THE UNIVERSITY OF AKRON

COLLEGE OF HEALTH & HUMAN SCIENCES

FIRE PROTECTION TECHNOLOGY

Course Name: Fire Sprinkler System Design
Course Number: FIRE:206
Course Credit: 3 credit hours
Pre-requisites: None

Course Description

This course will cover and review the design, installation and operation of automatic fire suppression systems. Included in the program are automatic sprinklers, ultra speed sprinklers spray systems and water mist systems.

Program Outcomes

Upon completion of this course the student will:

1. Be familiar with the advantages, disadvantages and limitations of various water-based fire suppression systems
2. Apply appropriate NFPA standards and other recognized standards to a given hazard
3. Evaluate a designated structure to identify relevant hazards
4. Demonstrate knowledge of water-based suppression systems including automatic sprinkler and water mist systems.

Assessment:

At the beginning of the semester, the instructor will discuss the format used to evaluate student performance and progress .The criteria for assigning a course grade shall also be discussed. A hard copy and electronic copy of the course syllabus will be provided on Springboard. Assessment methods may include one or more of the following: research papers, book and journal article reviews, written and oral reports, table top exercises, community service projects, and classroom presentations, to be determined by the instructor.

Course Outline:

Topic 1   Basics of Fire Behavior
Topic 2   Fire Protection Systems and the Model Code Process
Topic 3   Fire Alarm System Components and Functions
Topic 4   Types of Fire Alarm and Detection Systems
Topic 5   Water Supplies for Fire Protection Systems
Topic 6   Standpipe and Hose Systems

Topic 7   Automatic Fire Sprinkler Systems
Topic 8   Specialized Water-Based Fire Protection Systems
Topic 9   Wet and Dry Chemical Extinguishing Systems
Topic 10 Gaseous Agent Extinguishing Systems
Topic 11 Portable Fire Extinguishers
Topic 12 Smoke Control and Management Systems
Topic 13 Property Security, Emergency Response, and Fire Protection Systems

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 %**

Students with Disabilities Policy

In accordance with University policy, students with a documented disability for which accommodations may be required should contact the Office of Accessibility: SAS Building, Room 125