### FIRE 71 Course Outline as of Fall 2014

## **CATALOG INFORMATION**

Dept and Nbr: FIRE 71 Title: FIRE PROTECTION ORG. Full Title: Fire Protection Organization Last Reviewed: 10/14/2019

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	FIRE 51

### **Catalog Description:**

This course provides an introduction to fire protection; career opportunities in the fire service and related fields; history of fire protection; the organization and function to public and private fire protection services, fire departments as a part of local government; fire service nomenclature; specific fire protection functions; basic fire chemistry and behavior; introduction to fire protection systems and an introduction to strategy and tactics and building construction.

### **Prerequisites/Corequisites:**

### **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: This course provides an introduction to fire protection; career opportunities in the fire service and related fields; history of fire protection; the organization and function to public and private fire protection services, fire departments as a part of local government; fire service nomenclature; specific fire protection functions; basic fire chemistry and behavior; introduction

to fire protection systems and an introduction to strategy and tactics and building construction. (Grade Only) Prerequisites/Corequisites: Recommended: Eligibility for ENGL 100 or ESL 100 Limits on Enrollment: Transfer Credit: CSU; Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area	L	Effective: Effective:	Inactive: Inactive:	
<b>IGETC:</b>	Transfer Area			Effective:	Inactive:
CSU Transfer	:Transferable	Effective:	Fall 1981	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

**Certificate/Major Applicable:** 

Both Certificate and Major Applicable

# **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Describe the history, functions, culture, educational opportunities and development of local, state and federal fire and emergency services organizations.

2. Identify the various fire department positions, their standards and hiring practices in private and public organizations.

3. Define the terms, equipment, apparatus, facilities and emergency management systems associated with fire service and public safety organizations.

## **Objectives:**

Upon completion of the course, the student will be able to:

- 1. List the types of degrees and certificates that are offered in fire technology programs.
- 2. Identify the fire training programs offered at the state and Federal level.
- 3. Describe the web-based training programs available to students and fire service personnel.
- 4. Define a variety of fire service terms.
- 5. Identify the different types of agencies that provide fire protection services.
- 6. Demonstrate an understanding of the ethical behavior expected of fire service personnel.
- 7. List the steps used in the firefighter hiring process.

8. Describe the impact of Affirmative Action and Equal Employment practices on firefighter hiring.

9. List the different types of fire positions and companies used in emergency response and the roles they play.

10.List the different types of fire prevention personnel and the roles they play.

11.List the different types of special service and Emergency Medical Service (EMS) personnel used in the fire service and the roles they play.

12.Describe the origins and evolution of the fire service in the United States.

13.List the different classes of fires and the fuels involved with each.

14.Describe the major phases of a fire and the factors that influence fire behavior and spread.

15.Describe the different types of building construction and the effects of fire upon each.

16.Identify the different hazards encountered by firefighters in burning buildings.

17.Identify the three main roles of a fire prevention bureau and duties associated with each.

18.List the different types of fire alarm, detection and suppression systems.

19.Describe the roles private and public support organizations play that provide assistance to the fire service.

20.List common fire service facilities, vehicles and equipment that provide emergency services. 21.Describe the organizational structure of the different types of fire departments.

22.Describe the purpose of policies and incident management systems used by the fire service today.

## **Topics and Scope:**

I. Introduction to Fire Technology

A. Identification of the scope and content of Fire Technology Curriculum

- 1. Certificates
- 2. Degree programs
- 3. State Certification
  - B. Federal, State and local Fire Training programs
  - C. Web-site fire training
  - D. Fire Terms and their definitions
- II. Fire Service as a Career
  - A. Career, volunteer and combination fire departments
  - B. Public safety departments
  - C. Private fire brigades
  - D. Professional Ethics & Behavior
  - E. Selection process
- 1. Affirmative action and equal opportunity
- 2. Recruitment
- 3. Application
- 4. Written Examination
- 5. Physical ability tests
  - 6. Oral interview
  - 7. Background process
  - 8. Probationary Requirements
- III. Roles of Fire Service Personnel
  - A. Fire Suppression Positions
- 1. Firefighter
- 2. Fire apparatus driver/operator
- 3. Company officer
  - 4. Battalion or district chief
  - 5. Safety officer
  - 6. Public information officer
  - 7. Assistant or deputy chief
  - 8. Fire Chief
  - B. Fire Companies
- 1. Engine
- 2. Truck
- 3. Rescue/Squad

C. Special Operations

- 1. Airport firefighter
- 2. Hazardous materials technician
- 3. Technical rescue specialist D. Fire Prevention
- 1. Fire prevention officer/inspector
- 2. Fire investigator
- 3. Public fire and life safety educator
- 4. Building plans examiner E. Emergency Medical Services (EMS)
- 1. First responder
- 2. Emergency medical technician
- 3. Paramedic
- 4. EMS chief/officer
  - F. Special Services
- 1. Telecommunications/dispatch
- 2. Apparatus and/or equipment maintenance
- IV. History of the Fire Service
  - A. Early fire services
  - B. Fire protection in the United States
  - C. Fire equipment
  - D. Growth of the volunteer fire service
  - E. The impact of historic fires on fire protection in the United States
- V. Fire Behavior and Combustion
  - A. Fire as a chemical reaction
  - B. The major phases of fire
  - C. Types of Fire
- VI. Building Construction
  - A. Types
  - B. Effects of fire on common building materials
  - C. Firefighter hazards
- VII. Fire Prevention
  - A. Code enforcement
  - B. Fire investigation
  - C. Public education

# VIII. Fire Detection, Alarm, and Suppression Systems

- A. Types of alarm systems
- B. Automatic sprinkler systems
- C. Standpipe systems
- IX. Roles of Public and Private Support Organizations
  - A.Trade organizations
  - B. Federal organizations
  - C. National organizations
  - D. State/provincial organizations
  - E. Local organizations
- X. Fire and Emergency Services Equipment and Facilities
  - A. Facilities
  - B. Fire apparatus
  - C. Personal Protective Equipment (PPE)
- XI. Fire Department Organization and Management
  - A. Purpose of fire protection agencies
  - B. Organizational hierarchy

- C. Local government structures
- D. Types of fire departments
- E. Response considerations
- F. Policies and procedures
- G. Incident management systems

### Assignment:

- 1. Reading 20-30 pages from textbook per week
- 2. Completion of up to 17 weekly assignment sheets
- 3. Up to 10 weekly quizzes, a midterm and final exam
- 4. Up to 2 written essays
- 5. Term project, book report and/or internet research project
- 6. Class oral or power point presentation
- 7. Up to 2 field trips (group or individual)

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Autobiography, written assignments, history essay, term project or book report

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, Midterm, Final Exam; Multiple Choice, Completion

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Oral or power point presentations, Internet research projects, Field trips and/or Library project

### **Representative Textbooks and Materials:**

Writing 15 - 25%

Problem solving 5 - 10%

Skill Demonstrations 0 - 0%

> Exams 60 - 70%

Other Category 10 - 20% (1) Fire Service Orientation and Terminology, International Fire Service Training Association (IFSTA), 5th edition

(2) Introduction to Fire Protection, Klinoff, Thompson Delmar Learning, 4th edition
(3) Fire Fighters, Stories of Survival From the Front Lines of Firefighting, Willis, Thunder Mouth Press (2002) 1st Edition