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| **TEXAS CTE LESSON PLAN**[www.txcte.org](http://www.txcte.org) |
| **Lesson Identification and TEKS Addressed** |
| **Career Cluster** | Law, Public Safety, Corrections, and Security |
| **Course Name** | Firefighter I |
| **Lesson/Unit Title** | Firefighter Certification |
| **TEKS Student Expectations** | **130.334. (c) Knowledge and Skills**(5) The student applies laws, ordinances, regulations, and rules as defined by the Texas Commission on Fire Protection Certification Curriculum Manual to perform duties within a set of rules or protocols. (A) The student is expected to identify the correct laws and rules applicable to basic firefighter certification by the Texas Commission on Fire Protection(B) The student is expected to review the Texas Commission on Fire Protection requirements for certification as a basic firefighter as stated in the Standards Manual for Fire Protection Personnel(C) The student is expected to identify the various levels of firefighter certifications by the Texas Commission on Fire Protection as stated in the Standards Manual for Fire Protection Personnel |
| **Basic Direct Teach Lesson**(Includes Special Education Modifications/Accommodations and one English Language Proficiency Standards (ELPS) Strategy) |
| **Instructional Objectives** |

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| The students will be able to: |
| 1. Identify the correct laws and rules applicable to basic firefighter |
| certification by the Texas Commission on Fire Protection |
| 2. Review the requirements for certification as a basic firefighter as |
| stated in the Standards Manual for Fire Protection Personnel |
| 3. Identify the various levels of firefighter certifications as stated in the |
| Standards Manual for Fire Protection Personnel |
| 4. Identify the levels of instructor certification by the Texas Commission |
| on Fire Protection (TCFP) and in the Standards Manual for Fire |
| Protection Personnel |
| 5. Describe the responsibilities of a firefighter as required by the |
| National Fire Protection Agency 1500: Standard on Fire Department |
| Occupational Safety and Health Program |

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| **Rationale** | In this lesson, students will discuss firefighter training programs, expectations, and requirements. Additionally, students will research local fire department hiring requirements and Texas Firefighter Specialty Certifications that are of personal interest. |
| **Duration of Lesson** | 3 hours |
| **Word Wall/Key Vocabulary***(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* |  |
| **Materials/Specialized Equipment Needed** | * Fire Department Hiring Requirements Research handout
* Firefighter Certification Specialties Paper/Presentation handout
* Firefighter Certification Research Questions and Key
* Discussion Rubric
* Individual Work Rubric
* Interview Rubric
* Presentation Rubric
* Writing Rubric
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| **Anticipatory Set**(May include pre-assessment for prior knowledge) |

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| Engage the students in a discussion about the qualifications that they feel a |
| firefighter should possess. The following questions may be used: |
| * What do you think are the proper interview techniques you need to know to become a firefighter?
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| * What are the proper resume writing skills?
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| * What does it mean to hold a state certification in structural firefighting?
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| * How would you get certified?
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| Use the Discussion Rubric for assessment. |
| (Note: If students have no prior knowledge of certifications, lead a |
| conversation introducing what the following terms mean in fire service: |
| Hazardous Materials (HAZMAT), Aircraft Rescue and Firefighting (ARFF), |
| Urban Search and Rescue (US&R), Wildland, and Swift Water. The |
| information in the Key Points section may be used as a resource.) |

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| **Direct Instruction \*** | 1. The basic steps to becoming a licensed firefighter in Texas (TCFP, 2014)

A. Finish a basic firefighter training programB. Show that you can perform basic firefighting skills C. Pass the state certification testD. Finish your emergency-medical-responder trainingE. Have your fingerprints taken and pass a criminal history background checkF. Apply for your certificationG. Gain employment (or volunteer) within the fire service1. Basic firefighter training programs
	1. A “basic structure-fire-suppression-training program” is a school, course, or academy that teaches everything in the commission’s curriculum
	2. Texas requires a lot of training for its paid firefighters
	3. The Texas basic curriculum includes 468 hours of training
	4. The curriculum covers
		1. Firefighter I/II Curriculum Outline (TCFP, 2010)
			1. General introduction
			2. Fire department communications
			3. Foreground operations
			4. Rescue operations
			5. Prevention, preparedness, and maintenance
			6. Hazardous-materials awareness and operations
		2. Hazmat Awareness Curriculum Outline (TCFP, 2010)
			1. General HAZMAT introduction
			2. Analyzing the incident hazmat
			3. Planning the response
			4. Implementing the planned response
			5. Evaluating progress
			6. Terminating the incident
		3. Hazmat Materials Curriculum Outline (TCFP, 2010)
			1. General hazmat introductions
			2. Analyzing the incident
			3. Planning the response
			4. Implementing the planned response
			5. Evaluating progress
			6. Terminating the incident
			7. Personal Protective Equipment (PPE) and product control
		4. US Department of Homeland Security Courses (FEMA, 2013)
			1. Introduction to Incident Command System (ICS)
			2. ICS for single resources and initial action incidents
			3. National Incident Management System (NIMS)
			4. National Response Framework, an introduction
2. Qualifications for Texas Firefighters stated in the Standards Manual for Fire Protection Personnel (Title 37, part 13, chapter 421, rule 421.3 in the Texas Administrative Code)

A. Complete a commission-approved course successfully and achieve a passing score on the written and the performance certification examinationsB. Must be at least 18 years of ageC. Must have at least a high school diploma (most departments require some college)D. Have the ability to communicate verbally, via telephone and radio equipmentE. Have the ability to lift, carry, drag, and balance the weight equivalent of the average humanF. Have the ability to interpret in English, written, and oral instructions G. Have the ability to work effectively in high-stress situationsH. Have the ability to work effectively in an environment with loud noises and flashing lights1. Have the ability to function through an entire work shift (which is usually 24 hours)
2. Have the ability to calculate weight and volume ratios
3. Have the ability to read and understand English-language manuals, including chemical, medical, and technical terms, and road maps
4. Have the ability to discern accurately street signs and address numbers

M. Have the ability to document in English all relevant information in a prescribed format in light of legal ramificationsN. Have the ability to converse in English with coworkers and other emergency response personnelO. Have good manual dexterity with the ability to perform all tasks related to the protection of life and propertyP. Have the ability to bend, stoop, and crawl on uneven surfacesQ. Have the ability to withstand varied environmental conditions such as extreme heat, cold, and moistureR. Have the ability to work in low or no light, confined spaces, elevated heights and other dangerous environmentsIV. Various Levels of Firefighting CertificationsA. Structural firefighter (Basic, Intermediate, Advanced, and Master)* 1. The following are needed to advance in the levels of certification (for all of the “specialties” listed below)
		1. Amount of time with current certification in the field
		2. Educational hours in the content/specialty area
		3. Application submitted (with transcripts)
		4. $85.00
1. Aircraft (Basic, Intermediate, Advanced, and Master)
2. Marine (Basic, Intermediate, Advanced, and Master)
3. Fire-Service Instructor (Basic, Intermediate, Advanced, and Master)
4. Fire Inspector
5. Fire Investigator

G. Driver Operator/PumperH. Fire Officer I, II, III, IV* 1. HAZMAT (Tech and Incident Commander)
	2. Wildland
	3. Incident Safety Officer
1. The National Fire Protection Association (NFPA) 1500, Standard on Fire Department Occupational Safety and Health Program
	1. This standard was developed to provide a consensus standard for an occupational safety and health program for the fire service
	2. The intent of this standard is to provide the framework for a safety and health program for a fire department or any type of organization providing similar services
		1. The fire department shall actively attempt to identify and limit or prevent the exposure of members to infectious and contagious diseases in the performance of their assigned duties
		2. The fire department shall operate an infection control program that meets the requirements of NFPA standards. When appropriate, inoculations, vaccinations, and other treatment shall be made available
		3. When fire department members routinely respond to emergency medical incidents, the fire department should consult with medical professionals and agencies on measures to limit the exposure of members to infectious and contagious diseases. This should include the provision and maintenance of equipment to avoid or limit direct physical contact with patients, when feasible
		4. Members who perform emergency medical care or otherwise may be exposed to blood or other body fluids shall be provided with emergency medical garments, emergency medical face protection devices, and emergency medical gloves that meet the applicable requirements of NFPA standards

VI. Training FacilitiesA. Several of the state's large fire departments run their own fire academiesB. These academies are typically open only to the departments’ recruits C. There are also public and private fire academies put on by communitycolleges and private institutions throughout the stateD. Every fire department has its own hiring process. In general, hiring processes include:* 1. A civil-service test
	2. A physical-ability test: Candidate Physical Ability Test (CPAT)
	3. A series of interviews
	4. A criminal background check
1. Some departments will not accept your application unless you already have emergency responder medical training, such as a National Registry of Emergency Medical Technicians - Basic certificate (NREMT-B) or National Registry of Emergency Medical Technicians - Paramedic (NREMT-P) certificate

F. The competition for these jobs can be fierce. Some of the state's larger departments have several hundred applicants for each open position (i.e. In 2012 the Dallas Fire Department had 1600 applicants for 60 positions)G. If you have your heart set on working at a specific department, learn everything you can about the department and keep an eye on its human resources website. In general, these departments only hire once a year, have prerequisites, and clearly state their hiring processVII. Basic Fire Suppression Written Exam (Administered by the State) A. You must pass the commission's basic structure-fire suppressionexamination, which contains a written section and a performance skills sectionB. In order to pass the exam you must receive a grade of at least 70 percent on the written portion and a pass on the performance skills testC. No one can be a firefighter in Texas without this certificate D. In order to schedule the exam you must contact the TexasCommission on Fire Protection, and they will mail a packet with a study guide and the examination scheduleVIII. Emergency Medical Technician (EMT) RequirementA. All firefighters in Texas must show proof that they have completed the Department of State Health Service's (DSHS) emergency care attendant (ECA) or the American Red Cross Emergency Responder trainingB. Most community colleges, fire departments, and other for-profit sources provide this trainingC. The Department of State Health Service has a list of providers D. The most common form of required certification is a NREMT-B or NREMT-P1. Those departments requiring their firefighters to ride on a Medical Intensive Care Unit (MICU) and to provide Advanced Cardiovascular Life Support (ACLS) and advanced medical care need the higher NREMT-P designation

IX. Governing Body for Credentials, Curriculum, and Accreditation A. Texas Commission of Fire Protection1. Phone number: (512) 936-3838
2. Fax number: (512) 936-3808
3. Address: Texas Commission on Fire Protection, PO Box 2286, Austin, TX 78768-2286
4. Physical Address: 1701 N. Congress, Suite 105, Austin, TX 78701

*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*NONE |
| **Guided Practice \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Fire Department Hiring Requirements Research – Reiterate to students the difficulty of becoming a professional firefighter in Texas and emphasize the importance of applicants knowing the state requirements and the requirements specific to the department that is hiring. Have the students select a fire department in the location of their choice (i.e. city, county, etc.) and conduct research about the specific qualifications required for a position at that fire department. Have the students use the Internet to conduct research about the department and answer the questions in the Fire Department Hiring Requirements Research handout. (Note: Students should visit/utilize the fire department’s web page AND the city/county human resources web page.) Use the Individual Work Rubric for assessment.Texas Firefighter Specialty Certification Paper and Presentation – Have students select the Texas Firefighter Certifications that most interest them: HAZMAT, Wildland, Instructor, ARFF, Marine, Fire Investigator, or Incident Safety Officer. Then have the students conduct research using the http://www.tcfp.texas.gov/certification/certification\_overview.asp to find the information in the Firefighter Certification Specialties Paper/Presentation handout. (Note: Students may use additional sources, as long as the sources are reliable and accurate.) Have students write a 1-2 page, double-spaced paper summarizing their research. The paper must include the information on the Firefighter Certification Specialties Paper/Presentation handout and may include any additional information that the students find interesting or important. After the papers are complete have the students create short computer-based presentations about the specialty certifications. (Note: The presentations may be changed to a group activity by grouping the students according to their selected certification.) Use the Writing Rubric and the Presentation Rubric for assessment.*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*NONE |
| **Lesson Closure** |  |
| **Summative/End of Lesson Assessment \***  | Firefighter Certification Quiz and KeyFirefighter Certification Research Questions and KeyDiscussion RubricIndividual Work RubricInterview RubricPresentation RubricWriting Rubric*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*NONE |
| **References/Resources/****Teacher Preparation** | Texas Commission on Fire Protection http://www.tcfp.texas.gov/* Certification Curriculum Manual, Basic Fire Suppression Curriculum, NFPA 1001, 2008 Edition http://www.tcfp.texas.gov/manuals/curriculum\_manual/chapter\_1.pdf

National Fire Protection Association (NFPA) Standards Manual for Fire Protection* NFPA: Standard for Fire Fighter Professional Qualifications http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1001&DocNum=1001
* NFPA 1500: Standard on Fire Department Occupational Safety and Health Program <http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1500>
* Federal Emergency Management Agency (FEMA) http://training.fema.gov/ 0135151112, *Essentials of Firefighting* (5th Edition), International Fire Service Training Association (IFSTA)
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| **Additional Required Components** |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** | Cross-Disciplinary Standards II. Foundational Skills E. Technology* + 1. Use technology to gather information.
		2. Use technology to organize, manage, and analyze information.

3. Use technology to communicate and display findings in a clear and coherent manner. 4. Use technology appropriately. |
| **Recommended Strategies** |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy****Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies****Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication****90 Second Speech Topics** |  |
| **Other Essential Lesson Components** |
| **Enrichment Activity**(e.g., homework assignment) | For enrichment, have the students conduct mock interviews with one another (or the instructor) for positions in fire departments. Use the Interview Rubric for assessment. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | SkillsUSA |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)