

Course Code: CCA 112

Course Title: Occupational Safety and Health

Department: Applied Sciences and Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 46.0201

Repeatability: 0

Credit Hours

Catalog Notation: 1-2-2

Credit Hour Distribution:

Lecture: 1

Lab: 2

Clinical: 0

Total: 2

General Course Information

Catalog Description

Occupational Safety and Health Act 29 CFR 1926, common causes of accidents and fatalities in industry. Students practice applications of standards.

General Course Objectives

- Students will know and understand the OSH act.
- Students will be able to identify common causes of accidents and fatalities.
- Students will be able to demonstrate proper application of standards.

Minimum Placement Levels

English

None

Reading

None

Math

None

Prerequisites

None

Methods of Evaluation

The minimum evaluation methods include 4 written exams, 1 written final exam, 1 practical exam, quizzes, and lab return demonstrations.

Instructional Materials and Additional Supplies

OSHA Standards for the Construction Industry, Carpenters International Training Fund (2013).

Davenport, Iowa: Mancomm.

NIOSH Pocket Guide to Chemical Hazards, Department of Health and Human Services (2007).

Cincinnati, Ohio: NIOSH Publications.

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
General Safety and Health Provisions	1. Develop a safety management program using both management commitment and employee involvement to reduce injuries, illness, and fatalities.	1	1	0
Electrical	1. Demonstrate electrical safety requirements that are necessary for the practical safeguarding of employees involved in construction work.	1	2	0
Fall Protection	1. Explain how to prevent workers from falling off, onto, or through working levels, and to protect them from falling objects.	1	3	0
Scaffolding	1. Identify and comply with regulations and general industry requirements for the safe design, erection, and use of scaffolding platforms used in the construction industry.	2	3	0
Stairways and Ladders	1. Specify when stairways and ladders must be provided when used for construction including alteration, repair, and demolition.	1	3	0
Material Handling	1. Identify potential hazards in handling, rigging, storage, moving, and disposal of materials used in construction activities.	1	2	0
Confined Space	1. Explain the nature of hazards involved, the necessary precautions to be taken, and the use of protective and emergency equipment required for confined spaces.	2	4	0
Personal Protective Equipment	1. Ensure that protective equipment is provided, used, and maintained in a clean and usable condition whenever necessary due to hazardous conditions in the workplace.	1	2	0
Fire Safety	1. Describe the requirements for fire brigades and all portable and fixed fire suppression equipment, fire detection systems, and fire or employee alarm systems.	1	2	0
Excavations	1. Design and construct an adequate protective system which will prevent employees in excavations and trenching operations from cave-ins.	1	4	0
Cranes, Derricks, Hoists, Elevators, and Conveyors	1. Specify the requirements, specifications, and limitations applicable to the operation of any and all cranes, derricks, hoists, elevators, and conveyors.	1	4	0
Exams	1. Complete all required exams.	2	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	30	0