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:

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 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