

FIRE 006: HAZARDOUS MATERIALS/ICS

Date Submitted: Thu, 04 Jun 2020 18:48:28 GMT

Originator

asventura

Justification / Rationale

CIM updates that didn't cross over from CNet.

Effective Term

Spring 2020

Credit Status

Credit - Degree Applicable

Subject

FIRE - Fire Technology

Course Number

006

Full Course Title

Hazardous Materials/ICS

Short Title

HAZRDS MATRLS/ICS

Discipline**Disciplines List**

Fire Technology

Modality

Face-to-Face
100% Online

Catalog Description

This course introduces the student to the world of hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires and accidents. Basic information is covered regarding emergency procedures, legal requirements, compliance to regulations, health effects and treatment, and fire department protocols and responsibilities. This course is designed to meet the core competencies for hazardous materials first responders as outlined in OSHA 1910.120, NFPA 472, Professional Competencies of Responders to Hazardous Materials Incidents. This course is designated Fire 6 by the State Board of Fire Services and California State Fire Marshall.

Schedule Description

Introduces the student to the world of hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires and accidents. Advisory: ENG 061

Lecture Units

3

Lecture Semester Hours

54

Lab Units

0

In-class Hours

54

Out-of-class Hours

108

Total Course Units

3

Total Semester Hours

162

Prerequisite Course(s)

Advisory: ENG 061

Required Text and Other Instructional Materials**Resource Type**

Book

Author

Schnepp, Rob

Title

Hazardous Materials: Awareness Operations

Edition

Second

Publisher

Jones Bartlett Learning

Year

2016

College Level

Yes

ISBN #

9781449641542

Resource Type

Book

Author

GPO

Title

Emergency Response Guidebook 2012

Edition

2nd, Edition

Publisher

J. J. Keller Associates, Incorporated

Year

2012

College Level

Yes

ISBN #9781610991193

Class Size Maximum

30

Entrance Skills

Write organized summaries and responses to readings.

Requisite Course Objectives

ENG 061-Use theses to organize paragraphs into coherent analyses.

ENG 061-Demonstrate the ability to think critically and express ideas using various patterns of development.

ENG 061-Recognize features of style such as purpose, audience and tone integrate these elements into academic and professional writing.

ENG 061-Demonstrate the ability to use research skills including library resources such as books, periodicals, electronic databases and online resources such as the internet.

ENG 061-Utilize a handbook to properly cite and document source material in MLA format.

Course Content

1. Introduction to hazardous materials
2. Review of Basic Chemistry
3. Community hazards and risk assessment
 - i. Pre-emergency preparation
4. Command and control of hazardous materials incident
5. Information management and resource coordination
6. Operations at hazardous materials incidents
 - i. Hazardous Materials protective clothing and equipment
 - ii. Product control, containment and confinement
 - iii. Decontamination
 - iv. Incident Termination
7. Addressing and preparing for the incident
8. Addressing how to respond safely
9. Addressing systematic way of approaching a hazardous materials incident
 - i. Case studies

Course Objectives

	Objectives
Objective 1	Describe the basic physical properties and burning characteristics of the various classes of hazardous materials.
Objective 2	Explain the health dangers of chemical classes, and describe their resultant symptoms during physical human contact
Objective 3	Describe the implication of the legal mandates controlling the actions of all activities conducted on science by all agencies involved.
Objective 4	Describe Hazardous Materials Incident Command System.
Objective 5	Describe the community risks and actions to mitigate hazardous materials incidents

Student Learning Outcomes

	Upon satisfactory completion of this course, students will be able to:
Outcome 1	Identify and describe hazardous chemicals and their physical properties.
Outcome 2	Describe characteristics of hazardous materials when involved in spills, fires and accidents.
Outcome 3	Illustrate a Hazardous Materials Incident Command System organizational chart.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	Review text book chapters and power-points.
Activity	Group activities of identifying unknown hazardous material scenarios.
Participation	Student participation in classroom/online discussion posting and peer review.

Lecture	Classroom lectures pertaining to each chapter.
Role Playing	Scenario based exercises in class.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Written homework	Complete weekly workbook assignments and pre-assessments.	Out of Class Only
Mid-term and final evaluations	Complete mid-term and final examination.	In and Out of Class
Presentations/student demonstration observations	Student presentations in class and online video presentations.	In and Out of Class
Term or research papers	Conduct research preparation for 5-page term paper.	Out of Class Only
Tests/Quizzes/Examinations	Complete 14 chapter quizzes.	In and Out of Class
Student participation/contribution	Online discussion posts and peer reviews.	Out of Class Only
Self-paced testing	Read text book consisting of 14 chapters and study for weekly quizzes, mid-term, and final examination.	Out of Class Only

Assignments

Other In-class Assignments

1. Classroom participation & lecture
2. In class projects
3. Group discussion/postings online/peer reviews
4. Reading of handouts and text book assignments
5. Utilize ConferZoom for online group presentations and discussions
6. Complete quizzes

Other Out-of-class Assignments

1. Read 14 chapters from text book. One chapter per week consisting of 20-25 pages
2. Additional reading assignments pertaining to Incident Command System
3. Research term paper
 - a. Identify term paper topic
 - b. Perform online and library research
 - c. Complete a draft outline
 - d. Complete draft paper
 - e. TASC review for proper formatting
 - f. Submit final term paper
4. ICS review
5. Mid-term preparation
6. Complete class project
7. Complete weekly chapter pre-assessments
8. Complete weekly chapter quizzes

Grade Methods

Letter Grade Only

Distance Education Checklist

Instructional Materials and Resources

If you use any other technologies in addition to the college LMS, what other technologies will you use and how are you ensuring student data security?

Canvas will be the LMS to deliver this course.

If used, explain how specific materials and resources outside the LMS will be used to enhance student learning.

Big Blue Button and ConferZoom will be used to conference with students and to deliver student presentations.

Effective Student/Faculty Contact

Which of the following methods of regular, timely, and effective student/faculty contact will be used in this course?

Within Course Management System:

Timely feedback and return of student work as specified in the syllabus
Discussion forums with substantive instructor participation
Chat room/instant messaging
Regular virtual office hours
Online quizzes and examinations
Video or audio feedback

External to Course Management System:

Direct e-mail
Posted audio/video (including YouTube, 3cm mediasolutions, etc.)
Teleconferencing
Telephone contact/voicemail

Briefly discuss how the selected strategies above will be used to maintain Regular Effective Contact in the course.

Telephone, email, video conferencing, chat rooms, discussion posts/reviews, virtual office hours and on campus office meetings.

If interacting with students outside the LMS, explain how additional interactions with students outside the LMS will enhance student learning.

Telephone discussions/conferences will provide students another opportunity to communicate with the instructor. There may be times when students need additional clarification to understand specific assignments.

Other Information

Comparable Transfer Course Information

University System

CSU

Campus

CSU Los Angeles

Course Title

Hazardous Materials I

Catalog Year

2013-14

MIS Course Data

CIP Code

43.0201 - Fire Prevention and Safety Technology/Technician.

TOP Code

213300 - Fire Technology

SAM Code

D - Possibly Occupational

Basic Skills Status

Not Basic Skills

Prior College Level

Not applicable

Cooperative Work Experience

Not a Coop Course

Course Classification Status

Credit Course

Approved Special Class

Not special class

Noncredit Category

Not Applicable, Credit Course

Funding Agency Category

Not Applicable

Program Status

Program Applicable

Transfer Status

Transferable to CSU only

General Education Status

Not applicable

Support Course Status

Course is not a support course

Allow Audit

No

Repeatability

No

Materials Fee

No

Additional Fees?

No

Approvals**Curriculum Committee Approval Date**

10/01/2019

Academic Senate Approval Date

10/10/2019

Board of Trustees Approval Date

11/13/2019

Chancellor's Office Approval Date

6/4/2020

Course Control Number

CCC000242604

Programs referencing this course

Fire Technology Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=146/>)