

**FIRE 208.5 Course Outline as of Fall 2017****CATALOG INFORMATION**

Dept and Nbr: FIRE 208.5 Title: FIREFIGHTER II CAPSTONE

Full Title: Firefighter II Capstone Training

Last Reviewed: 11/28/2016

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0.50	Lecture Scheduled	2.00	2	Lecture Scheduled	4.00
Minimum	0.50	Lab Scheduled	10.00	1	Lab Scheduled	20.00
		Contact DHR	0		Contact DHR	0
		Contact Total	12.00		Contact Total	24.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 8.00

Total Student Learning Hours: 32.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

This course prepares students to meet the State Fire Training (SFT) requirements for Firefighter II (FFII) including the capstone knowledge and skills necessary to pass. Upon successful completion, students will receive a pass letter from SFT.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:**

Completion of all SFT Lecture and Activity requirements as identified in the FFII Course Plan. Must possess a STT FFI certificate.

**Schedule of Classes Information:**

Description: This course prepares students to meet the State Fire Training (SFT) requirements for Firefighter II (FFII) including the capstone knowledge and skills necessary to pass. Upon successful completion, students will receive a pass letter from SFT. (Grade Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Completion of all SFT Lecture and Activity requirements as identified in the FFII Course Plan. Must possess a STT FFI certificate.

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **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:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Student Learning Outcomes:**

Upon completion of the course, students will be able to:

1. Identify the use of the correct firefighting tools, tactics and strategies for given firefighting situations.
2. Demonstrate and apply the use of the appropriate firefighting tools, tactics and strategies to complete given firefighting skills evolutions and prevention activities.

**Objectives:**

Upon completion of the course, students will be able to:

1. Describe the course syllabus and the classroom, facility and participation requirements
2. Describe the Firefighter II written and skills tests and capstone Task Book process
3. Demonstrate the ability to organize, coordinate and transfer the Incident Command System (ICS) at an emergency scene
4. Demonstrate the ability to complete a basic Incident Report (IR)
5. Demonstrate the ability to extinguish an ignitable liquid fire
6. Demonstrate the ability to control a flammable gas cylinder fire
7. Demonstrate the ability to coordinate an interior attack on a structure fire
8. Demonstrate the ability to extricate a victim entrapped in a motor vehicle
9. Demonstrate the ability to assist a rescue operations team
10. Demonstrate the ability to perform a Fire Safety Survey for a private dwelling
11. Demonstrate the ability to present fire safety information
12. Demonstrate the ability to prepare a pre-incident survey (pre-plan)
13. Demonstrate the ability to clean, maintain power equipment and place in a ready state
14. Demonstrate the ability to perform an annual hose service test

**Topics and Scope:**

- I. Orientation and Administration
  - A. Review of course syllabus

1. objectives
  2. methods of evaluation
  3. participation requirements
- B. Review of training facilities
- II. Firefighter II Certification Test and Capstone Task Book process
- A. Written test
1. on-line test registration process
  2. on-line written test
- B. Skills test
1. mandatory skills
  2. random skills
- C. Capstone task book process
- III. Organizing and Coordinating the ICS until Command is Transferred
- A. Determining the need for command
- B. Implementing the ICS
- C. Coordinating an incident until transfer of command occurs
- D. Transferring command to an incoming Incident Commander (IC)
- E. ICS roles often assumed after transfer of command
1. Division or Group Supervisor
  2. Operations Section Chief
  3. Incident Safety Officer
  4. Public Information Officer
  5. Liaison Officer
- IV. Completing Incident Reports (IR's)
- A. Use of the National Fire Incident Reporting System (NFIRS) codes
- B. Use of equipment used to complete incident reports
- C. Completion of required fields
- D. Recording all pertinent information and narrative sections
- E. Proofreading
- F. Forwarding reports following department policy
- V. Extinguishing an Ignitable Liquid Fire
- A. Selecting the appropriate foam concentrate
- B. Setting up and assembling foam stream components
- C. Approaching the fire as a team using one of the following techniques
1. Roll-On method
  2. Bank-Down method
  3. Rain-Down method
- D. Applying foam to the fire surface and maintaining a foam blanket
- E. Extinguishing the fire and preventing re-ignition
- F. Maintaining team protection with a foam stream
- G. Facing the hazard until retreating to a safe location
- VI. Controlling a Flammable Gas Cylinder Fire
- A. Identifying container contents and safe havens prior to advancing
- B. Advancing the attack team in a controlled manner maintaining team integrity
- C. Operate the nozzle with different patterns to accomplish the following:
1. straight stream for reach and initial cooling
  2. narrow fog to cool the cylinder
  3. wide fog to shield personnel from heat and push flames away from control valves
- D. Cite the common indicators used for assessing cylinder integrity and monitor for changing conditions
- E. Select appropriate procedures for situational changes that may occur
- F. Advance and position fire streams in a manner that provides safe access for personnel to

- operate control valves.
  - G. Operate control valves so that gas flow is stopped
  - H. While facing the hazard, retreat in a smooth and controlled manner until the team reaches a safe haven
- VII. Coordinate an Interior Attack on a Structure Fire
- A. Assemble a team for the fire attack
  - B. Conduct a size-up and communicate an action plan to the team
  - C. Select appropriate tools and equipment for forcible entry
  - D. Evaluate fire conditions upon entry and forecast anticipated fire spread
  - E. Request coordinated ventilation activities based on fire conditions
  - F. Request search and rescue activities base on fire conditions and known information
  - G. Identify any developing or hazardous building or fire conditions and communicate to incident commander
  - H. Correctly extinguish fire using the appropriate pattern based on fire conditions
- VIII. Extricate a Victim Entrapped in a Motor Vehicle
- A. Vehicle components that can be removed to facilitate extrication:
    1. roofs
    2. doors
    3. windshields
    4. steering wheels and columns
    5. dashboards
  - B. Size up the situation to identify hazards, determine required stabilization and select appropriate extrication techniques
  - C. Stabilize a vehicle using cribbing and shoring material
  - D. Operate both hand and power extrication tools in a safe and efficient manner
  - E. Perform extrication techniques and disentangle victim without causing further injury
- IX. Assist Rescue Operations Team
- A. Identify potential rescue scenarios
    1. structural collapse
    2. trench Collapse
    3. cave or tunnel emergencies
    4. water emergencies
    5. elevator emergencies
    6. escalator emergencies
    7. energized electrical line emergencies
    8. industrial accidents
  - B. Selection of the tools and equipment used to perform a special rescue
  - C. Establish public barriers so that bystanders are isolated from the rescues scene
  - D. Assist rescue teams by completing assigned tasks
- X. Perform a Fire Safety Survey in a Private Dwelling
- A. Proper introduction and explanation of the purpose of the fire safety survey
  - B. Identification of common fire hazards (electrical, cooking, storage or flammables)
  - C. Checking the function and operation of smoke and carbon monoxide detectors
  - D. Reviewing exit drills with occupants
  - E. Checking heating systems and other heating sources for proper clearance from combustible materials
  - F. Check for obvious structure hazards
  - G. Check for combustible waste hazards (trash, sawdust, paper)
  - H. Explain findings and unresolved issues to occupant and provide referrals as needed
  - I. Complete all related survey forms and file in accordance with local policies
- XI. Presenting Fire Safety Information
- A. Organizing and preparing material prior to the presentation

- B. Clearly stating the topic and objective(s) to the group
- C. Teaching the lesson in accordance with the objectives
- D. Using supplies and equipment appropriate for the lesson
- E. Use of instructional techniques appropriate for the age of the audience
- F. Referring questions to the appropriate personnel

## XII. Preparing Pre-Incident Surveys

- A. Notifying the building occupant and arranging to conduct the survey
- B. Identifying the fire detection and suppression systems to include in the survey
- C. Sketching the site, building and applicable special features
- D. Identifying applicable hazards to include in the pre-incident sketches
- E. Identifying special considerations to include in the pre-incident sketches
- F. Completing related department forms and diagrams
- G. Routing and filing the report in accordance with local policies

## XIII. Maintaining Power Equipment

- A. Identify different types of power equipment
  - 1. power plants (hydraulic or portable pumps)
  - 2. power tools (chain saws, smoke ejector, rotary saw, etc.)
  - 3. lighting equipment (generator, cord reel, light standard)
- B. Inspecting power and lighting equipment to ensure it is in a ready state
- C. Starting and operating power equipment
- D. Using manufactures and department guidelines for maintaining power equipment
- E. Completing applicable maintenance documents and records
- F. Reporting out of service equipment in accordance with local procedures

## XIV. Performing Annual Hose Service Test

- A. Inspect hose condition, gasket and mark hose directly behind coupling
- B. Assemble hose line to a maximum of 300 feet and connect to the hose tester discharge port
- C. Fill hose with water and bleed air from all lines
- D. Check couplings for leaks and tighten as needed
- E. Operate hose tester machine so that all hose lines are pressurized in accordance with National Fire Protection Association (NFPA) 1962
- F. Maintain test pressure for five (5) minutes and observe for leaks or weeping
- G. Reduce hose pressure, bleed lines and inspect each hose for slipped couplings
- H. Completion of all applicable recording and reporting in accordance with local policies
- I. Report any out of service hose in accordance with local policies

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

### **Assignment:**

1. Minimum of reading 4 hours of assigned materials prior to the first class session
2. Completion of online test registration prior to the first class session
3. Reviewing materials from the recommended text and handout materials
4. Written exam

### **Lab Assignments:**

1. Practice and skills demonstration of core firefighting skills including Self Contained Breathing Apparatus (SCBA), ropes and knots, ladders, hose, fire streams, wildland firefighting and hazardous materials

### **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.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

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

Skills performance

Problem solving  
10 - 15%

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

Skills performance exams

Skill Demonstrations  
30 - 50%

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

Written exam

Exams  
40 - 60%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

IFSTA Essentials of Firefighting. 6th ed. Fire Service Publications. Oklahoma State University. 2013

Fundamentals of Firefighting Skills. 3rd ed. International Association of Fire Chiefs. Jones and Bartlett. 2014