Fire and Life Safety Requirements (2024)

Course Plan

Course Details

Certification: Fire Inspector

CTS Guide: Fire Inspector Certification Training Standards Guide (2024)

Description: This course provides students with a basic knowledge of fire and life safety requirements related to the roles and responsibilities of a Fire Inspector including occupancy classification, load calculation, egress elements, emergency plans and procedures, building construction and fire growth potential.

Designed For: Personnel preparing to pursue Fire Inspector certification or anyone who performs the duties of an inspector within their agency

Prerequisites: Fire Inspector 2A: Fire Prevention Administration (2014 or newer)

Standard: Complete all activities and formative tests.

Complete all summative tests with a minimum score of 80%.

Hours (Total): 30 hours

(17 lecture / 10.5 application / 2.5 testing)

Maximum Class Size: 30

Instructor Level: SFT Fire Inspector Registered Instructor

Instructor/Student Ratio: 1:30

Restrictions: None

SFT Designation: CFSTES

Table of Contents

Required Resources

Instructor Resources

To teach this course, instructors need:

- One of the following textbooks (including Instructor Resource kit)
  - *Fire Inspection and Code Enforcement* (IFSTA, 9th edition, 2023)
    or
  - *Fire Inspector: Principles and Practice* (Jones & Bartlett, revised enhanced 1st edition, 2016)
- California Building Code (International Code Council, current edition)
- California Code of Regulations (CCR) Title 19 (Office of Administrative Law, current edition)
- California Fire Code (International Code Council, current edition)

Online Instructor Resources

The following instructor resources are available online at https://osfm.fire.ca.gov/what-we-do/state-fire-training/professional-certifications:

- Activity 3-1: Calculating Occupant Load

Student Resources

To participate in this course, students need:

- Required textbook chosen by the instructor
- California Fire Code (International Code Council, current edition)
- Access to a computer and printer

Facilities, Equipment, and Personnel

Facilities

The following facilities are required to deliver this course:

- Standard learning environment or facility, which may include:
  - Writing board or paper easel chart
  - Markers, erasers
  - Amplification devices
  - Projector and screen
  - Laptop or tablet with presentation or other viewing software
  - Internet access with appropriate broadband capabilities

Time Table

Segment	Lecture	Application	Unit Total
Unit 1: Introduction			
Topic 1-1: Orientation and Administration	0.50	0.00	
Topic 1-2: Fire Inspector Certification Process	0.50	0.00	
Unit 1 Totals	**1.00**	**0.00**	**1.00**
Unit 2: Occupancy Classification			
Topic 2-1: Classifying a Building Occupancy	2.00	1.00	
Topic 2-2: Identifying Occupancy Classifications	1.00	0.50	
Topic 2-3: Computing Maximum Allowable Occupancy Load	1.50	1.00	
Topic 2-4: Computing the Maximum Occupant Load of a Multi-Use Building	0.50	0.50	
Topic 2-5: Assessing Alternative Methods to Adjust Occupant Loads	1.00	1.00	
Unit 2 Totals	**6.00**	**4.00**	**10.00**
Unit 3: Egress Elements			
Topic 3-1: Reviewing the Means of Egress Elements	0.50	1.00	
Topic 3-2: Inspecting Means of Egress Elements	2.00	2.00	
Unit 3 Totals	**2.50**	**3.00**	**5.50**
Unit 4: Emergency Plans and Procedures			
Topic 4-1: Assisting with Developing and Evaluating Emergency Planning and Procedures	1.00	0.00	
Topic 4-2: Evaluating Emergency Planning and Preparedness Procedures	1.00	0.00	
Unit 4 Totals	**2.00**	**0.00**	**2.00**
Unit 5: Building Construction			
Topic 5-1: Reviewing Building Construction and Construction Type	2.00	0.00	
Topic 5-2: Evaluating Construction Type of an Addition or Remodel	1.00	0.50	
Unit 5 Totals	**3.00**	**0.50**	**3.50**
Unit 6: Fire Growth Potential			
Topic 6-1: Determining Fire Growth Potential	2.50	1.00	
Unit 7 Totals	**2.50**	**1.00**	**3.50**
Formative Assessments			
Determined by AHJ or educational institution	**0.00**	**0.00**	**0.00**
Summative Assessment			
Determined by AHJ or educational institution	**0.00**	**2.50**	**2.50**

Course Totals	**17.00**	**13.00**	**30.00**

Time Table Key

1. The Time Table documents the amount of time estimated to deliver the content included in the course plan.

2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.

3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.

4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.

5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, skills exercises, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
    - Restroom locations
    - Food locations
    - Smoking locations
    - Emergency procedures
2. Identify classroom requirements
    - Start and end times
    - Breaks
    - Electronic device policies
    - Special needs and accommodations
    - Other requirements as applicable
3. Review course syllabus
    - Course objectives
    - Calendar of events
    - Course requirements
    - Student evaluation process
    - Assignments
    - Activities
    - Required student resources
    - Class participation requirements

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Topic 1-2: Fire Inspector Certification Process

Terminal Learning Objective

At the end of this topic a student will be able to identify the requirements for Fire Inspector certification and describe the certification task book and testing process.

Enabling Learning Objectives

1. Identify the levels of certification in the Fire Inspector certification track
   - First Responder Inspector
   - Fire Inspector
2. Identify other Fire Prevention certification tracks
   - Fire Plans Examiner
   - Fire Marshal
3. Identify the prerequisites for Fire Inspector certification
   - OSFM Fire Inspector 1 (2014) **or** First Responder Inspector (2024) certification
4. Identify the course work required for Fire Inspector certification
   - Fire Inspector 2A: Fire Prevention Administration (2014 or newer)
   - Fire Inspector 2B: Fire and Life Safety Requirements (2014 or newer)
   - Fire Inspector 2C: Fire and Life Safety Systems and Equipment Inspections (2014 or newer)
   - Fire Inspector 2D: Hazardous Materials, Operations, and Processes (2014 or newer)
   - Statutes and Regulations (SFT – Completed within the last 10 years)
   - Fire and Life Safety Educator 1A: Fire and Life Safety Educator 1
5. Identify the exam requirements for Fire Inspector certification
   - None
6. Identify the task book requirements for Fire Inspector certification
   - Fire Inspector Certification Task Book (2024)
7. Identify the experience requirements for Fire Inspector certification
   - Has a minimum of three (3) years' full-time paid experience or six (6) years' volunteer or part-time paid experience in a recognized California fire agency as a Fire Inspector or Prevention Officer
8. Identify the position requirements for Fire Inspector 1 certification
   - None
9. Identify the supporting documentation requirements for Fire Inspector certification
   - International Code Council Fire Code Inspector 1 certification
10. Describe the certification task book process
11. Describe the certification testing process
    - Not applicable
    - All formative and summative testing is completed in individual courses

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Unit 2: Occupancy Classification and Load Calculation

Topic 2-1: Classifying a Building Occupancy

Terminal Learning Objective

At the end of this topic a student, given a set of plans, specifications, and a description of a building and its use, will be able to classify an occupancy so that the classification is made in accordance with the applicable codes, standards, ordinances and AHJ policies.

Enabling Learning Objectives

1. Describe types of plan views
   - Site plan
   - Floor plan
   - Elevation
   - Sectional
2. Describe the systematic plan review process
   - Building size
   - Occupancy classification
   - Use
   - Means of egress
     - Occupant load
     - Exit capacity
   - Building compartmentation
3. Describe how to identify an occupancy classification from a set of plans
4. Identify applicable codes, standards, ordinances, and regulations
5. Describe how operational features may impact occupancy classification
6. Describe how occupancy classifications affect permitted construction type
   - Might limit future building use
     - A different construction type or more flexible future building use might be possible
     - Exercise judgment when classifying occupancies within a mixed-used building
     - Evaluate small uses that are accessory to the main occupancy within the framework of adopted building code
       - Not all spaces require separation
       - Some spaces always require separation
7. Identify hazards presented by various occupancies
8. Read plans to determine occupancy classification
9. Apply decision-making skills

Discussion Questions

1. What types of operational features may change an occupancy's classification?
2. When you have a building that houses a variety of small businesses with mixed uses and audiences, how would you deal with providing an occupancy classification?

Application

1. Given sets of plans, have students identify the occupancy classification and means of egress for each building.

- Note the year plans were approved and determine the legacy occupancy classification identified by the plans with respect to current occupancy classifications. Ensure that the building was built correctly and was compliant at the time of construction and evaluate for legacy H8 vs. L.

Instructor Notes

1. None

CTS Guide Reference: CTS 5-1

Topic 2-2: Identifying Occupancy Classifications

Terminal Learning Objective

At the end of this topic a student, given a description of the uses, will be able to identify the occupancy classifications of a building so that all areas are classified in accordance with applicable codes, standards, and ordinances.

Enabling Learning Objectives

1. Describe various occupancies
   - Occupancy classification
   - Applicable codes, standards, and ordinances
   - Operational features
   - Hazard classifications
2. Interpret code requirements
3. Recognize building uses associated with each occupancy classification
   - Accessory versus incidental uses

Discussion Questions

1. How would you handle providing an occupancy classification when a use is less than 10% of the space? What if one of the spaces stores hazardous materials?
2. How would you classify a boiler room?

Application

1. Using a set of plans for a mixed-use building, identify the different occupancy classifications.

Instructor Notes

1. None

CTS Guide Reference: CTS 4-2

Topic 2-3: Computing Maximum Allowable Occupancy Load

Terminal Learning Objective

At the end of this topic a student, given a floor plan of a building or portion of the building and field observations or description of a building's uses, will be able to compute the maximum allowable occupant load so that the calculated occupant load is in accordance with the applicable codes, standards, ordinances and AHJ policies.

Enabling Learning Objectives

1. Describe code, standard, and ordinance requirements, regulations, and operational features presented by various occupancies
2. Describe how to calculate occupant loads for an occupancy and building use
3. Describe how operational features impact occupant load
   - Fixed seating
   - Aisles
   - Bench seating
   - Identify hazards presented by various occupancies
4. Calculate accurate occupant loads
   - Net versus gross
5. Verify calculated occupant loads for an existing occupancy and for existing building use
6. Identify occupancy factors related to various occupancy classifications
7. Use measuring tools, including a calculator
8. Read plans
9. Describe occupant load signs in assembly occupancies
   - Identify when multiple occupant loads may need to be posted
10. Apply code, standard, and ordinance requirements, regulations, and operational features presented by various occupancies

Discussion Questions

1. When computing occupant load, what types of information need to be considered?
2. Can you allow the number of occupants to exceed the maximum occupant load?
3. How does fixed seating impact occupant load?
4. Provide some instances where low assembly occupant load factor may be utilized in occupancies other than an A-occupancy.

Application

1. Activity 3-1: Calculating Occupant Load

Instructor Notes

1. None

CTS Guide Reference: CTS 4-1 and CTS 5-2

Topic 2-4: Computing Maximum Occupant Load of a Multi-Use Building

Terminal Learning Objective

At the end of this topic a student, given field observations or a description of a building's uses, will be able to compute the maximum allowable occupant load of a multi-use building in accordance with applicable codes and standards.

Enabling Learning Objectives

1. Describe how to calculate occupant loads for an occupancy and for building use
2. Describe code requirements, regulations, operational features, and fire hazards presented by various occupancies
3. Calculate occupant loads
4. Identify occupancy factors related to various occupancy classifications
5. Use measuring tools, including a calculator, to compute the maximum allowable occupant load of a multi-use building

Discussion Questions

1. When computing occupant load, what types of information need to be considered?
2. Can you allow the number of occupants to exceed the maximum occupant load?

Activities

1. Using a set of plans for a multi-use building, compute the maximum allowable occupant load.

CTS Guide Reference: CTS 4-17

Topic 2-5: Assessing Alternative Methods to Adjust Occupant Loads

Terminal Learning Objective

At the end of this topic a student, given a description of an area, building, or portion of a building and its intended use, will be able to assess alternative methods to adjust occupant loads to keep the occupant load in accordance with applicable codes and standards.

Enabling Learning Objectives

1. Identify applicable codes and standards adopted by the jurisdiction
2. Discuss occupancy requirements for adjusting occupant loads
3. Describe impact of egress requirements on alternative methods to adjust occupant loads
4. Describe how to evaluate evacuation plan procedures related to adjusted occupant loads
5. Read plans and reports, interpret codes and standards, and make decisions related to adjusting occupant loads
6. Analyze performance-based reports

Discussion Questions

1. List alternative methods that can be used to allow for the adjustment of an occupant load.
2. How do evacuation plans impact occupant load?

Activities

1. Using a description of an area, building, or portion of a building and its intended use, evaluate occupant load and recommend alternative methods to adjust occupant load.

CTS Guide Reference: 4-18

Unit 3: Egress Elements

Topic 3-1: Reviewing Means of Egress Elements

Terminal Learning Objective

At the end of this topic a student, given a floor plan of a building or portion of a building, will be able to review the means of egress elements provided so that all elements are identified and checked against applicable codes, standards, and ordinances, and deficiencies are discovered and communicated in accordance with AHJ policies.

Enabling Learning Objectives

1. Identify applicable codes, standards, and ordinances adopted by the AHJ
2. Identify standard symbols recognized by the AHJ used in plans to denote means of egress
3. Describe the elements of the means of egress
    - Exit access
        - Aisles
        - Corridors
        - Common path of egress travel
    - Exit
        - Exit passageways
        - Exit courts
        - Exit stairs
    - Exit discharge
    - Horizontal exits
4. Discuss field verification practices used to confirm appropriate egress element
5. Read plans to verify means of egress elements
6. Research codes and standards to verify means of egress elements
7. Communicate findings with stakeholders

Discussion Questions

1. In what portion of the means of egress is the common path of egress travel?
2. During a field inspection, how should appropriate egress elements be verified?

Application

1. Using a floor plan of a building or portion of a building, identify means of egress elements, check to ensure compliance with applicable codes, standards, and ordinances, and document any egress deficiencies noted.

Instructor Notes

1. None

CTS Guide Reference: CTS 5-5

Topic 3-2: Inspecting Means of Egress Elements

Terminal Learning Objective

At the end of this topic a student, given observations made during a field inspection of an existing building, will be able to inspect means of egress elements so that means of egress elements are maintained in compliance with applicable codes, standards, and ordinances and deficiencies are identified, documented, and reported in accordance with AHJ policies.

Enabling Learning Objectives

1. Describe acceptable means of egress devices
2. Describe applicable codes, standards, and ordinances adopted the AHJ related to means of egress elements
3. Describe maintenance requirements of egress elements
4. Describe types of construction
5. Verify occupancy egress requirements
   - Under construction
   - Normal use
6. Describe relationship of fixed fire protection systems to:
   - Egress requirements
   - Approved means of egress elements, including, but not limited to, doors, hardware, and lights
7. Describe transition of existing exiting requirements to comply with new exit egress system requirements
8. Observe, recognize, and communicate deficiencies
9. Calculate egress requirements
10. Apply decision-making skills related to means of egress
11. Use measuring tools
    - Tape measure
    - Door pressure gauge
    - Luminometer
12. Make field sketches

Discussion Questions

1. What does the California Fire Code identify as acceptable means of egress devices?
2. How has the risk of active shooters impacted means of egress devices?

Application

1. Using observations made during a field inspection, analyze the provision and location of egress elements and document deficiencies as necessary.

Instructor Notes

1. None

CTS Guide Reference: CTS 4-6

Topic 3-3: Proposing Correction for Egress Deficiencies

Terminal Learning Objective

At the end of this topic, a student, given a list of means of egress deficiencies in a building and the proposed correction, will be able to evaluate each deficiency and its proposed correction for compliance with applicable codes and standards, and identify, document, and report deficiencies in accordance with jurisdictional policies.

Enabling Learning Objectives

1. Identify applicable codes and standards adopted by the jurisdiction
2. Describe impact of occupancy requirements on egress deficiencies
3. Describe means of egress requirements for a building or portion of a building
4. Read and analyze plans and performance-based reports
5. Interpret codes and standards related to egress deficiencies and make decisions regarding correction

Discussion Questions

1. What are some common egress violations?

Application

1. Determined by instructor

Instructor Notes

1. None

CTS Guide Reference: CTS 4-19

Unit 4: Emergency Plans and Procedures

Topic 4-1: Assisting with Developing and Evaluating Emergency Planning and Procedures

Terminal Learning Objective

At the end of this topic a student, given a description of a building and its use, will be able to assist with developing and evaluating emergency planning and procedures so that plans and procedures are in accordance with the applicable codes, standards, ordinances, and AHJ policies.

Enabling Learning Objectives

1. Identify occupancies that require emergency evacuation plans
2. Identify information sources and recommend criteria for emergency evacuation plans
   - California Fire Code
   - CCR Title 19
   - NFPA 101
   - Joint Commission on Accreditation of Hospitals (hospitals only)
3. Identify applicable codes, standards, and ordinances adopted by the AHJ
4. Describe purpose, use, and applicability of evacuation plans
5. Describe human behavior in relation to emergency planning and procedures
6. Describe how to evaluate emergency planning and procedures
   - Can incorporate location and operation of emergency shutdown systems installed in chemical, explosive, large mechanical, high-voltage electrical, or hazardous occupancies, and occupancies where security needs involve lock-down procedures or other egress procedures
7. Evaluate emergency planning and procedures, including:
   - Emergency shutdown systems
   - Lock-down procedures
   - Other egress procedures
8. Read plans and reports
9. Recognize hazards and deficiencies in plans and reports
10. Describe the adoption process of emergency planning and preparedness (California Fire Code Chapter 4)

Discussion Questions

1. What are the elements of an emergency plan for a school?
2. What are the elements of an emergency plan for a residential care facility?
3. What are key factors to determine a safe area of refuge?

Application

1. Determined by instructor

Instructor Notes

1. None

CTS Guide Reference: CTS 4-9

Topic 4-2: Evaluating Emergency Planning and Preparedness Procedures

Terminal Learning Objective

At the end of this topic a student, given existing or proposed plans and procedures and applicable codes, standards, and ordinances, will be able to evaluate emergency planning and preparedness procedures so that compliance is determined.

Enabling Learning Objectives

1. Describe the occupancy requirements for emergency evacuation plans
2. Evaluate fire safety programs for crowd control
3. Describe when it's appropriate to shelter in place versus evacuate
4. Describe procedures involving lockdown.
5. Identify roles of agencies and individuals in implementing and developing emergency plans
6. Describe how to evaluate emergency planning and preparedness procedures to determine applicability to the facility
7. Compare submitted emergency plans and procedures with applicable codes and standards adopted by the AHJ

Discussion Questions

1. What types of occupancies require an emergency evacuation plan?
2. What is the role of a crowd manager in evacuation planning?

Application

1. Determined by instructor

Instructor Notes

1. Recommend that students consider further training crowd manager certification.

CTS Guide Reference: CTS 4-8

Unit 5: Building Construction

Topic 5-1: Reviewing Building Construction and Construction Type

Terminal Learning Objective

At the end of this topic a student, given an approved set of plans, specifications, and construction features, will be able to review and evaluate a building's area, height, occupancy classification, and construction type to verify the building and its construction type comply with applicable AHJ codes, standards, and ordinances.

Enabling Learning Objectives

1. Describe how to evaluate a building's area, height, and occupancy classification
2. Describe the following building elements:
   - Primary structural frame
   - Secondary structural frame
   - Bearing walls
   - Nonbearing walls
   - Floor assemblies
   - Floor-ceiling assemblies
   - Roof assemblies
3. Describe how to evaluate construction methods and fire rating assemblies
4. Describe building construction type with an emphasis on fire-rated construction
5. Identify approved construction methods and materials related to fire safety
6. Identify characteristics of each type of building construction and occupancy classification
7. Describe the concept of performance-based versus prescriptive design, including:
   - Materials testing
   - Technical analysis
   - Human-factor studies
   - Fire protection engineering principles
8. Describe how to evaluate and analyze construction methods and assemblies for fire rating using the interpretation of test results and manufacturer specifications, including:
   - Design/listing criteria, such as:
     - ASTM E119
     - ASTM E84
     - UL 555 series
     - SFM 12-7A-2
9. Describe how to assess code compliant construction type based on new construction or changes that have occurred since the building's original use and/or occupancy
   - Renovations or additions
   - Changes in storage commodity
   - Changes in occupancy classification
   - Other changes that might occur throughout the life of a building
10. Identify and describe manufacturer specifications

11. Evaluate characteristics of each type of building construction and occupancy classification
12. Interpret analysis of test results

Discussion Questions

1. What is the process of an ASTM E119 test?
2. What are the construction characteristics of a Type II building, and how do they differ from a Type I?

Application

1. Determined by instructor

Instructor Notes

1. A fire inspector should be familiar with current building materials, concepts, and technologies. New building materials, processes, and technologies are continually being introduced in new building systems. The individual should be able to recognize new systems; research information relevant to the fire, life safety, and security impacts of a new system; and request a professional evaluation of a new system from the design engineer-of-record or architect-of-record. The individual should also be able to determine when further evaluation by an independent third party might be required.

CTS Guide Reference: CTS 4-3, CTS 5-6

Topic 5-2: Evaluating Construction Type of an Addition or Remodel

Terminal Learning Objective

At the end of this topic a student, given a description of a building and its use, will be able to evaluate the construction type required for an addition or remodeling project based on applicable codes and standards, and identify, document, and report deficiencies in accordance with jurisdictional policies.

Enabling Learning Objectives

1. Identify policies, procedures, and applicable codes and standards adopted by the jurisdiction
2. Describe the impact of occupancy requirements on construction type
3. Describe construction methods
4. Describe building construction features required in a wildland urban interface environment, including:
   - Ignition-resistant construction
   - Roofing
   - Vents
   - Exterior coverings
   - Exterior doors and windows
   - Decking
   - Ancillary structures
5. Recognize problems with the construction type of an addition or remodel project
6. Read reports and plans as necessary to evaluate construction type
7. Describe the procedures for resolving deficiencies, including:
   - Identifying deficiencies
   - Referencing applicable codes and standards
   - Documenting deficiencies
   - Reporting a summary of deficiencies
   - Verifying corrective actions
   - Identifying alternate methods and materials for compliance

Discussion Questions

1. Why do structures in the wildland urban interface environment require different construction features?
2. How do you resolve deficiencies identified in plan review?

Activities

1. Given pictures of structures in a wildland urban interface, identify compliant and non-compliant construction features.

CTS Guide Reference: CTS 4-20

Unit 6: Fire Growth Potential

Topic 6-1: Determining Fire Growth Potential

Terminal Learning Objective

At the end of this topic a student, given field observations or plans, will be able to determine fire growth potential in a building or space so that the contents, interior finish, and construction elements are evaluated for compliance, and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, ordinances, and AHJ policies.

Enabling Learning Objectives

1. Describe basic fire behavior in buildings and spaces
2. Identify flame spread and smoke development ratings of:
    - Contents
    - Interior finishes
    - Building construction elements
    - Decorations
    - Decorative materials
    - Furnishings
3. Describe factors related to fire growth potential:
    - Fuel load
    - Heat content of the materials involved
    - Exposed surface area
    - Material height and array
    - Continuity of combustible materials within a space
    - Ceiling height
    - Ventilation or openness of the space
4. Describe factors related to the fire growth potential of high piled combustible storage
5. Describe how to determine compliance of contents, interior finish, and construction elements
6. Describe how to identify, document, verify, and report or resolve deficiencies
7. Describe safe housekeeping practices
8. Communicate deficiencies in building contents, interior finishes, and construction elements
9. Interpret codes and standards related to building contents, interior finishes, and construction elements
10. Observe and recognize hazardous conditions and demonstrate decision-making skills regarding corrections
11. Demonstrate decision-making skills regarding corrections

Discussion Questions

1. What impact would windows have on a fire?
2. How does ceiling height/shape impact fire growth?
3. What are some factors that help determine fuel load?

4. What impact would open windows have on a fire?
5. How does ceiling height/shape impact fire growth?
6. What is high piled combustible storage?

Application

1. Given a set of NIST (National Institute of Standards and Technology) fire reports, discuss different factors that impact fires.
    - Watch a video (source from the NIST database) and discuss.

Instructor Notes

1. For ELO 1, review chapter 2 of *Fire Inspection and Code Enforcement* (International Fire Service Training Association, 9th edition)

CTS Guide Reference: CTS 4-12

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details
The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources
The Required Resources segment identifies the resources, equipment, facilities, and personnel required to deliver the course.

Unit
Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics
Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective
A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives
The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master to complete the TLO.

Discussion Questions
The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application
The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes
The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference
The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Skill Sheet
The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.