#### FIRE 71 Course Outline as of Fall 2008

#### **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 service and protection; it includes careers in fire protection and related fields. The course includes history, loss analysis, private fire protection, and an introduction to the chemistry and physics of fire.

## **Prerequisites/Corequisites:**

# **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100.

#### **Limits on Enrollment:**

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

Description: State Core Course. This course provides an introduction to fire service and protection; it includes careers in fire protection and related fields. The course includes history, loss analysis, private fire protection, and an introduction to the chemistry and physics of fire. (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: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** 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**

#### **Outcomes and Objectives:**

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

- 1. Identify the three types of degrees and certificates that are offered in fire technology.
- 2. List the hiring practices and equal opportunity requirements that are stated in fire service policies.
- 3. Identify Federal, State and local training programs provided to firefighters.
- 4. Differentiate between types of fire departments.
- 5. List the major components of the fire service selection process.
- 6. Identify the types of common fire department apparatus, equipment, and personal safety equipment used for firefighting.
- 7. Recognize the role of fire service personnel.
- 8. Identify the early traditions and history of the fire service.
- 9. Explain basic components of fire behavior and combustion.
- 10. Identify hazards and categorize building construction along with materials used.
- 11. Analyze types of fire alarm, detection and suppression systems.
- 12. Compare private and public support organizations that provide service to the fire service.
- 13. List common fire service facilities and vehicles that provide emergency services.
- 14. Distinguish between the different organizations and management considerations 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. Affirmative action and equal opportunity requirements
  - C. Federal, State and local Fire Training programs

- D. Fire Terms and their definitionsE. Web-site fire training
- II. Fire Service as a Career
  - A. Career, volunteer and combination fire departments
  - B. Public safety departments
  - C. Private fire brigades
  - D. Selection process
- 1. Recruitment
- 2. Application
- 3. Written Examination
- 4. Physical ability tests
- 5. Oral interview
- III. Roles of Fire Service Personnel
  - A. Fire Companies
- 1. Engine
- 2. Truck
- 3. Rescue/Squad
  - B. Fire Suppression
- 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
  - C. Special Operations
- 1. Airport firefighter
- 2. Hazardous materials techinician
- 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 and Philosophy of the Modern Day Fire Services
  - A. Early fire services
  - B. Fire protection in America
  - C. American fire equipment
  - D. Growth of the volunteer fire service
  - E. Improvements and protective clothing
  - F. The impact of historic fires on fire protection in North America
- V. Fire Behavior and Combustion
  - A. Fire as a chemical reaction

- B. The major phases of fire
- C. Factors that influence fire spread and fire behavior

## VI. Building Construction

- A. Types
- B. Effects of fire on common building materials
- C. Firefighter hazards

### VII. Fire Detection, Alarm, and Suppression Systems

- A. Types of alarm systems
- B. Automatic sprinkler systems
- C. Standpipe systems

# VIII. Role of Public and Private Support Organizations

- A. Trade organizations
- B. Federal organizations
- C. State/provincial organizations
- D. Local organizations

# IX. Fire and Emergency Services - Equipment and Facilities

- A. Facilities
- B. Fire apparatus

## X. 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
- H. Fire department planning

## **Assignment:**

- 1. Reading 20-30 pages from textbook
- 2. Completion of 17 weekly assignment sheets
- 3. Midterm, final exam, and weekly quizzes
- 4. Term project and/or internet research project
- 5. Class oral presentation
- 6. 2 field trips
- 7. Scenarios and role playing

#### 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.

Written homework, reading reports, term project

Writing 10 - 30%

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

Homework problems, Quizzes	Problem solving 5 - 10%
<b>Skill Demonstrations:</b> All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
None	Skill Demonstrations 0 - 0%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Multiple choice, Completion, Midterm, Final exam	Exams 60 - 80%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
Internet research project, Field trips	Other Category 5 - 10%

- Representative Textbooks and Materials:
  (1) Fire Service Orientation and Terminology, International Fire Service Training Association (IFSTA), current edition
- (2) Introduction to Fire Protection, Klinoff, Thompson Delmar Learning, current edition