### FIRE 0608 - BASIC STRUCTURAL FIREFIGHTER

#### **Catalog Description**

Hours: 150 (55 lecture, 95 laboratory)

Description: Entry-level course for volunteer firefighters. Topics include fire behavior, safety, personal protective equipment, forcible entry, rescue, ground ladders, hoses, fire streams and nozzles, and fire control principles. (not transferable) (not degree applicable) (pass/no pass grading)

#### **Course Student Learning Outcomes**

- CSLO #1: Differentiate between various fire service organizations and their roles and responsibilities.
- CSLO #2: Analyze fire ground safety and apply personal protective equipment to the emergency.
- CSLO #3: Operate basic firefighting suppression equipment and tools.
- CSLO #4: Describe and demonstrate correct techniques and procedures of salvage and overhaul.

#### **Effective Term**

Fall 2019

#### **Course Type**

Credit - Nondegree-applicable

#### **Contact Hours**

150

#### **Outside of Class Hours**

110

#### **Total Student Learning Hours**

260

#### **Course Objectives**

Lecture Objectives:

- 1. Differentiate between various fire service organizations and their responsibilities;
- $2. \ \ \text{Examine the principles and responsibilities associated with the } \\ \text{Incident Command System;}$
- 3. Evaluate general safety precautions for all emergency situations;
- 4. Analyze the function and uses of personal protective equipment;
- 5. Assess the importance of self-contained breathing apparatus;
- 6. Describe the uses of fire service tools and equipment;
- 7. Differentiate the characteristics and uses of portable extinguishers;
- 8. Examine the procedures and concepts of forcible entry;
- 9. Discuss the reasons for the use of clear text in radio communications;
- 10. Compare types and uses of ground ladders;
- ${\tt 11.} \ Examine \ and \ rank \ the \ considerations \ and \ concepts \ for \ ventilation;$
- 12. Analyze fire hose procedures and safety precautions;
- 13. Describe characteristics and precautions for fire streams and nozzles;
- 14. Compare principles underlying various modes of fire attack;
- 15. Evaluate purposes and procedures for salvage and overhaul;

- 16. Compare the structural components of each of the five classes of building construction;
- 17. Examine the features of a municipal water system and assess alternative water supplies in rural environments; and
- 18. Evaluate the appropriateness and effectiveness of wet, dry, pre-action, and deluge fire sprinkler systems in various residential, mercantile and industrial settings.

Laboratory Objectives:

- 1. Demonstrate correct technique when carrying, raising, and working from various size ladders;
- 2. Practice correct procedures and techniques when advancing and operating medium and large size attack lines;
- 3. Arrange room and building contents for salvage, and deploy salvage covers and perform protective measures necessary to minimize property loss:
- 4. Demonstrate correct technique and procedures for tying various knots;
- 5. Practice proper victim disentanglement and extrication procedures from motor vehicle accidents.

#### **General Education Information**

- · Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- · Cal-GETC Applicability (Recommended Requires External Approval)
- · IGETC Applicability (Recommended-requires CSU/UC approval)

#### **Articulation Information**

Not Transferable

#### **Methods of Evaluation**

- · Objective Examinations
  - Example: Students will take a multiple-choice examination on self-contained breathing apparatus. Standard Grading. Example Question: What are the four main components of the SCBA? A. Mask, tank, regulator, and backpack assembly B. Mask, regulator, backpack assembly and low air alarm C. Mask, regulator, backpack assembly and cylinder gauge D. Tank, backpack assembly, cylinder gauge and low air alarm
- Reports
  - Example: In a report, students will list the most commonly used fire service ground ladders and the typical uses for each. Rubric Grading.
- · Skill Demonstrations
  - Example: Students will demonstrate the ability to properly don a self-contained breathing apparatus. Grade based on industry standards

#### Repeatable

No

#### **Methods of Instruction**

- Laboratory
- · Lecture/Discussion

Lab:

 Following a lecture and demonstration by the instructor on how to properly raise a 14 foot roof ladder, students will demonstrate how to raise the 14 foot ladder safely.

#### Lecture:

 The instructor will lecture on the proper use of the SCBA. Students will work in groups and list the steps, in proper order, on how to don and doff the SCBA.

## Typical Out of Class Assignments Reading Assignments

1. The student will read the assigned material in the text on phases of fire, and then create a list of the signs/indicators of flameover/ rollover, flashover, and backdraft. 2. The students will read the provided OSHA regulation 29 CFR Part 1910, and be prepared to discuss in class firefighting situations in which the OSHA "Two-in Two-out" rules apply for IDLH circumstances.

#### **Writing, Problem Solving or Performance**

1. Create a list of what type of portable fire extinguisher can be used on each classification of fire, and indicate how the extinguishing agent extinguishes the fire. 2. Develop a list comparing and contrasting positive pressure ventilation and negative pressure ventilation procedures for a single family dwelling.

# Other (Term projects, research papers, portfolios, etc.) Required Materials

- · Fundamentals of Fire Fighter Skills
  - Author: International Association of Fire Chiefs & National Fire Protection Association
  - · Publisher. Jones & Bartlett Learning
  - Publication Date: 2014
  - · Text Edition: 3rd
  - · Classic Textbook?:
  - · OER Link:
  - · OER:

Other materials and-or supplies required of students that contribute to the cost of the course.