



**I. COURSE DESCRIPTION:**

No fire authority and no amount of legislation, policies or procedures can prevent all fires. Even with all our advances in technology and workplace practices, fires still occur.

Fires are not limited to specific industries, areas of work or places of leisure. Fires can develop whether you are actively carrying out your duties at work or while you are asleep at home.

This course will teach students that fire awareness can lead to fire prevention, which can minimize fire risks and prevent unplanned fires from occurring. Should you, however, be unfortunate enough to be involved in a fire this awareness may save your life or help save the life of someone else.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the CICE student, along with the assistance of a Learning Specialist, will demonstrate the basic ability to:

**1. Public Fire Protection**Potential Elements of the Performance

- a) Recognize the origins of modern fire protection
- b) Discuss the evolution of fire protection
- c) Discuss the cause for the change from volunteer to public fire departments
- d) Discuss the responsibilities of a public fire department
- e) Discuss the evolution of equipment and protective clothing
- f) Discuss the current fire problems in existence
- g) Discuss the different ranks and responsibilities and organization of the fire department in Sault Ste. Marie
- h) Discuss the process and requirements of becoming a firefighter in Ontario
- i) Discuss the principles of life safety
- j) Discuss the code of ethics and firefighter's creed
- k) Discuss the myths about fire

**2. Fire Safety Legislation in Ontario ([www.gov.on.ca/OFM/](http://www.gov.on.ca/OFM/))**Potential Elements of the Performance

- a) Recognize and discuss pertinent building code sections for fire
- b) Recognize and discuss pertinent Occupation Health and Safety Act sections for fire
- c) Recognize and discuss Ontario Fire Code sections
- d) Recognize and discuss Fire Protection and Prevention Act sections

**3. Chemistry and Physics of Fire**Potential Elements of the Performance

- a) Understand and discuss the fire triangle and fire tetrahedron
- b) Discuss what constitutes an oxidizer
- c) Discuss what constitutes a fuel
- d) Discuss the three states of matter
- e) Discuss the properties or characteristics that affect solids, liquids and gas
- f) Discuss the differences between heat and temperature
- g) Discuss the four methods of heat transfer
- h) Discuss the four classifications of fire
- i) Discuss the three phases of fire
- j) Discuss the fire extinguishment theory as it applies to each class of fire
- k) Understand and discuss fire terminology

**4. Fire Protection Systems and Equipment**Potential Elements of the Performance

- a) Discuss the components of a water supply system
- b) Discuss fire detection equipment and their use
- c) Discuss various types of fire extinguishments systems and components
- d) Discuss the types of extinguishments agents and their uses
- e) Outline how various types of extinguishment agents work to extinguish fire
- f) Recognize and discuss fire protection equipment used for personal protection of a firefighter
- g) Recognize and discuss the comprehensive fire safety effectiveness model and its sub-components
- h) Recognize and discuss the 10 rules of engagement for structural fires
- i) Understand and discuss types of fire apparatus and equipment

**5. Fire Prevention**Potential Elements of the Performance

- a) Discuss the importance of prevention
- b) Discuss typical fire prevention activities
- c) Discuss methods of public education as they relate to prevention
- d) Understand and discuss the uses of fire-related statistics
- e) Discuss leading causes of fire in industrial and domicile locations
- f) Recognize and discuss arson characteristics to determine fire cause

**6. Fire Prevention Surveys**Potential Elements of the Performance

- a) Describe the term "fire risk analysis"
- b) Understand and discuss the components of a fire prevention/inspection survey
- c) Complete a fire prevention survey

**III. TOPICS:**

1. Public Fire Protection
2. Fire Safety Legislation
3. Chemistry and Physics of fire
4. Fire Protection Systems and Equipment
5. Fire Prevention
6. Fire Prevention Survey

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

Handouts/notes will be provided by the course instructor.

**V. EVALUATION PROCESS/GRADING SYSTEM:**

Students will be evaluated through assignments and tests. The overall grade for the course will be calculated on a total of 300 points. These points will be achieved by the following evaluation method:

1.	Assignment	10 marks
2.	Test	20 marks
3.	Mid-Term Exam	30 marks
4.	Final Exam	40 marks
		Total 100 marks

***The following semester grades will be assigned to students in postsecondary courses:***

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
F	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies &amp; Procedures Manual – Deferred Grades and Make-up</i> ).	

NR                    Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.

## VI. SPECIAL NOTES:

### Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

### Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

### Plagiarism:

Students should refer to the definition of “academic dishonesty” in the *Student Code of Conduct*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

### Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

Re-writes, exams, and assignments

Re-write of tests or exams is not permitted.

Assignments must be typed, double spaced, and have a cover page.

Failure to notify the professor of a test/exam absence prior to the test/exam (valid excuse) will result in a zero grade being assigned. Students may be requested to provide a doctor's note.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.

**CICE Modifications:****Preparation and Participation**

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
3. Study notes will be geared to test content and style which will match with modified learning outcomes.
4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

**A. Tests may be modified in the following ways:**

1. Tests, which require essay answers, may be modified to short answers.
2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

**B. Tests will be written in CICE office with assistance from a Learning Specialist.*****The Learning Specialist may:***

1. Read the test question to the student.
2. Paraphrase the test question without revealing any key words or definitions.
3. Transcribe the student's verbal answer.
4. Test length may be reduced and time allowed to complete test may be increased.

**C. Assignments may be modified in the following ways:**

1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

***The Learning Specialist may:***

1. Use a question/answer format instead of essay/research format
2. Propose a reduction in the number of references required for an assignment
3. Assist with groups to ensure that student comprehends his/her role within the group
4. Require an extension on due dates due to the fact that some students may require additional time to process information
5. Formally summarize articles and assigned readings to isolate main points for the student
6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

**D. Evaluation:**

Is reflective of modified learning outcomes.