#### FIRE 206 Course Outline as of Fall 2018

## **CATALOG INFORMATION**

Dept and Nbr: FIRE 206 Title: WILDLAND FF ACADEMY

Full Title: CAL FIRE Wildland Firefighter Academy

Last Reviewed: 5/13/2019

Units		Course Hours per Wee	ek N	br of Weeks	<b>Course Hours Total</b>	
Maximum	1.33	Lecture Scheduled	0	1	Lecture Scheduled	0
Minimum	1.33	Lab Scheduled	0	1	Lab Scheduled	0
		Contact DHR	70.00		Contact DHR	70.00
		Contact Total	70.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00 Total Student Learning Hours: 70.00

Title 5 Category: AA Degree Applicable

Grading: P/NP Only

Repeatability: 21 - Legally Mandated Repetition

Also Listed As:

Formerly: FIRE299.44

#### **Catalog Description:**

An intensive study of wildland firefighting, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction and wildland safety and survival, and a field skills day is included with live fire operations. Course also includes two overnight sessions. Students must adhere to the same dress, rules and conduct as prescribed in the Firefighter I Academy. Upon successful completion, students will be eligible to apply for a CAL FIRE Basic Firefighter Certificate.

## **Prerequisites/Corequisites:**

Course Completion of FIRE 208.1 or equivalent as determined by the Dean of Public Safety Instruction

#### **Recommended Preparation:**

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

# **Schedule of Classes Information:**

Description: An intensive study of wildland firefighting, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction and wildland safety and survival, and a field

skills day is included with live fire operations. Course also includes two overnight sessions. Students must adhere to the same dress, rules and conduct as prescribed in the Firefighter I Academy. Upon successful completion, students will be eligible to apply for a CAL FIRE Basic Firefighter Certificate. (P/NP Only)

Prerequisites/Corequisites: Course Completion of FIRE 208.1 or equivalent as determined by the

Dean of Public Safety Instruction

Recommended:

Limits on Enrollment:

**Transfer Credit:** 

Repeatability: Legally Mandated Repetition

# **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:**

Certificate Applicable Course

#### **COURSE CONTENT**

# **Outcomes and Objectives:**

The students will:

- 1. Describe the mission of CAL FIRE and the policies and procedures applicable to seasonal firefighters.
- 2. Demonstrate the correct procedures for radio use and responding to emergency calls.
- 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. 18 "Watch Out" Situations
  - C. Ten Standing Firefighting Orders
  - D. Lookouts, Communications, Escape Routes, Safety Zones (LCES)
  - E. Common Denominators of Fire Fatalities
  - F. Fireline Hazards
  - G. Downhill Fireline Construction
  - H. Avoiding Entrapment
  - I. Human Factors in Wildland Fires
  - J. Situational Awareness
  - K. Hydration
  - L. Self-Contained Breathing Apparatus (SCBA)
  - 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. Three Strikes and You're Out
- V. Wildland Firefighting Equipment
  - A. Fire Hose
    - 1. Sizes and construction
    - 2. Care and maintenance
    - 3. Hose couplings
    - 4. Hose rolls
    - 5. Hose lays
      - a. Progressive hose lays

- b. Reel line use
- 6. Picking up and draining hose
  - a. Progressive hose lays
  - b. Reel line use
- 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
  - 5. Safety vests
- E. Hand Tools
  - 1. Brush hook
  - 2. Pulaski
  - 3. Double bit, single bit and pick-headed axes
  - 4. Round and square point shovels
  - 5. McLeod
  - 6. Wire broom
  - 7. Rhino tool
  - 8. 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:**

- 1. Demonstrate 18-26 manipulative and technical firefighting skills.
- 2. Complete 2-4 pages of written homework problems daily.
- 3. Reading 30-80 pages daily.
- 4. Complete a performance exam.
- 5. Attend a minimum of 60 hours of instruction including two overnight sessions.
- 6. Complete 5-7 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

Problem solving 10 - 20%

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

Class performances, field work, performance 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 (classic)

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

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

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

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

L-180, Potential Hazards and Human Factors on the Fireline, Publ. NWCG, 2003 (classic) Essentials of Firefighting, 5th edition, Publ. International Fire Service Training Association (IFSTA), 2008 (classic)