, College) TTJ4C

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section II:
OE: Effectively evaluate and implement safe work practices when performing transportation-related	Chemical Hazards	pgs. 86-88
tasks; identify the role of health and safety		Section II:
legislation in transportation technology programs in schools and in the transportation sector.	Physical Hazards	pgs. 30-37, 55-58, 59
	Workplace Law	Section II:
		pgs. 38-46, 47-48, 49-50

## Transportation Technology (Grade 12, Workplace) TTJ4E

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences	Biological and	Section II:
OE: Develop and conduct effective safety audits	Chemical	pgs. 86-88

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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.	Hazards Physical Hazards Workplace Law	Section II: pgs. 30-37, 55-58, 59 Section II: pgs. 38-46, 47-48, 49-50

## Computer and Information Science (Grade 12, University/College) ICS4M

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
Impact and Consequences Effects of Information Technology 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

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
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.