

## Firefighter Certification VI (FIRS 1329)



**Credit:** 4 semester credit hours (3 hours lecture, 2 hours lab)

**Co-requisite:** FIRS 1319, FIRS 1433, FIRS 1407, FIRS 1103, and FIRS 1301.

### Course Description

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. \*\*\*THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION\*\*\*

### Required Textbook and Materials

1. *Fundamentals of Fire Fighting Skill, 4<sup>th</sup> Edition*
  - a. 9781284144017
2. *Hazardous Materials for First Responders 5<sup>th</sup> Edition*. Published by: Fire Protection Publications, Oklahoma State University. Validated by IFSTA
  - a. ISBN: 978-0-8793939-613-8

### Course Objectives

Upon completion of this course, the student will be able to:

Demonstrate competencies, for subjects taught, set forth in the TCFP curriculum for Basic Fire Suppression

101-1.00 The firefighter trainee shall identify state laws and rules related to health and safety.

101-2.00 The firefighter trainee shall describe the responsibilities of a firefighter relating to compliance with the provisions of occupational safety and health programs.

101-3.00 The firefighter trainee shall identify the correct laws and rules applicable to Basic Firefighter certification by the Texas Commission on Fire Protection.

101-4.00 The firefighter trainee shall identify the various levels of instructor certification by the Texas Commission on Fire Protection.

102-1.00 The firefighter trainee shall identify, safely carry, and describe how to use forcible entry tools safely.

103-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standard applicable to portable fire extinguishers.

104-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standard applicable to ropes.

105-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standards applicable to fire service ladders.

106-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standards applicable to fire service hose.

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107-1.00 The firefighter trainee shall identify and describe the purpose of salvage and its value to the fire department and in public relations.

108-1.00 The firefighter trainee shall identify and describe the safety precautions necessary during overhaul.

109-1.00 The firefighter trainee shall identify, define, and demonstrate characteristics of fire streams.

110-1.00 The firefighter trainee shall identify and describe the principles, advantages, and effects of proper ventilation.

111-1.00 The firefighter trainee shall describe and demonstrate the proper techniques of searching for victims.

112-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standard applicable to fire prevention inspections.

113-1.00 The firefighter trainee shall describe the operation of fire hydrants, fully open and close fire hydrants, and identify the NFPA hydrant color code.

114-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standards applicable to fire protection systems.

115-1.00 The firefighter trainee shall identify and describe the process of combustion and define key terms associated with fire science.

116-1.00 The Firefighter trainee shall identify and be able to describe the purpose, goals, and definitions of the NFPA standards applicable to Hazardous Materials.

117-1.00 The firefighter trainee shall explain, identify, or demonstrate emergency service communication procedures.

118-1.00 The firefighter trainee shall describe the importance and purpose of communications between the fire department and the community.

119-1.00 The firefighter trainee shall define the following terms related to wildland fire suppression.

120-1.00 The firefighter trainee shall describe the purpose of the following NFPA standards applicable to SCBAs.

121-1.00 The firefighter trainee shall be able to describe the purpose of the following NFPA standards applicable to personal protective equipment.

122-1.00 The firefighter trainee shall be able to describe the purpose of the NFPA standard applicable to professional firefighters.

123-1.00 The firefighter trainee shall identify and describe the basic types of building construction and the general fire behavior expected with each type of construction.

124-1.00 The firefighter trainee shall identify and describe the general requirements, purpose, and definitions of the NFPA standard(s) applicable to Live Fire Training evolutions.

125-1.00 The firefighter trainee shall identify the responsibilities of the firefighter which could assist in the subsequent investigation of a fire.

156-1.00 The firefighter trainee shall demonstrate procedures for testing fire hose.

158-1.00 The firefighter trainee shall list and describe dangerous building conditions.

159-1.00 The firefighter trainee shall identify and define foam making appliances, and shall demonstrate a foam stream from each.

160-1.00 The firefighter trainee shall recognize the characteristics of ventilating a basement.

161-1.00 The firefighter trainee, operating as a member of a team, shall demonstrate the extrication of a victim from a vehicle.

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162-1.00 The firefighter trainee shall identify the types of fire extinguishers in an occupancy and ensure that they conform to the fire prevention requirements for that occupancy.

163-1.00 The firefighter trainee shall identify and describe water systems and their fundamental components.

164-1.00 The firefighter trainee shall identify the features and characteristics of automatic sprinkler systems.

166-1.00 The firefighter trainee shall identify and be able to describe the purpose, goals, and definitions of the NFPA standards applicable to Hazardous Materials.

173-1.00 The firefighter trainee shall identify and describe the basic types of building construction and the general fire behavior expected with each type of construction.

174-1.00 The firefighter trainee shall extinguish or control live fires.

175-1.00 The firefighter trainee shall identify the methods for protecting evidence for fire cause determination.

176-1.00 The firefighter trainee shall identify and describe the purpose of an incident management system.

177-1.00 The firefighter trainee shall identify fire incident reporting systems.

178-1.00 The firefighter trainee shall identify and describe the benefits and components of pre-incident planning.

179-1.00 The firefighter trainee shall be able to describe various types of automotive fire apparatus, their functions, and their features.

180-1.00 The firefighter trainee shall identify various types of fire apparatus pumps and pump components, and shall identify their function(s), theory(s), and principle(s) of operation.

### **Course Outline**

The Texas Commission on Fire Protection determines the minimum course content.

| <b>Class Day</b> | <b>Start Time</b> | <b>End Time</b> | <b>Hrs Trng</b> | <b>Subject/ Curriculum Number</b> | <b>Subject</b>   |
|------------------|-------------------|-----------------|-----------------|-----------------------------------|--|
| 1                | 7:30              | 16:30           | 8               | 101                               | Admin/TCFP & LIT R&R/CPAT Orientation/Research Paper Assgmts |
| 2                | 7:30              | 16:30           | 8               | 115                               | Fire Science/Behavior  |
| 2                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Evaluation                                  |
| 3                | 7:30              | 16:30           | 8               | 115                               | Fire Science/Behavior  |
| 4                | 7:30              | 16:30           | 8               | 176                               | NIMS & ICS   |
| 4                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                                    |
| 5                | 7:30              | 16:30           | 8               | 176                               | NIMS & ICS   |
| 5                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                                    |
| 6                | 7:30              | 16:30           | 8               | 121                               | Personal Protective Equipment (PPE)                          |
| 6                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                                    |
| 7                | 7:30              | 16:30           | 8               | 120                               | SCBA   |
| 7                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                                    |
| 8                | 7:30              | 16:30           | 8               | 120                               | SCBA   |
| 9                | 7:30              | 16:30           | 8               | 104                               | SCBA (Skills Testing)  |
| 9                | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                                    |

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|------------------|-------------------|-----------------|-----------------|-----------------------------------|---|
| 10               | 7:30              | 16:30           | 8               | 122                               | Firefighter Safety & Orientation                  |
| 11               | 7:30              | 16:30           | 8               | 122                               | Firefighter Safety & Orientation                  |
| 11               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 12               | 7:30              | 16:30           | 8               | 122                               | Firefighter Safety & Orientation                  |
| 13               | 7:30              | 16:30           | 8               | 122                               | Firefighter Safety & Orientation (Skills Testing) |
| 14               | 7:30              | 16:30           | 8               | 123                               | Building Construction                             |
| 14               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 15               | 7:30              | 16:30           | 8               | 113                               | Water Supply                                      |
| 15               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 16               | 7:30              | 16:30           | 8               | 111                               | Search & Rescue                                   |
| 16               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 17               | 7:30              | 16:30           | 8               | 120/111                           | SCBA's (Smoke House)                              |
| 18               | 7:30              | 16:30           | 8               | PFT/121/120                       | CPAT 2nd Orientation/Skills Practice - PPE & SCBA |
| 19               | 7:30              | 16:30           | 8               | 111                               | Search & Rescue                                   |
| 19               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 20               | 7:30              | 16:30           | 8               | 106                               | Fire Service Hose                                 |
| 20               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 21               | 7:30              | 16:30           | 8               | 106                               | Fire Service Hose                                 |
| 21               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 22               | 7:30              | 16:30           | 8               | 156                               | Fire Service Hose (Skills Testing)                |
| 23               | 7:30              | 16:30           | 8               | 109                               | Fire Streams                                      |
| 23               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 24               | 7:30              | 16:30           | 8               | 117                               | Emergency Services Communications                 |
| 24               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 25               | 7:30              | 16:30           | 8               | 105                               | Fire Service Ground Ladders                       |
| 25               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 26               | 7:30              | 16:30           | 8               | 105                               | Fire Service Ground Ladders                       |
| 26               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 27               | 7:30              | 16:30           | 8               | 105                               | Fire Service Ground Ladders & Aerial Climb        |
| 28               | 7:30              | 16:30           | 8               | 107                               | Fire Service Salvage                              |
| 28               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 29               | 7:30              | 16:30           | 8               | 108/158                           | Fire Service Overhaul                             |
| 29               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 30               | 7:30              | 16:30           | 8               | 102                               | Firefighter Tools & Equipment                     |
| 30               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 31               | 7:30              | 16:30           | 8               | 102                               | Forcible Entry                                    |
| 31               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 32               | 7:30              | 16:30           | 8               | 110                               | Ventilation                                       |

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|------------------|-------------------|-----------------|-----------------|-----------------------------------|---|
| 33               | 7:30              | 16:30           | 8               | 110                               | Ventilation                                       |
| 33               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 34               | 7:30              | 16:30           | 8               | 160                               | Ventilation (Skills Testing)                      |
| 34               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 35               | 7:30              | 16:30           | 8               | 111                               | CPAT 3rd Orientation & Practice & Skills Practice |
| 36               | 7:30              | 16:30           | 8               | 124/174                           | Fire Control: Response & Scene Size Up            |
| 36               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 37               | 7:30              | 16:30           | 8               | 124/174                           | Fire Control: Response & Scene Size Up            |
| 38               | 7:30              | 16:30           | 8               | 124/174                           | Fire Control: Fire Suppression                    |
| 38               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 39               | 7:30              | 16:30           | 8               | 110/160                           | Ventilation/Forcible Entry Houses                 |
| 40               | 7:30              | 16:30           | 8               | 103                               | Portable Fire Extinguishers (Skills Testing)      |
| 40               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 41               | 7:30              | 16:30           | 8               | 104                               | Ropes, Knots & Hitches                            |
| 41               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 42               | 7:30              | 16:30           | 8               | 161                               | Rescue  |
| 43               | 7:30              | 17:30           | 8               | 161                               | Rescue  |
| 43               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 44               | 7:30              | 16:30           | 8               | 161                               | Rescue (Skills Testing)                           |
| 44               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 45               | 7:30              | 16:30           | 8               | 161                               | Rescue (Skills Testing)                           |
| 45               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 46               | 7:30              | 16:30           | 8               | 161                               | Vehicle Extrication                               |
| 47               | 7:30              | 16:30           | 8               | 107/106                           | Skills Practice & Testing - S & O and Hose        |
| 48               | 7:30              | 16:30           | 8               | FIRS                              | Driving Practices                                 |
| 48               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 49               | 7:30              | 16:30           | 8               | FIRS                              | Pump Operations                                   |
| 49               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 50               | 7:30              | 16:30           | 8               | 119                               | Wildland Fire Suppression                         |
| 50               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 51               | 7:30              | 16:30           | 8               | 119                               | Wildland Fire Suppression Skills                  |
| 52               | 7:30              | 16:30           | 8               | 161                               | Transportation Emergencies                        |
| 53               | 7:30              | 16:30           | 8               | PFT/FIRS                          | CPAT 4th Practice & Skills Practice               |
| 54               | 7:30              | 16:30           | 8               | 124                               | Live Fire Training (Flashover)                    |
| 55               | 7:30              | 16:30           | 8               | 125/175                           | Fire Cause  |
| 55               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |
| 56               | 7:30              | 16:30           | 8               | 112                               | Inspections/Fire Prevention Education             |
| 56               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                         |

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| <b>Class Day</b> | <b>Start Time</b> | <b>End Time</b> | <b>Hrs Trng</b> | <b>Subject/ Curriculum Number</b> | <b>Subject</b>                              |
|------------------|-------------------|-----------------|-----------------|-----------------------------------|---|
| 57               | 7:30              | 16:30           | 8               | 124                               | Live Fire Training                          |
| 58               | 7:30              | 16:30           | 8               | 124                               | Live Fire Training                          |
| 59               | 7:30              | 16:30           | 8               | 118/177                           | Public Relations, Reports & Records         |
| 60               | 7:30              | 16:30           | 8               | 112                               | Inspections/Fire Prevention Education       |
| 60               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                   |
| 61               | 7:30              | 16:30           | 8               | 124                               | Live Fire Training (Skills Testing)         |
| 61               | 16:30             | 17:30           | 1               | PFT                               | Physical Fitness Training                   |
| 62               | 7:30              | 16:30           | 8               | 124                               | Live Fire Training (Skills Testing)         |
| 63               | 7:30              | 16:30           | 8               | 159                               | Foam Fire Streams (Skills Testing)          |
| 64               | 7:30              | 16:30           | 8               | 174                               | Night Live Fire Training                    |
| 65               | 7:30              | 17:30           | 8               | 178                               | Pre-incident Planning/Research Projects Due |
| 66               | 7:30              | 13:30           | 5               | PFT                               | CPAT Test                                   |
| 67               | 7:30              | 16:30           | 8               | 116                               | HazMat Awareness                            |
| 68               | 7:30              | 16:30           | 8               | 116                               | HazMat Awareness                            |
| 69               | 7:30              | 16:30           | 8               | 166                               | HazMat Operations                           |
| 70               | 7:30              | 16:30           | 8               | 166                               | HazMat Operations                           |
| 71               | 7:30              | 16:30           | 8               | 166                               | Response to Terrorism & Operations Skills   |
| 72               | 7:30              | 16:30           | 8               | 114                               | Fire Protection Systems                     |
| 73               | 7:30              | 16:30           | 8               | 164                               | Fire Protection Systems (Skills Testing)    |
| <b>74</b>        | <b>7:30</b>       | <b>16:30</b>    | <b>8</b>        | <b>FIRS</b>                       | <b>Final Exam/Skills Practice</b>           |
| <b>75</b>        | <b>7:30</b>       | <b>16:30</b>    | <b>8</b>        | <b>TCFP</b>                       | <b>TCFP State Certification Testing</b>     |
|                  |                   |                 | <b>634</b>      | (Total Hours may vary)            |   |

**Grade Scale**

|          |   |
|----------|---|
| 90 – 100 | A |
| 80 – 89  | B |
| 70 – 79  | C |
| 60 – 69  | D |
| 0 – 59   | F |

**Course Evaluation**

Completion of the Basic Firefighting Certification Academy leads to the issuance of a Certificate of Completion. The full-time BFFC consists of six separate course designations which are conducted concurrently – FIRS 1301, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1433 and FIRS 1103. The second digit from the left denotes the number of semester hour credits per course.

## **FIRS 1329**

### Course Syllabus

Cadets receive one academic grade which is identical for each of the five core academy courses (FIRS 1301, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1433). FIRS 1103 Firefighter Agility and Fitness Preparation, is the physical fitness component of the academy and the cadet will receive a separate grade for that course. Successful completion of the BFFC results in the graduate receiving 18 college credit hours. These courses are used in computing the cadet's Grade Point Average.

### **EXAMS**

Exams will be announced in advance.

- ◆ Pop quizzes may be given at any time; you should be prepared at all times.
- ◆ Student Workbooks are expected to be completed by all Cadets (these will be picked up periodically to see if you are working on them and assigned a grade at the end of the academy)
- ◆ Each student will be assigned a topic for writing a research paper.
- ◆ A comprehensive final examination will be given at the end of the academy. Passing of the final is **MANDATORY**. In order to be eligible to sit for the Final Exam, all absences are to be completed and all LIT financial obligations must be met prior to the date of the exam.

### **ASSIGNMENTS**

Each Cadet will be expected to satisfactorily participate in and complete all assignments and examinations given in the course attended.

- ◆ Homework and/or remedial work will be assigned and must be satisfactorily completed by the assigned date and time. Failure to complete work assignments will be considered insubordination and will be referred for disciplinary action.

### **GRADING**

- ◆ The minimum passing grade on written exams shall be a grade of 75.
- ◆ Cadets failing to achieve an average of 75 upon completion of the first three exams are subject to dismissal from the academy.
- ◆ Cadets failing to maintain a 75 average at any time during the academy will be placed on Academic Probation and afforded the next two tests to demonstrate academic competence. A Cadet failing to successfully pass those two tests may be dismissed from the academy.
- ◆ Course Grade:

|                          |            |
|--------------------------|------------|
| a. Live Fire Evaluations | 05%        |
| b. Exams                 | 60%        |
| c. Research Paper        | 10%        |
| d. Physical Training     | 05%        |
| e. Final Exam            | <u>20%</u> |
| f. Final Course Grade    | 100%       |

- ◆ All examinations and research papers become the property of the academy.

Late Penalties (5 points per day) will be assessed on all work turned in late.

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### Course Syllabus

### **Course Policies**

Course policies are included in the comprehensive LIT Regional Fire Academy Handbook. Each student will receive either a printed or digital copy of the handbook.

### **Technical Requirements**

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support/Browser\\_Checker](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support/Browser_Checker)

A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

### **Disabilities Statement**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building. You may also visit the online resource at <https://www.lit.edu/student-success/special-populations>

### **Student Code of Conduct Statement**

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at [www.lit.edu](http://www.lit.edu) or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document

### **Starfish**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.



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