TAFTCOLLEGE

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C & G Ed approval: Marh 22, 2024
Board approval: April 10, 2024
Semester effective:

Environmental Health and Safety (EHS) 1560 Fire Prevention (3 Units) CSU

Advisory: Eligibility for English 1500 or 1501 strongly recommended.

Hours and Units Calculations:
48 hours lecture hours; 96 outside classroom hours (144Total Student Learning Hours) 3 units

Catalog Description: This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

Type of Class/Course: Degree Credit

Textbook: Principles of Fire Prevention. David Diamontes, A. Maurice Jones Jr. 4th Edition. Jones and Bartlett. 2022

Additional Required Materials: None

Course Objectives:

By the end of the course, a successful student will be able to

1. Analyze the basic components of fire prevention and the codes and formulate a mock fire inspection procedure form.
2. Evaluate and apply the basic concepts of fire prevention inspection procedures, within a simulated event.
3. Identify the adequacy of fire protection equipment within the fire prevention codes.
4. Evaluate and develop techniques and procedures for handling special hazards.
5. Translate the basic components of fire prevention to provide a technical background, so that learning the dynamics of fire prevention is utilized in developing public educational concepts.

Student Learning Outcomes:

1. Know the history and philosophy of fire prevention.
2. Identify corrective measures for specific fire hazards.
3. Ability to deliver fire safety education including how detection systems provide protection.
4. Determine the appropriate built in fire protection system for differing situations.

Course Scope and Content:

Unit I Introduction to Fire Prevention
A. Model codes
B. Code organizations
C. Code adoption
D. The minimum and maximum codes

Unit II Inspection Procedures
A. Legal aspects of fire inspections
B. Conduction of inspection procedures
C. Code violations and compliance

Unit III Use and Occupancy of Structures
A. Building codes
B. Mixed use occupancies
C. Freedom of information laws and public access

Unit IV Building Construction for Fire Prevention
A. Types of construction
B. Exposure protection
C. Height and area limitations

Unit V Fire Resistive Construction Elements
A. Testing laboratories
B. Local ordinances
C. Rated assemblies

Unit VI Installation of Fire Protection Systems
A. Fire extinguishing systems
B. Fire alarm systems
C. Smoke control devices

Unit VII Means of Egress
A. Exit illumination
B. Rated exit pathways
C. Exit assemblies

Unit VIII Interior Finish Requirements
A. Interior finishes, walls, and flooring
B. Decorations

Unit IX Fire Hazards by Occupancies
A. Permits to conduct business
B. Computerized modeling for materials control
C. Special cases of violations

Unit X Maintenance of Fire Protection Systems
A. Installations of fire protection systems
B. Wet and dry chemical extinguishing systems
C. Fire alarm systems

Unit XI Heating Hazards
A. Installation compliance
B. Special hazardous areas

Unit XII Hazardous Materials
A. Installation compliance
B. Special hazards
C. National Fire Protection Association (NFPA) 704 Systems

Unit XIII Special Hazards
A. New storage techniques
B. Reducing hazardous materials technology
C. Future trends in prevention

Unit XIV Enforcement and Investigations
A. Policy of department
B. Special Investigations
C. Court decisions

Learning Activities Required Outside of Class:
The students in this class will spend a minimum of 6 hours per week outside of the regular class time doing the following:

1. **Writing assignments**
2. **Essays**
3. **Term papers**
4. **Reading reports, textbook, monthly periodicals, journals, newspapers, and magazines,**

Methods of Instruction:

1. **Lecture**
2. **Multimedia presentations**

3. **Discussion**
4. **Hands-on practical exercises/ demonstrations**
5. **Group collaborations**

Methods of Evaluation:

1. **Written final exam**
2. **Oral presentations of term paper assignment**

Supplemental Data:

TOP Code:	**095670: Indus Occupational Safe Health**
SAM Priority Code:	**C: Clearly Occupational**
Distance Education:	**Y**
Funding Agency:	**Y: Not Applicable (funds not used)**
Program Status:	**1: Program Applicable**
Noncredit Category:	**Y: Not Applicable, Credit Course**
Special Class Status:	**N: Course is not a special class**
Basic Skills Status:	**N: Course is not a basic skills course**
Prior to College Level:	**Y: Not applicable**
Cooperative Work Experience:	**N: Is not part of a cooperative work experience education program**
Eligible for Credit by Exam:	**NO**
Eligible for Pass/No Pass:	**C: Pass/No Pass**

Taft College General Education:	**NONE**
Disciplines	**Fire Technology or Forestry/Natural Resources or Environmental Technologies**