

**El Paso Community College**  
**Syllabus**  
**Part II**  
**Official Course Description**

<b>SUBJECT AREA</b>	<u><b>Fire Technology</b></u>								
<b>COURSE RUBRIC AND NUMBER</b>	<u><b>FIRS 1401</b></u>								
<b>COURSE TITLE</b>	<u><b>Firefighter Certification I</b></u>								
<b>COURSE CREDIT HOURS</b>	<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u><b>4</b></u></td> <td style="text-align: center;"><u><b>3</b></u></td> <td style="text-align: center;"><b>:</b></td> <td style="text-align: center;"><u><b>4</b></u></td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td></td> <td style="text-align: center;">Lab</td> </tr> </table>	<u><b>4</b></u>	<u><b>3</b></u>	<b>:</b>	<u><b>4</b></u>	Credits	Lec		Lab
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Credits	Lec		Lab						

**I. Catalog Description**

Provides one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Student must participate in a Fire Technology Academy orientation; pass an agility exam, and see the Fire Technology counselor at the Valle Verde campus before enrolling in FIRS courses. **Prerequisites: READ 0308 (can be taken concurrently) or by placement exam and FIRS 1103 and FIRT 1301 and FIRT 1319. Corequisites: FIRS 1407 and FIRS 1413 and FIRS 1419 and FIRS 1433. \*\*\*THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION. \*\*\* (3:4).**

**II. Course Objectives**

**A. Section 115, Fire Science (16 Hours)**

- 1.00 Identify and describe the process of combustion and define key terms associated with fire science.
- 2.00 Define and describe fire theory.
- 3.00 Identify and describe the heat energy sources.
- 4.00 Identify the stages of fire and describe the appropriate action to be taken for extinguishment.
- 5.00 Identify special conditions that occur during a fire's growth.
- 6.00 Define and describe methods of heat transfer.
- 7.00 Define and describe the physical states of matter in which fuels are commonly found.
- 8.00 Define and describe the chemical and physical properties of fuels.
- 9.00 Identify and describe chemical byproducts of combustion
- 10.00 Identify and describe the units of heat measurement.
- 11.00 Identify and describe the fire extinguishment theory.
- 12.00 Identify and describe the characteristic of water as it relates to its fire extinguishing potential.

**B. Section 120, Self-Contained Breathing Apparatus (32 Hours)**

- 1.00 Describe the purpose of the following NFPA standards applicable to SCBAs.
- 2.00 Describe the internal systems that sustain life in the human body and identify the physical requirements of a self-contained breathing apparatus wearer.
- 3.00 Identify and describe respiratory hazards during firefighting.
- 4.00 Identify and describe the different types of self-contained breathing apparatus.

- 5.00 Describe the necessary safety considerations and demonstrate confidence in performing firefighting skills while wearing self-contained breathing apparatus.
- 6.00 Describe and demonstrate the various methods of donning and doffing the self-contained breathing apparatus.
- 7.00 Describe and demonstrate inspection, care, and testing procedures for the self-contained breathing apparatus.
- 8.00 Describe and demonstrate the use of an air supply system for recharging an air cylinder.
- 9.00 Describe and demonstrate emergency procedures while using the self-contained breathing apparatus.

**C. Section 121, Personal Protection Equipment (4 Hours)**

- 1.00 Describe the purpose of the following NFPA standards applicable to personal protective equipment.
- 2.00 Identify and describe the various types and components of fire service protective clothing.
- 3.00 Identify and demonstrate the correct procedures for inspection and maintenance of personal protective equipment.
- 4.00 Identify and describe the limitations of personal protective equipment.
- 5.00 Demonstrate the donning and doffing of personal protective equipment.
- 6.00 Identify and demonstrate the proper testing and operation of a personal alert safety system (PASS) device.

**D. Section 122, Fire Fighter Orientation and Safety (24 Hours)**

- 1.00 Describe the purpose of the NFPA standard applicable to professional fire fighters.
- 2.00 Identify aspects of the fire department organization.
- 3.00 Describe the responsibilities of a fire fighter relating to compliance with the provisions of occupational safety and health programs.
- 4.00 Identify potential long-term consequences of exposure to products of combustion.
- 5.00 Identify common types of accidents and injuries and their causes.
- 6.00 Describe the elements of personnel accountability systems and the application of systems at an incident.
- 7.00 Describe and demonstrate techniques for action when trapped or disoriented in a fire situation or in a hostile environment.
- 8.00 Describe and demonstrate the ability to shut off the utility services to a building.
- 9.00 Explain hazards that exist and define procedures to be used in electrical emergencies.
- 10.00 Describe and demonstrate the safe handling and operation of hand and power tools.
- 11.00 Identify and describe safety procedures when using fire service lighting equipment.
- 12.00 Identify and describe safety precautions and the use of safety equipment provided for protection while riding on apparatus.
- 13.00 Describe and demonstrate safety procedures while around fire apparatus.
- 14.00 Identify safety procedures for ensuring a safe station facility environment.

**III. THECB Learning Outcomes (WECM)**

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

**IV. Evaluation**

**Attendance Policy:** Students absent for two more class periods without a valid excuse as determined by the instructor may be dropped from the course. Any exam or assignment not completed as a result of an unexcused absence will receive a grade of "0" for that exam or assignment.

Students who do not attend class before or on the census date listed in the Credit Course Schedule and the Course Calendar and have not contacted the instructor with a valid excuse will be dropped from the course.

**Tardiness Policy:** Students must be seated and ready to begin class at the scheduled time. Students tardy for two or more class periods without a valid excuse as determined by the instructor may be dropped from the course.

Expect class to last the entire scheduled time. Students may not leave class early without a valid excuse or without having made arrangements with the instructor. Students doing so will be considered absent for that class period.

**Withdrawal Policy:** Students who desire to withdraw are responsible for initiating withdrawal action through the EPCC Registrar's Office according to the policy in the Credit Class Schedule. **After the drop date listed in the Credit Class Schedule and the Course Calendar, students will receive a grade based upon all required items. Items not completed will be given a grade of "0".**

Students requesting an Incomplete, "I", must comply with EPCC policies and procedures listed in the Credit Class Schedule.

**Cheating Policy:** Students determined to be cheating on an exam or plagiarizing another student's assignment will be given a grade of "0" for that exam or assignment. An incident report documenting the circumstances will be prepared by the Instructor and submitted to the Instructional Coordinator of Fire Technology and then forwarded to the Instructional Dean Occupational Education. A copy of the report will be provided to the student. A second such incident will be grounds for dismissal of the student from the course with a grade of "F".

**Grading Scale:**

- A: 90-100
- B: 80-89
- C: 75-79
- D: 70-74
- F: 0-69

**V. Disability Statement (Americans with Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

**VI. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.