



Hazardous Materials Operations – FIRE 112

Hazardous Materials Operations Core; Mission Specific: P.P.E., Product Control
Fire Training Certification

Course Outline

COURSE IMPLEMENTATION DATE: September 2015
OUTLINE EFFECTIVE DATE: February 2018
COURSE OUTLINE REVIEW DATE: September 2023

GENERAL COURSE DESCRIPTION:

This course complies with the standards set by NFPA 472 (Operations), Core, Mission Specific P.P.E. and Product Control. At this (Responder) level, students learn the skills and additional knowledge necessary to respond to hazardous materials or weapons of mass destruction (WMD) incidents and protect nearby persons, the environment, and property from the effects of the release. Note: before being certified for Hazardous Materials (NFPA 472) at the Operations level, candidates must meet all competencies at the Hazmat Awareness level.

Program Information: This course is a required course for the Fire Training Certification program. It may also be delivered as a standalone course or as a part of a specialized contract training program.

Delivery: This course may be delivered either face-to-face, or in a hybrid delivery model (i.e. course theory delivered online; practical skills developed in a face-to-face setting).

COTR Credits: 2

Hours for this course: 32 hours

Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	20
Practical Skills Training	12
Laboratory / Studio Hours	
Practicum / Field Experience	
Other Contact Hours	
Total	32

Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-Job Experience	N/A
Formal Work Experience	N/A
Other	N/A
Total	

Course Outline Author or Contact:

Rick Prasad, Fire Instructor

Signature

APPROVAL SIGNATURES:

Department Head

Joy Brown

E-mail: jbrown3@cotr.bc.ca

Dean of Trades and Technology

Dr. Jack Moes

E-mail: jmoes@cotr.bc.ca

Department Head Signature

Dean Signature

EDCO

Valid from: February 2018 – September 2023

Education Council Approval Date

COURSE PREREQUISITES AND TRANSFER CREDIT:

Prerequisites: FIRE 111 (NFPA 472) Hazardous Materials Awareness.

Corequisites: None

Flexible Assessment (FA):

Credit can be awarded for this course through FA Yes No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit: For transfer information within British Columbia, Alberta and other institutions, please visit <http://www.cotr.bc.ca/Transfer>.

Student should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number: N/A

Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

International Fire Service Training Association, 2010. *Hazardous Materials for First Responders*. 4th edition. Fire Protection Publications.

The course will provide: Chemical splash suits

Please see the instructor syllabus or check COTR's online text calculator

http://www.cotr.bc.ca/bookstore/cotr_web.asp?IDNumber=164 for a complete list of the currently required textbooks.

LEARNING OUTCOMES:

Upon the successful completion of this course, students will be able to perform the duties of an operations level hazardous materials responder according to the criteria set by the National Fire Protection Association, standard NFPA 472; ie:

- analyze a hazardous materials/WMD incident to determine the scope of the problem and potential outcomes;
 - plan an initial response to a hazardous materials/WMD incident within the capabilities and competencies of available personnel and personal protective equipment;
 - implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes consistent with the emergency response plan and/or standard operating procedures; and
 - evaluate the progress of the actions taken at a hazardous materials/WMD incident to ensure that the response objectives are being met safely, effectively, and efficiently.
-

COURSE TOPICS:

The order in which course topics are delivered may vary in order to accommodate student interests, prior knowledge, and complementary or co-delivered training courses.

- Chemical Properties and Hazardous Materials Incidents
- Incident Management
- Strategic Goals and Tactical Objectives
- Terrorist Attacks, Criminal Activities and Disasters
- Personal Protective Equipment
- Decontamination
- Product Control
- Air Monitoring and Sampling
- Victim Rescue and Recovery
- Evidence Preservation and Sampling
- Illicit Laboratories

See instructor syllabus for the detailed outline of weekly readings, activities and assignments.

EVALUATION AND ASSESSMENT:

Assessment of learning follows standard testing procedures as defined by the Pro Board Fire Service Professional Qualifications System:

Assessment
The theory portion of the course is assessed with a Pro Board-approved written test. Students must achieve a minimum mark of 70%.
The practical skills portion of the course is assessed on a pass/fail basis. Students must earn a passing grade on each of the skills tests as required by the Pro Board.
A passing grade is required in both theory and practical skills components in order to earn credit for the course.

Please see the instructor syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

COURSE GRADE:

Course grades are assigned as follows:

COM	Completed to defined standard
NCG	No Credit Granted

A grade of COM is awarded for a minimum of 70% on all theory based tests and a pass on all practical assessments.

All courses (whether credit-bearing or continuing education courses) must be passed or marked "complete" according to the criteria listed before the student can be awarded the COTR Fire Services Training Certificate.

ACADEMIC POLICIES:

See www.cotr.bc.ca/policies for general college policies related to course activities, including grade appeals, cheating and plagiarism.

COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.