



# **ILLINOIS VALLEY COMMUNITY COLLEGE**

## **COURSE OUTLINE**

**DIVISION: Workforce Development**

**COURSE: IMT 1208; Industrial Safety**

Date: Spring 2014

Credit Hours: 1

Prerequisite(s): None

Delivery Method:  **Lecture**                      **1 Contact Hours** (1 contact = 1 credit hour)  
 **Seminar**                              **0 Contact Hours** (1 contact = 1 credit hour)  
 **Lab**    **0 Contact Hours** (2 contact = 1 credit hour)  
 **Clinical**                                      **0 Contact Hours** (3 contact = 1 credit hour)  
 **Online**  
 **Blended**

Offered:  **Fall**     **Spring**     **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>:

### **CATALOG DESCRIPTION:**

This course provides a basic overview of the concepts of industrial safety, the origins of the safety movement, the elements of a good safety program and an understanding of those elements.

## GENERAL EDUCATION GOALS ADDRESSED

*[See the last page of this form for more information.]*

### Upon completion of the course, the student will be able:

[Choose those goals that apply to this course.]

- To apply analytical and problem solving skills to personal, social and professional issues and situations.
- To communicate orally and in writing, socially and interpersonally.
- To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

*[Outcomes related to course specific goals.]*

#### Upon completion of the course, the student will be able to:

The student will:

- 1.0 Understand both the employer's and employee's rights and obligations for providing and maintaining a safe work environment.
- 2.0 Understand the elements of a good workplace safety program and the need for such programs.
- 3.0 Understand the need for personal protective equipment and be able to identify the appropriate protective equipment for different safety situations.
- 4.0 Understand and identify different types of hazards associated with the workplace and the correct approach for dealing with each type of hazard.
- 5.0 Develop an understanding of electrical and fire safety programs.
- 6.0 Have a working knowledge of the most common health hazards, the regulations governing those hazards, and the methods used to control those hazards within the workplace.
- 7.0 Understand the benefits of good safe work practices within the workplace.

## **COURSE TOPICS AND CONTENT REQUIREMENTS:**

1. Introduction to Safety
  - A. Responsibilities
  - B. Hazard recognition
  - C. Accident investigation
2. Safety Laws
  - A. OSHA, The act and related laws
  - B. NIOSH and EPA
3. Contractor Safety
  - A. Safety regulations
  - B. Elements of a contractor safety program
4. Other Safety and Health Regulations
  - A. Construction, shipbuilding, DOT, etc.
5. Personal Protective Equipment
  - A. Introduction
  - B. Types of PPE
  - C. Engineering controls
6. Chemical Safety
  - A. Physical hazards
  - B. Health Hazards
  - C. Exposure routes
7. Tool Safety
  - A. Hand tools
  - B. Power tools
8. Safety Materials Handling
  - A. Causes of injuries
  - B. Material handling hazards
  - C. Material handling tools
9. Machine Safety
  - A. Machine guards
  - B. Other safety devices
10. Electrical Safety
  - A. Electricity
  - B. Electrical injuries
11. Electrical Protection
  - A. Grounding
  - B. Fuses and breakers
  - C. Hazards
12. Fire Protection
  - A. Chemistry of fire
  - B. The fire experience
  - C. Basic fire protection
13. Health Protection
  - A. Health hazards
  - B. The work environment
14. Safe Work Practices
  - A. Housekeeping
  - B. Walking and work surfaces
  - C. Tools
  - D. Other hazards

**INSTRUCTIONAL METHODS:**

Telecourse or Lecture

**INSTRUCTIONAL MATERIALS:****STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

Examinations

**TEXT:**

*Safety and Health*, Bolender, Schoolcraft Publishing

**OTHER REFERENCES**

“This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.”

## Course Competency/Assessment Methods Matrix

IMT 1208; Industrial Safety		Assessment Options																															
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment	
	Direct/ Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D							
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.																																	
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2.0 Understand the elements of a good workplace safety program and the need for such programs.									X																								
3.0 Understand the need for personal protective equipment and be able to identify the appropriate protective equipment for different safety situations.									X																								
4.0 Understand and identify different types of hazards associated with the workplace and the correct approach for dealing with each type of hazard.									X																								
5.0 Develop an understanding of electrical and fire safety programs.								X																									

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