

FIRE 107.2 Course Outline as of Fall 2018

CATALOG INFORMATION

Dept and Nbr: FIRE 107.2 Title: ADVANCED VOLUNTEER FF
Full Title: Advanced Volunteer Firefighter Skills
Last Reviewed: 8/26/2024

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	3.25	17.5	Lecture Scheduled	56.88
Minimum	4.00	Lab Scheduled	2.25	6	Lab Scheduled	39.38
		Contact DHR	0		Contact DHR	0
		Contact Total	5.50		Contact Total	96.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 113.75

Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable
Grading: P/NP Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly: FIRE 107B

Catalog Description:
An extended format course of advanced operations designed to provide the student with an overview of both manipulative and technical firefighting operations and procedures necessary to safely function as a volunteer firefighter. This course is designed to be a pathway to meet many of the requirements for California State Firefighter I certification including Hazardous Materials First Responder, State Fire Training Confined Space Awareness, ICS-200, Title 22 First Aid and National Wildfire Coordinating Group S-130, 131 and 190.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: An extended format course of advanced operations designed to provide the student with an overview of both manipulative and technical firefighting operations and procedures necessary to safely function as a volunteer firefighter. This course is designed to be a pathway to

meet many of the requirements for California State Firefighter I certification including Hazardous Materials First Responder, State Fire Training Confined Space Awareness, ICS-200, Title 22 First Aid and National Wildfire Coordinating Group S-130, 131 and 190. (P/NP Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

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:		Effective:	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. Demonstrate and apply the use of fire department equipment through its selection for given firefighting task.
2. Demonstrate the ability to operate safely as a wildland firefighter.
3. Complete the California Title-22 requirements for basic first aid and Cardio Pulmonary Resuscitation (CPR).
4. Demonstrate the ability to safely operate at the awareness and first responder levels in hazardous materials and confined space incidents.

Objectives:

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

1. Describe the anatomy of a vehicle as it relates to extrication practices.
2. List the types of rescue tools and their application in an extrication assignment.
3. Identify the steps in sizing up and stabilizing an accident scene.
4. Describe the procedures used to remove and/or displace vehicle components.
5. Describe wildland fire behavior and the tactics and the factors that influence it.
6. Describe the strategies used to fight wildland fires
7. Demonstrate the ability to properly use wildland safety equipment.
8. Describe how to safely operate at a wildland fire.
9. Demonstrate the proper application of the tools used in wildland firefighting.
10. Identify the safety considerations when working at an Interface (I-Zone) fire.
11. Demonstrate the ability to assess and recognize the illness and injuries encountered by a First Responder.
12. Demonstrate the ability to treat and conduct patient care as a First Responder.

13. Demonstrate the proper application and use of an Automatic External Defibrillator (AED).
14. Describe the correct procedures to follow when dealing with Sudden Infant Death Syndrome (SIDS) and elder abuse.
15. Describe the components of ICS and its application at emergency scenes.
16. Demonstrate an awareness of the limitations and dangers of confined space environments
17. Describe the roles and limitations of a hazardous materials first responder.
18. Identify the steps involved in conducting a hazardous materials risk assessment and selecting the proper personal protective equipment (PPE)
19. Demonstrate the ability to safely conduct hazardous material rescue, control, containment and decontamination activities
20. Describe the correct procedures for terminating a hazardous materials incident.

Topics and Scope:

I. Auto Extrication

- A. Vehicle extrication principles
- B. Vehicle anatomy
- C. New vehicle safety systems
- D. Vehicle accident size-up
- E. Principles of vehicle disentanglement
- F. Characteristics and functions of rescue tools
- G. Vehicle stabilization
- H. Windshield removal
- I. Roof removal
- J. Opening and removing doors
- K. Displacing steering wheels and columns
- L. Displacing vehicle seats

II. Wildland Firefighting

- A. Wildland fire behavior
- B. Fire weather
- C. Wildland firefighter preparedness and personal protective equipment (PPE)
- D. Wildland firefighter safety
 1. Lookouts, communications, escape routes and safety zones (LCES)
 2. Safety considerations when working around dozers
 3. Safety considerations when working near aircraft
- E. Characteristics and functions of fire shelters
 1. How to deploy a fire shelter - Standing method
 2. How to deploy a fire shelter - Lying down method
- F. Parts of a wildland fire
- G. Wildland fire strategy
- H. Handline construction
- I. Characteristics and functions of wildland hand tools
- J. Inspection and maintenance of wildland hand tools
- K. Characteristics and functions of back pumps
- L. Characteristics and functions of fuseses as a firing tool
- M. Characteristics, functions and use of a drip torch
- N. Characteristics and functions of wildland hose lays
 1. Water application on wildland fires
 2. Constructing progressive hose lays
- O. Mobile attack operations
- P. Characteristics and functions of mop-up and patrol
- Q. Methods for scouting and communicating spot fires

- R. Navigational tools
 - 1. Use of a compass
 - 2. Use of a topography map
 - 3. Use of a Global position system (GPS)
- S. Introduction to an Incident Base
- T. Working with wildland fire resources
- U. I-Zone firefighting
 - 1. Introduction to the I-Zone
 - 2. I-Zone safety considerations
 - 3. I-Zone structure protection procedures
- III. Emergency Care
 - A. First aid
 - 1. Overview of the Emergency Medical System
 - 2. Assessment and examination of a victim
 - 3. Recognition and treatment of:
 - a. Heart attack and stroke
 - b. Fainting, convulsions and/or drug abuse
 - c. Heat exhaustion, heat stroke, hypothermia and frost bite
 - d. Types of wounds and control of bleeding
 - e. Bandaging techniques, first aid kits and supplies
 - f. Shock, its causes, infections and closed wounds
 - g. Eye, face, scalp, jaw and ear injuries
 - h. Injuries of the head, neck, back, trunk, arms and legs
 - i. Exposure to toxic substances
 - j. Bites and stings by snakes, marine life and insects
 - k. Burns and their severity
 - 1. Open and closed fractures, sprains, strains and dislocated joints
 - m. Obstetrical emergencies
 - B. Cardiopulmonary Resuscitation and AED use
 - C. Elder abuse
 - D. Sudden Infant Death Syndrome
 - E. Blood borne pathogens
- IV. Incident Command System (ICS)
 - A. Introduction to the ICS
 - B. Basic ICS
- V. The National Incident Management System (NIMS)
- VI. Confined space rescue awareness
 - A. Hazards associated with confined space emergencies
 - B. Emergency response procedures for confined space emergencies including non-entry
 - C. Site control and scene management
- VII. Hazardous Materials Response
 - A. Hazardous materials response plans
 - B. First Responder operational level proficiency
 - 1. Basic hazard and risk assessment techniques
 - 2. Selection and use of the correct PPE
 - 3. The composition of hazardous materials teams
 - 4. Control, containment, and confinement operations.
 - 5. The rescue of injured or contaminated persons
 - 6. Decontamination techniques and equipment
 - 7. Hazardous materials response operating and incident termination procedures.

All topics are covered in both the lecture and lab portions of the course.

Assignment:

Lecture-Related Assignments:

1. Weekly homework problems including written and computer-based activities
2. Reading 30-70 pages per week
3. Complete 6 - 12 quizzes, a midterm, and final exam including a CPR certification, an IS 200, NIMS 700, Confined Space and FRO tests

Lab-Related Assignments:

1. Demonstrate 12 - 24 basic manipulative and technical firefighting skills as found in the student task book
2. Complete 3 - 5 incident reports

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 and incident reports

Writing
10 - 15%

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

Written and computer based homework problems and scenarios

Problem solving
15 - 20%

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

Demonstrate technical firefighting skills

Skill Demonstrations
20 - 40%

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

Quizzes, midterm, final, and certification exams

Exams
20 - 40%

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

Completion of self-paced computer assignments

Other Category
10 - 15%

Representative Textbooks and Materials:

Essentials of Firefighting. 6th ed. International Fire Service Training Association (IFSTA). 2013 (classic)

Instructor Prepared Materials