

EASTERN ARIZONA COLLEGE
Fire Protection Systems

Course Design
2010-2011

Course Information

Division Allied Health
Course Number FSC 140
Title Fire Protection Systems
Credits 3
Developed by Patricia A. Burke
Lecture/Lab Ratio 3 Lecture/0 Lab

Transfer Status

ASU	NAU	UA
Pending Evaluation	Pending Evaluation	Pending Evaluation

Activity Course No
CIP Code 43.0203
Assessment Mode Pre/Post Test (10 Questions/10 Points)
Semester Taught Upon Request
GE Category None
Separate Lab No
Awareness Course No
Intensive Writing Course No

Prerequisites

None

Educational Value

This course is designed for fire department personnel and interested students who wish to learn the principles of fire protection systems. The goal of this course is to give firefighters an overview of fire protection systems.

Description

In this course the student will learn the principles of fire protection systems. Includes portable and fixed fire extinguishing equipment, automatic sprinkler and deluge systems, rate of temperature rise and smoke detecting devices and alarm systems.

Supplies

None

Competencies and Performance Standards

- 1. Describe the basic principles involved in the design and operation of suppression and detection systems found in most occupancies.**

Learning objectives

What you will learn as you master the competency:

- Define combustion
- Define suppression
- Discuss suppression agents and principles

Performance Standards

You will demonstrate your competence:

- When learner can define combustion
- When learner can define suppression
- When learner can discuss suppression agents and principles

Your performance will be successful when:

- Learner completes written test

- 2. Discuss the limitations and potential of the various systems, as a basis for recommending their application and use.**

Learning objectives

What you will learn as you master the competency:

- Describe the various types of extinguishers
- Describe the various types of foam, dry chemical, and CO₂ systems
- Describe the characteristics and effects of halogenated agents
- Describe the design and components of explosion suppression systems

Performance Standards

You will demonstrate your competence:

- When learner can describe the various types of extinguishers
- When learner can describe the various types of foam, dry chemical, and CO₂ systems
- When learner can describe the characteristics and effects of halogenated agents
- When learner can describe the design and components of explosion suppression systems

Your performance will be successful when:

- Learner completes written test

- 3. Acquire basic knowledge required to recognize and safely inspect the more common in-use systems.**

Learning objectives

What you will learn as you master the competency:

- Discuss the purpose and principles of fire detection systems
- Describe residential fire detection systems and how they differ from industrial systems
- Describe the characteristics and operation of thermal systems
- Describe the characteristics and operation of smoke-detection equipment

- e. Identify the principles of flame detection

Performance Standards

You will demonstrate your competence:

- o When learner can discuss the purpose and principles of fire detection systems
- o When learner can describe residential fire detection systems and how they differ from industrial systems
- o When learner can describe the characteristics and operation of thermal systems
- o When learner can describe the characteristics and operation of smoke detection equipment
- o When learner can identify the principles of flame detection

Your performance will be successful when:

- o Learner completes written test

Types of Instruction

Classroom presentation

Grading Information

Grading Rationale

Grades will be based on class participation and written tests. The Post-Test will count as 10% of the final grade.

Grading Scale

A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	59% and below