

**FIRE 206 Course Outline as of Fall 2011****CATALOG INFORMATION**

Dept and Nbr: FIRE 206 Title: WILDLAND FF ACADEMY

Full Title: CDF Wildland Firefighter Academy

Last Reviewed: 5/13/2019

| Units   |      | Course Hours per Week |      | Nbr of Weeks | Course Hours Total |       |
|---------|------|-----------------------|------|--------------|--------------------|-------|
| Maximum | 3.00 | Lecture Scheduled     | 2.00 | 17.5         | Lecture Scheduled  | 35.00 |
| Minimum | 3.00 | Lab Scheduled         | 2.75 | 2            | Lab Scheduled      | 48.13 |
|         |      | Contact DHR           | 0    |              | Contact DHR        | 0     |
|         |      | Contact Total         | 4.75 |              | Contact Total      | 83.13 |
|         |      | Non-contact DHR       | 0    |              | Non-contact DHR    | 0     |

Total Out of Class Hours: 70.00

Total Student Learning Hours: 153.13

Title 5 Category: AA Degree Applicable

Grading: P/NP Only

Repeatability: 27 - Exempt From Repeat Provisions

Also Listed As:

Formerly: FIRE299.44

**Catalog Description:**

Safety policies, wildland safety and survival, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction. A mandatory field skills day is included with live fire operations.

**Prerequisites/Corequisites:**

Course Completion of FIRE 208.1 or equivalent

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Safety policies, wildland safety and survival, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction. A mandatory field skills day is included with live fire operations. (P/NP Only)

Prerequisites/Corequisites: Course Completion of FIRE 208.1 or equivalent

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Exempt From Repeat Provisions

## **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: |
|---------------|----------------------|------------|-----------|

|                      |            |           |
|----------------------|------------|-----------|
| <b>CSU Transfer:</b> | Effective: | Inactive: |
|----------------------|------------|-----------|

|                     |            |           |
|---------------------|------------|-----------|
| <b>UC Transfer:</b> | Effective: | Inactive: |
|---------------------|------------|-----------|

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The students will:

1. Describe the mission of Cal Fire and policies and procedures applicable to seasonal firefighters.
2. Demonstrate the correct procedures for responding to emergency calls and radio use.
3. Identify the components of basic fire chemistry and wildland fire behavior.
4. Identify and demonstrate the use of safety equipment used in wildland firefighting.
5. List and describe the orders, situations and practices used to promote safety on the wildland fire ground.
6. Demonstrate the hose lays and loads used in wildland firefighting.
7. Demonstrate the proper use of fuses and drip torches.
8. Describe the proper use of chain saws and flagging tape on the wildland fire ground.
9. Describe the use of aircraft in wildland situations.
10. Identify the apparatus and their safety devices used in wildfire firefighting.
11. List and demonstrate the proper use of hand tools used in wildland firefighting.
12. Describe the tactics and strategies used in wildland firefighting operations.
13. Describe the tactics and strategies used in wildland urban interface (WUI) firefighting operations.
14. Demonstrate the proper techniques for fighting wildland fires.

### **Topics and Scope:**

#### **I. Orientation**

- A. Cal Fire mission and organization
- B. Policies and Regulations
  1. Ethics, diversity, sexual harassment
  2. Code of conduct
  3. Working with inmate fire crews
- C. Station operations
  1. Responding to emergency calls

- 2. Introduction to radio communications
- II. Basic Fire Chemistry
  - A. Fire triangle
  - B. Methods of heat transfer
- III. Wildland Fire Behavior
  - A. Terminology
  - B. Fuels
  - C. Topography
  - D. Weather
- IV. Safety And Risk Management
  - A. Wildland Personal Protective Equipment (PPE)
  - B. Safety vests
  - C. 18 "Watch Out" Situations
  - D. Ten Standing Firefighting orders
  - E. Lookouts, Communications, Escape Routes, Safety Zones (LCES)
  - F. Common denominators of fire fatalities
  - G. Fireline hazards
  - H. Downhill fireline construction
    - I. Avoiding entrapment
  - J. Human factors in wildland fires
  - K. Situational awareness
  - L. Hydration
  - M. Fire shelters
    - 1. Use
    - 2. Deployment
  - N. Fire blankets and curtains
    - 1. Types
    - 2. Deployment
  - O. Using vehicles as refuge
  - P. Using structures as refuge
  - Q. Burn treatment of firefighters
  - R. Air tanker retardant drop safety considerations
  - S. Rotary wing aircraft safety considerations
  - T. Bulldozer operations safety considerations
  - U. Power line and electrical considerations
- V. Wildland firefighting equipment operations
  - A. Fire hose
    - 1. Sizes and construction
    - 2. Care and maintenance
    - 3. Hose couplings
    - 4. Hose rolls
    - 5. Hose loads
      - a. Flat loads
      - b. Minuteman loads
      - c. Triple fold loads
    - 6. Hose lays
      - a. Progressive hose lays
      - b. Reel line use
      - c. Forward hose lays
      - d. Advancing hose into structures
    - 7. Picking up and draining hose
  - B. Tools and Equipment

1. Traffic control devices and signals
2. Road flares (fusees)
  - a. How to ignite and extinguish fusees
  - b. Use of fusees as firing tools
3. Drip torch use and maintenance
4. Fireline flagging
5. Chain saw use
- C. Firefighting Aircraft
  1. Fixed wing aircraft
  2. Rotary wing aircraft
- D. Mobile Equipment
  1. Fire apparatus identification
  2. Warning devices
  3. Chock blocks and seatbelts
  4. Backing hand signals
- E. Hand Tools
  1. Brush hook
  2. Pulanski
  3. Double bit, single bit and pick-headed axes
  4. Round and square point shovels
  5. McLeod
  6. Wire broom
  7. Pike pole and rubbish hooks
  8. Rhino tool
  9. Combi tool
- VI. Wildland Firefighting Principles
  - A. Wildland firefighting terminology
  - B. Parts of a wildland fire
  - C. Wildland firefighting strategies
  - D. Wildland fire uses of water
  - E. Wildland hose lay
  - F. Mobile attack
  - G. Mop-up and control
  - H. Handline construction
- VII. Wildland Fire Operations
- VIII. Wildland Urban Interface (WUI) Operations

**Assignment:**

The student will:

1. Demonstrate 12-24 manipulative and technical firefighting skills.
2. Complete weekly homework problems including written and computer based activities.
3. Reading 30-80 pages per week.
4. Complete a performance exam to be determined by instructor.
5. Complete 4-6 quizzes and a final 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

Writing  
10 - 15%

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

Homework problems and computer based activities

Problem solving  
10 - 20%

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

Firefighting exams

Skill Demonstrations  
30 - 40%

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

4-6 quizzes and final exam

Exams  
30 - 40%

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

Attendance and participation

Other Category  
5 - 10%

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

Cal Fire Wildland Firefighter Academy Manual, Publ. Cal Fire, 2003

Cal Fire Wildland Firefighter Safety & Survival manual, Publ. Cal Fire, 2010

S-130, Firefighting Training Manual, Publ. National Wildfire Coordinating Group (NWCG), 2003

S-131, Type I Firefighting Training Manual, Publ. NWCG, 2004

S-190, Introduction to Wildland Fire Behavior, Publ. NWCG, 2006

L-180, Potential Hazards and Human Factors on the Fireline, Publ. NWCG, 2003

Essentials of Firefighting, 5th edition, Publ. International Fire Service Training Association (IFSTA), 2008