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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, & Security |
| **Course Name** | Firefighter II |
| **Lesson/Unit Title** | Emergency Response |
| **TEKS Student Expectations** | **130.335. (c) Knowledge and Skills**  (3) The student evaluates behaviors, strategies, and protocols that demonstrate an understanding of duties while responding to a variety of emergency incidents.  (A) The student is expected to identify response procedures to emergency incidents  (B) The student is expected to apply response procedures to simulated emergency incidents  (6) The student describes the purpose of the National Fire Protection Association standards applicable to fire service hoses and reviews the procedures for care, maintenance, and inspection of fire hoses, couplings, nozzles, and water valves.  (E) The student is expected to demonstrate advancing dry hose lines and charged attack lines of different sizes |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | The students will be able to:   1. Identify response procedures to emergency incidents. 2. Apply response procedures to simulated emergency incidents. 3. Demonstrate advancing dry hose lines and charged attack lines of different sizes. |
| **Rationale** | Emergency response and effective mitigation of emergency situations depend upon individual and company preparedness, effective scene safety, effective emergency scene management, and personnel accountability. All of these issues need to be addressed prior to having to act during an emergency. Personnel accountability or personal preparedness is essential for effective team members in the fire service. Firefighters should be drilled in and prepared for situations that are anticipated in fire service. They should be able to rely on their knowledge, skills, and abilities to make wise decisions for those situations that cannot be anticipated. |
| **Duration of Lesson** | 5 Hours |
| **Word Wall/Key Vocabulary**  *(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* | None |
| **Materials/Specialized Equipment Needed** | * 1½-inch or 1¾-inch hose * Fire apparatus * Nozzle * Personal Protective Equipment (PPE) * Self-Contained Breathing Apparatus (SCBA) |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Engage students in a class discussion, using current events in the fire service and in emergency response in general (these events can be student selected, or teacher prepared). Establish that incident preparedness is as much a state of mind as it is a state of being properly trained and informed. Preparedness may begin with training and knowledge, but it will falter if firefighters become complacent and comfortable with the routine part of their job. Use the Discussion Rubric for assessment. |
| **Direct Instruction \*** | 1. Emergency incident Response    1. Preparedness       1. Personnel          1. Properly trained          2. Continuing education          3. Certifications       2. Equipment          1. Training equipment must be in good condition          2. Front line equipment must be in good condition    2. Scene management       1. Develop effective Incident Action Plans (IAPs)       2. Establish tactical priorities       3. Establish clear benchmarks          1. Personnel Accountability Report (PAR): all fire service personnel working in the hazard zone are okay and accounted for          2. “All Clear”: primary search completed, all who could be rescued are clear of the hazard zone          3. “Under Control”: the fire’s forward progress has been halted, and there is no imminent danger to personnel          4. “Loss Stopped”: the property conservation tactic is achieved 2. Simulated Emergencies/Live Fire Procedures    1. Establish policies and procedures for Live Fire Training       1. Live fire/burn exercises should be run in accordance with [National Fire](http://www.nfpa.org/categoryList.asp?categoryID=124&URL=Codes%20&%20Standards) [Protection Association (NFPA) 1403: Standard on Live Fire Training](http://www.nfpa.org/categoryList.asp?categoryID=124&URL=Codes%20&%20Standards) [Evolutions](http://www.nfpa.org/categoryList.asp?categoryID=124&URL=Codes%20&%20Standards)          1. Site preparation             1. Clear all potential hazards   Hazardous materials  Structural deficiencies  Utilities  Pests and vermin   * + - * 1. Safety   Student-instructor ratio no less than 5 to 1  Designated safety officer  Humans cannot be used to simulate fire victims  Fires cannot be set in egress (exit) routes  Personal Protective Equipment (PPE) and uniforms should be in compliance with NFPA standards   * + - * 1. Prerequisite training – participants must have completed a basic firefighter training course/class         2. Water supply     1. Adequate water supply for the size of the structure and the specified training     2. There must be separate water supplies for attack lines and backup lines  1. Training plan – have a developed plan and briefing with training participants 2. Fuel – flammable liquids are not allowed in acquired structures or burn buildings not designed for their use 3. Ventilation – controlled ventilation is required to prevent flashover and backdraft 4. Advancing Dry and Charged Hose Lines    1. Into a structure       1. Bleed air from the line before entry       2. All team members should be on the same side of the hose line       3. Feel or check doors for evidence of heating before entering       4. Stay low and do not impede ventilation efforts       5. Chock self-locking doors in an effort to keep lines from being kinked    2. Up a stairway       1. Hose lines should be advanced up stairways while they are uncharged          1. Too difficult to negotiate doorways, stairs, and corners while charged          2. The shoulder carry works efficiently because the hose is carried rather than dragged          3. The minuteman load works well too          4. Lay the hose against the outside wall to keep the stairwell clear          5. Avoid sharp bends and kinks in the hose          6. Take the excess flaked hose up the stairs above the fire floor    3. Down a stairway       1. It is easier to advance dry lines down stairs than it is charged lines       2. Advancing uncharged lines downstairs should only occur if there is little (minor) or no fire present       3. Advancing charged lines downstairs is considerably difficult          1. Excess hose should be flaked outside the stairwell, in a hallway, or room adjacent to the stairwell          2. Firefighters can be positioned to feed the hose forward to the nozzle team          3. Have firefighters at corners and tight areas to help negotiate turns and areas of limited access    4. From a Standpipe       1. Use hose rolls or hotel packs carried to upper floors. Have the necessary fittings and nozzles with you       2. Connect one floor below the fire in most circumstances. If the standpipe is in an enclosed stairwell it is allowable to connect on the fire floor       3. At the standpipe connection          1. Remove the outlet cap          2. Check for foreign objects          3. Check the connection to determine what adaptor to use if necessary          4. A gated wye may be necessary to reduce the line size desired          5. Any extra hose should be flaked up the stairs towards the floor above    5. Advancing an uncharged hose line up a ladder       1. Advancing a hose up a ladder is much safer and easier with an uncharged line       2. The firefighter heeling the ladder can assist by feeding the line as it is being pulled       3. Have the first firefighter (FF1) carry the hose draped over his or her shoulder from the front with the nozzle on his or her back       4. FF1 advances to the first fly section and waits until the next firefighter (FF2) is ready to advance       5. FF2 advances with a large loop draped over his or her shoulder and starts up the ladder (on a three section ladder a third firefighter can continue the process). There should never be more than one firefighter on each section of the ladder       6. The hose can be charged when it is in place for an attack    6. Advancing a charged hose line up a ladder       1. Firefighters should be positioned on the ladder within reach of each other       2. They should be attached with a leg lock or secured with a ladder belt       3. The hose is then pushed up from one firefighter to the next. The firefighter on the nozzle will advance through the window while the other firefighters support the hose by securing it to the ladder   *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 \*** | **Hose Evolution**  Describe and demonstrate advancing dry and charged hose lines (attack) of different sizes. The evolution should include deploying charged and uncharged lines from a hydrant or other water source (pumper) and should include the use of different size attack lines and nozzles. Use the Advancing an Attack Hose Line (Dry and Charged) Into A Structure Checklist 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 |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | *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** | NONE |
| **Summative/End of Lesson Assessment \*** | * Fire and Emergency Response Quiz and Key * Advancing an Attack Hose Line (Dry and Charged) Into a Structure Checklist * Discussion Rubric   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  For reinforcement, students will participate in peer teaching (mentoring) and team learning, participate in guided research and note taking (web based), and keep journals (key words and definitions). |
| **References/Resources/**  **Teacher Preparation** | * ISBN: 0135151112, *Essentials of Firefighting* (5th Edition), International Fire Service Training Association (IFSTA) * National Fire Protection Association (NFPA) 1403: Standard on Live Fire Training Evolutions * <http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards> |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **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, students will participate in situational awareness exercises and classroom discussion and training exercises. |
| **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)