FIRE 206 Course Outline as of Fall 2013

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 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	3.00	2	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 157.50

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 receive a CAL FIRE Basic Firefighter Certificate.

Prerequisites/Corequisites:

Course Completion of FIRE 208.1 or equivalent

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 receive a CAL FIRE Basic Firefighter

Certificate. (P/NP Only)

Prerequisites/Corequisites: Course Completion of FIRE 208.1 or equivalent

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

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