

**FIRE 208.1 Course Outline as of Fall 2005****CATALOG INFORMATION**

Dept and Nbr: FIRE 208.1 Title: FIREFIGHTER I ACADEMY

Full Title: Firefighter I Academy

Last Reviewed: 10/27/2014

Units	Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	12.00	Lecture Scheduled	6.00	24	Lecture Scheduled	144.00
Minimum	12.00	Lab Scheduled	10.00	2	Lab Scheduled	240.00
		Contact DHR	0		Contact DHR	0
		Contact Total	16.00		Contact Total	384.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 288.00

Total Student Learning Hours: 672.00

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:

**Catalog Description:**

An intensive series of theoretical and practical lessons and prescribed activities which, when combined with Emergency Care, meet the educational requirements for Firefighter I certification by the State Fire Marshal's Office and Board of Fire Services.

**Prerequisites/Corequisites:**

Course Completion of FIRE 71 ( or FIRE 51) and Course Completion of FIRE 208 and Course Completion of EMC 100 ( or EMC 290)

**Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:**

Current Class "C" California Driver License. Medical History Statement and Cardiac Risk Assessment signed by a physician for participation in a rigorous fitness program and other physical activities including climbing, rappelling, carrying and lifting heavy equipment (65-100 lbs.), rescue/body drags (165 lbs.) and live fire exercises (crawling and pulling pressurized hose lines).

**Schedule of Classes Information:**

Description: An intensive series of theoretical and practical lessons and exercises which satisfy

the education requirements for certification as Firefighter I by the State Board of Fire Services. Students who meet the prerequisite course work requirements and the academic standards set by the program will be randomly selected and notified by the Department. (Grade Only)

Prerequisites/Corequisites: Course Completion of FIRE 71 ( or FIRE 51) and Course Completion of FIRE 208 and Course Completion of EMC 100 ( or EMC 290)

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment: Current Class "C" California Driver License. Medical History Statement and Cardiac Risk Assessment signed by a physician for participation in a rigorous fitness program and other physical activities including climbing, rappelling, carrying and lifting heavy equipment (65-100 lbs.), rescue/body drags (165 lbs.) and live fire exercises (crawling and pulling pressurized hose lines).

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

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

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

**Outcomes and Objectives:**

Upon completion of this course, students will be able to:

1. Identify the roles, functions, and responsibilities of the professional firefighter.
2. Demonstrate the proficiencies needed to function in a hazardous atmosphere through the use of protective clothing and self contained breathing apparatus.
3. Define the necessary knowledge and understanding of fire chemistry and behavior.
4. Recognize and demonstrate the proficiencies needed to safely operate manual and power driven tools, equipment, and techniques, individually and as a member of a team.
5. List and describe the practices necessary to utilize modern fire suppression equipment and techniques, individually and as a member of a team.
6. Define and identify the procedure necessary to protect property from non-fire damage through the use of salvage techniques and equipment.
7. Identify the necessary indicators that determine the cause

and origin of fires, and to recognize and protect evidence of arson.

8. Demonstrate knowledge of the roles and functions of firefighters.
9. Name the basic properties of fire chemistry and behavior.
10. List the different firefighting tools and equipment.
11. Name wildland terminology, demonstrate an awareness of wildland firefighting safety.
12. List wildland tools and equipment and identify wildland fire behavior
13. Demonstrate the functions necessary to become a member of a fire suppression team, through hands-on performance, and live fire exercises.
14. Demonstrate the skills necessary to complete the Firefighter I physical fitness agility examination.

## **Topics and Scope:**

### **I. Organization and Responsibility**

#### **A. Laws and Regulations**

1. Government organizations
2. Personnel rules and regulations
3. Retirement systems, compensation laws
4. Agency rules and regulations

#### **B. Personnel and Functions**

1. Fire department functions
2. Duties of personnel
3. Personal development programs
4. Obedience and obligation to duty

#### **C. Professional Organizations**

1. National, State, and local organizations
2. Periodical publications

### **II. Apparatus and Equipment Operation**

#### **A. Forcible Entry and Miscellaneous Tools**

1. Cutting, boring, and sawing tools
2. Battering, carrying, digging, prying, and striking tools
3. Lighting equipment
4. Ventilation equipment

#### **B. Lifting and Hoisting Equipment**

1. Ropes, knots, and hitches
2. Lifting and spreading equipment
3. Hoisting and pulling equipment

#### **C. Extinguishers and Proportioners**

1. Pressure type extinguishers
2. Foam generators
3. Water-additive proportioners

#### **D. Hose, Nozzles and Fittings**

1. Coupling hose
2. Roll, fold and carry hose
3. Nozzles, valves, fittings and other devices
4. Siamese and wye lines
5. Extend and reduce lines
6. Load hose on apparatus

## E. Hose Evolutions

1. Operate hydrants
2. Lay single lines
3. Lay multiple lines
4. Connect lines to auxiliary appliances
5. Master stream appliances
6. Operate lines above and below street level

## F. Ladders

1. Carry, raise, and lower ladders
2. Climb and work from ladders
3. Ladders as improvised equipment

## G. Building Equipment

1. Elevators
2. Fire Protection Systems
3. Fire Escape Systems

## H. Rescue Tools and Equipment

1. Breathing apparatus
2. Lifelines and belts
3. Protective clothing

## III. Water Supply

### A. Nozzle Stream

1. Range of fire streams
2. Reaction of fire streams

### B. Hydrants and Reservoirs

1. Size and gallons per minute
2. Pumps and engines

## IV. Fire Control

### A. Fire Behavior

1. Classes of fire
2. Theory and fundamentals of combustion
3. Theory of heat transfer
4. Theory of extinguishment
5. Fire characteristics of solids
6. Fire characteristics of flammable liquids and gasses
7. Products of combustion
8. Hazardous and explosive materials

### B. Extinguishment

1. Types of agents
2. Methods used for different fires

## V. Wildland Interface Firefighting

### A. Orientation

1. Wildland firefighting terminology
2. Fundamentals of heat transfer
3. Wildland fire behavior
  - a. Fuels
  - b. Topography
  - c. Weather

### B. Tactics and Strategy

1. Parts of a wildland
2. Incident Command System

### C. Firefighter Safety and Survival

1. Fire shelters

- 2. Protective clothing
- 3. Look up, look down, look around
- 4. Urban interface hazards
- D. Suppression Methods
  - 1. Wildland tools and equipment
  - 2. Additional resources
- VI. Salvage and Overhaul
  - A. Procedures for making buildings/areas safe after an emergency
  - B. Common types of fire service salvage equipment
  - C. Procedures to restore premises
  - D. Preservation of evidence
    - 1. Cause and origin of fires
    - 2. Properties of fire investigation
- VII. Hazardous Materials
  - A. Hazardous materials definitions
  - B. Hazardous materials labeling System
  - C. Use of Department of Transportation Response Guidebook
- VIII. Fire Alarm Communications
  - A. Clear radio text terminology
  - B. Fire Department Emergency Communication Systems
- IX. Vehicle Extrication
  - A. Principles of vehicular extrication
  - B. Equipment and resources for auto extrication
- X. Physical Fitness
  - A. Physical abilities training
  - B. Firefighter physical abilities examination
- XI. Rescue Practices
  - A. Components of Rescue Operations
  - B. Confined Space Awareness
  - C. Lifts, carries and stabilization

**Assignment:**

Assignments include:

- 1. Reading approximately 50 pages per week from assigned text.
- 2. Memorization of mandated Firefighter I policies and procedures as assigned
- 3. Practice six critical skills and prepare for skills demonstrations and scenarios (self-contained breathing apparatus, ropes and knots, ladders, hose and fire streams, physical fitness ability, and wildland firefighting.)
- 4. Prepare for tactics and strategy exercise/scenario utilizing incident command system components and hazardous material procedures.
- 5. Study for daily/weekly quizzes and seven block exams
- 6. Prepare for midterm written and skills exam and final written skills exam.

**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, Lab reports, Limited report writing

Writing  
5 - 10%

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

Scenarios

Problem solving  
5 - 10%

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

Class performances, Performance exams, Scenarios

Skill Demonstrations  
40 - 60%

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

Multiple choice, True/false, Completion

Exams  
30 - 50%

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

None

Other Category  
0 - 0%

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

Essentials of Firefighting, 4th Edition; International Fire Service Training Association

Hazardous Materials First Responder Syllabus "Operations", California Specialized Training Institution

Emergency Response Guidebook, Department of Transportation, current edition

Ethics, Respect and Work Relationships Syllabus, instructor prepared materials

Incident Command System, Syllabus, National Wildfire Coordinating Group, current edition

Critical Stress Debriefing, Syllabus, instructor prepared materials

Performance Standards, Firefighter I Academy, current edition

Procedure Manual, Firefighter I Academy, current edition

Report Writing, Syllabus, instructor prepared materials

California Department of Forestry and Fire Protection, Syllabus, current edition

Vehicle Extrication Techniques, Holmatro Rescue Equipment, current edition

Personal Exposure Reporting, California Professional Firefighters Association, current edition