

FE1-PMSC
Fire, Properties of Materials, AFC 2014
2 Credits

Instructor: TBA

Phone:

Original Developer: Chris Senaratne

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Reviewer: Alan Jones

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FE1-PMSC Version: 3



Fire, Properties of Materials, AFC 2014

Calendar Description

This 32-hour course covers the physical and chemical characteristics that affect or determine the degree of hazard associated with flammable and combustible metals and dusts, and compressed and liquefied gases. It also outlines the classification of dangerous goods and the regulations governing their storage and handling. This information is then correlated to the Alberta Fire Code and applied to the inspection and enforcement tasks required of a safety codes officer.

Rationale

This is a required course for the Emergency Services Technology—Fire Specialization program. Fire prevention requires a detailed understanding of the properties of dangerous goods. Personnel responsible for determining if materials are stored and handled safely in any given setting must understand the physical and chemical properties that determine the degree of hazard of the materials. They must also be familiar with the safety regulations governing the storage and handling of these goods.

Prerequisites

None

Co-Requisites

None

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. assess the degree of hazard presented by any flammable and combustible metal, dust or liquid.
2. assess the degree of hazard presented by any flammable and combustible compressed and liquefied gas.
3. determine the safest way to store and handle dangerous goods using the *Emergency Response Guidebook 2004* and the Alberta regulations.

4. correlate all classifications of dangerous goods to the Alberta Fire Code and apply them to the inspection and enforcement tasks required of a safety codes officer.

Resource Materials

Safety Codes Council course text: All required readings are included in course materials.

Conduct of Course

A. Methods

1. Lecture

B. Aids

1. Power Point
2. Whiteboard

C. Assignments

1. Self-testing exercises in Lakeland College Emergency Training Centre modules

D. Study Time

1. 8 hours

Evaluation Procedures

Written exam, 70% pass mark.

Grade Equivalents and Course Pass Requirements

The final mark is given as a letter grade.

Letter	F	B-	B	B+	A-	A	A+
Percent Range	0-69	70-74	75-79	80-84	85-89	90-94	95-100
Points	0.00	2.70	3.00	3.30	3.70	4.00	4.00

Attendance

Regular attendance is essential for success in any course. Absence for any reason does not relieve a student of the responsibility of completing course work and assignments to the satisfaction of the instructor. Poor attendance may result in the termination of a student from a course.

Course Units/Topics

1. Analyzing the Incident
2. Flammable and Combustible Liquids
3. Compressed and Liquefied Gases
4. Dangerous Goods, Explosives, Combustible Metals and Dusts Part A
5. Dangerous Goods, Explosives, Combustible Metals and Dusts Part B



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