

The University of Akron
College of Health & Human Sciences
FIRE PROTECTION TECHNOLOGY

Course Name: Fire Detection and Suppression Systems
Course Number: 2230:205
Course Credit: 3 credit hours
Prerequisites: None

Course Description

This course provides a comprehensive treatment of fire detection systems, fire alarm systems and fixed fire extinguishing systems. The fundamental principles, design criteria and installation requirements for fire suppression, detection, and alarm systems are considered. Extinguishing systems incorporating the use of clean agents, halocarbon and inert gas agents, carbon dioxide, dry chemical and foam fire suppression agents for total flooding, local application, and explosion suppression, are covered. Current design procedures and criteria for these systems, in accordance with NFPA standards and manufacturer's guidelines, will be studied.

Program Outcomes

Upon completion of this course the student will:

1. Explain the benefits of fire protection systems in various types of structures
2. Identify different types of non-water based fire suppression systems and describe how these systems extinguish fire
3. Describe the basic components of a fire alarm system
4. Identify three different types of detectors and explain how they detect fire.
5. Describe the hazards of smoke and list the four factors that can influence smoke movement in a building
6. Explain the operation and appropriate application for the different types of portable fire extinguishing systems

Assessment

The University of Akron and specifically the Fire Protection program assesses student learning at several levels. The goal of these assessment activities is to improve student learning. As a student in this course, you will participate in various assessment activities. Grades and work samples may be selected to gather learning outcome data to be measured and tracked over several years. Student names or indicators are not used in data analysis. Students have an active role in course and program assessment projects. Generated data will direct any changes made in the curriculum which is designed to strengthen and constantly improve student learning and educational outcomes.

Tuesday, November 15, 2016

Course Outline

- Topic 1 Chemistry of Fire
- Topic 2 Introduction to Basic Fire Alarm Technology
- Topic 3 Ohio Building and Fire Code
- Topic 4 NFPA 72
- Topic 5 NFPA 17 and 17A
- Topic 6 NFPA 2001

Grading Scale:

A	96 - 100 %
A-	93 - 95 %
B+	90 - 92 %
B	87 - 89 %
B-	85 - 86 %
C+	82 - 84 %
C	79 - 81 %
C-	76 - 78 %
D+	73 - 75 %
D	71 - 72 %
D-	70%
F	below 70 %