

Fire Prevention Practices

Course Title	Fire Prevention Practices
Course Number	ATPC1505
Prerequisite (s)	None
Revision Date	September 8, 2018
College Credit Recommendation	This course has a college recommendation of 3 credits, 45 contact hours
Continuing Education Units (CEU's)	45 CEUs for Firesafety Inspector renewal
Class Days/Time	Online continuing, join anytime
Instructional Supervisor	Ben Rigney (info@jbfires.com)
Class Location	JBFires.com online
Course Description	The purpose of this course is to place emphasis on fire prevention through inspection, code enforcement, the use of model building and fire prevention codes, including detailed information on the legal, economic, and political aspects of the fire inspection process.
Student Learning Outcomes	<p>After the successful completion of this course, the student will be able to do the following:</p> <ol style="list-style-type: none"> 1. Describe the duties and authority of the inspector and explain the legal system on which it is based. 2. Explain standards, codes and permits and participate in a legal proceeding and recognize the need for a permit. 3. Summarize physical and chemical changes that occur with fire and fire behavior. 4. Describe construction types and occupancy classifications as defined by the model building and fire codes and the Florida Fire Prevention Code 5. Describe the means of egress system and calculate occupant loads. 6. Describe and identify the components of fire alarm systems and peripheral devices 7. Recognize fire hazards that create unsafe environments and discuss the roles of the officer or inspector during an arson investigation. 8. Identify site access requirements and conditions 9. Identify and describe various hazardous materials symbols, placards, and markings. 10. Describe types of packaging used for storage and transportation of hazardous materials and inspection concerns regarding storage, handling, dispensing, transportation, using and disposing of hazardous materials.

	<p>11. Describe the plans review process, describe how to review plan views and system plans, describe the steps to be followed when reviewing plans, and be able to verify plans compliance in the field.</p> <p>12. Demonstrate communication and inspection preparation skills, identify the importance of conducting inspections and follow up inspections, describe the steps of a comprehensive emergency planning and preparedness document, handle citizen complaints and describe administrative duties.</p>
Required Textbook	IFSTA Fire Inspection and Code Enforcement (8th Edition) ISBN # 978-087939348-9
Required Material	Computer with internet access, textbook
Method of Instruction	Online (Must be logged into the course for a minimum of 40 Hours. The other 5 hours will be utilized for offline research.)
Grading	Passing 70%
Certification(s)	One of six required courses for Fire Officer 2 certification and one of five required courses for Firesafety Inspector I certification
Attendance Policy	Self paced online course to be completed within 1 month. If unable to continue for valid reason, contact instructor for course to be placed on hold or restarted at a later date. No refunds will be given for non completion. All courses completed by the end of the month will receive their final score and certificate by the 15 th of the following month.
Academic Integrity	Academic integrity is crucial to the learning community and indicates respect for the college, the instructor, the course, your classmates, and yourself. Any violation of this trust, including but not limited to cheating, plagiarism, collusion, or using or having any content of an unadministered test, will result in immediate dismissal from the course.
Students with Disabilities	Any student who has a permanent or temporary disability that may require a reasonable accommodation to participate in the course must present documentation of the disability and requested accommodation no later than the beginning of the course.
Enabling Objectives	<p>Chapter 1: Duties and Authority</p> <ol style="list-style-type: none"> 1. Describe the duties of an inspector. 2. Describe the legal guidelines for inspections. [<i>NFPA</i>[®] 1031, 4.2.6] 3. Explain the types of laws, legal status, and liability that impact inspections. [<i>NFPA</i>[®] 1031, 5.2.4] 4. Recognize an inspector's role in developing, maintaining, and revising policies or procedures and forms. [<i>NFPA</i>[®] 1031, 5.2.4, 5.2.5]

Chapter 2: Codes, Standards, Permits

1. Identify appropriate resources for finding current and applicable codes and standards. *[NFPA® 1031, 4.2.5]*
2. Explain complaint procedures. *[NFPA® 1031, 4.2.4]*
3. Describe the role of an Inspector I in the permitting process. *[NFPA® 1031, 4.2.2]*
4. Explain the role of an Inspector II in the local code development process. *[NFPA® 1031, 5.2.4]*
5. Explain the ways an Inspector II will participate in code modification and appeals procedures. *[NFPA® 1031, 5.2.4]*
6. Describe the role of an Inspector II in the permitting process. *[NFPA® 1031, 5.2.1]*

Chapter 3: Fire Behavior

1. Describe the various components of fire behavior. *[NFPA® 1031, 4.3.8, 4.3.14, 4.3.15]*
2. Describe fire development. *[NFPA® 1031, 4.3.14]*
3. Describe how the fire tetrahedron model can be used to control or extinguish a fire. *[NFPA® 1031, 5.3.6, 5.3.8, 5.3.9, 5.3.10]*

Chapter 4: Construction Types

1. Identify construction types. *[NFPA® 1031, 4.3.4]*
2. Identify single-use occupancy classifications. *[NFPA® 1031, 4.3.1]*
3. Identify multiple-use occupancies. *[NFPA® 1031, 5.3.2]*

Chapter 6: Building Components

1. Describe different types of walls found in structures and the fire hazards they present. *[NFPA® 1031, 4.3.4, 4.3.1]*
2. Identify roof types and coverings and the fire hazards they present. *[NFPA® 1031, 4.3.4, 4.3.1]*
3. Identify floor characteristics. *[NFPA® 1031, 4.3.4]*
4. Describe ceiling characteristics. *[NFPA® 1031, 4.3.4]*
5. Describe stair characteristics important to inspectors. *[NFPA® 1031, 4.3.4]*
6. Describe the fire risks posed by how doors operate. *[NFPA® 1031, 4.3.4, 4.3.1]*
7. Differentiate among fire doors based on construction and operation. *[NFPA® 1031, 4.3.4]*
8. Describe different types of windows and how they operate. *[NFPA® 1031, 4.3.4]*

9. Describe how interior finishes can contribute to fire spread. *[NFPA® 1031, 4.3.4]*
10. Explain the fire and life safety aspects of building services. *[NFPA® 1031, 4.3.4]*
11. Describe the characteristics of fire walls. *[NFPA® 1031, 5.4.6]*
12. Describe the hazards solar panels pose for firefighters. *[NFPA® 1031, 5.4.6]*
13. Identify the standardized testing method currently accepted by building codes. *[NFPA® 1031, 5.4.6]*
14. Describe the characteristics of interior components to be evaluated during fire inspections. *[NFPA® 1031, 5.4.6]*
15. Explain the inconsistencies in fire door classifications. *[NFPA® 1031, 5.4.6]*
16. Identify the testing methods used to evaluate interior finishes. *[NFPA® 1031, 5.4.6]*
17. Describe building service characteristics that require inspector evaluations. *[NFPA® 1031, 5.3.12, 5.4.6]*

Chapter 7: Means of Egress

1. Describe means of egress systems. *[NFPA® 1031, 4.3.3]*
2. Explain the way to calculate occupant loads for a single-use occupancy. *[NFPA® 1031, 4.3.2]*
3. Explain the way to calculate occupant loads for multiuse occupancies. *[NFPA® 1031, 5.3.1, 5.2.2, 5.3.2, 5.3.3, 5.4.1, 5.4.2]*
4. Explain the steps in determining means of egress. *[NFPA® 1031, 5.3.5, 5.3.11, 5.4.5]*

Chapter 8: Site Access

1. Describe types of fire lanes and fire apparatus access roads. *[NFPA® 1031, 4.3.11]*
2. Explain site access considerations for construction and demolition sites. *[NFPA® 1031, 4.3.11]*
3. Identify structure access barriers. *[NFPA® 1031, 4.3.11]*

Chapter 9: Fire Hazard Recognition

1. Identify unsafe behaviors that may require code enforcement. *[NFPA® 1031, 4.3.8, 4.3.15]*
2. Identify improper use or storage of flammable and combustible liquids. *[NFPA® 1031, 4.3.8, 4.3.12, 4.3.13, 4.3.15]*

3. Recognize unsafe conditions that have hazardous fire growth potential and may require code enforcement. *[NFPA® 1031, 4.3.8, 4.3.14]*
4. Evaluate hazardous conditions involving building systems. *[NFPA® 1031, 5.3.6, 5.3.8, 5.3.11, 5.3.12]*
5. Distinguish among hazardous processes that contribute to increased fire risk. *[NFPA® 1031, 5.3.8, 5.3.9, 5.3.11]*

Chapter 10: Hazardous Materials

1. Explain the application of hazardous materials regulations. *[NFPA® 1031, 4.3.8, 4.3.12, 4.3.13]*
2. Identify some of the applicable codes and standards that apply to hazardous materials. *[NFPA® 1031, 4.3.8, 4.3.12, 4.3.13]*
3. Explain the classification system used for hazardous materials. *[NFPA® 1031, 4.3.12, 4.3.13]*
4. Describe the classification and properties of physical hazard materials. *[NFPA® 1031, 4.3.12, 4.3.13]*
5. Explain the classification of health hazard materials. *[NFPA® 1031, 4.3.12, 4.3.13]*
6. Describe the code requirements for the marking of hazardous materials for identification by emergency responders. *[NFPA® 1031, 4.3.12, 4.3.13]*
7. Describe code considerations for determining the permissible amount of hazardous materials within a building. *[NFPA® 1031, 4.3.12, 4.3.13]*
8. Explain the requirements for storage and use of nonbulk and bulk packaging. *[NFPA® 1031, 4.3.12, 4.3.13]*
9. Describe the code requirements for testing, maintenance and operation of equipment, containers and tanks. *[NFPA® 1031, 4.3.8, 4.3.12, 4.3.13]*
10. Describe an inspector's role in process controls. *[NFPA® 1031, JPR 5.3.6]*
11. Identify an inspector's responsibility after an unauthorized discharge. *[NFPA® 1031, 5.3.6, 5.3.9]*
12. Describe requirements for piping, valves, and fittings that convey hazardous materials. *[NFPA® 1031, 5.3.8, 5.3.9]*
13. Recognize the classification system and requirements for hazardous and high-hazard occupancies. *[NFPA® 1031, 5.3.6, 5.3.8, 5.3.9]*
14. Describe engineering controls required for hazardous materials. *[NFPA® 1031, 5.3.8, 5.3.9]*

	<p>Chapter 16: Inspection Procedures</p> <ol style="list-style-type: none"> 1. Explain the duties of an Inspector I. <i>[NFPA® 1031, 4.2.1]</i> 2. Describe components of interpersonal communication. <i>[NFPA® 1031, 4.2.1]</i> 3. Describe the basic administrative duties of an Inspector I. <i>[NFPA® 1031, 4.2.1]</i> 4. Describe the preparation required before an inspection. <i>[NFPA® 1031, 4.2.1]</i> 5. Explain basic inspection procedures. <i>[NFPA® 1031, 4.2.1]</i> 6. Explain the role of an Inspector I in follow-up inspections. <i>[NFPA® 1031, 4.2.1]</i> 7. Identify ways an Inspector I will participate in emergency planning. <i>[NFPA® 1031, 4.3.10]</i> 8. Describe the complaint management process. <i>[NFPA® 1031, 4.2.4]</i> 9. Describe what makes a complaint complex. <i>[NFPA® 1031, 5.2.3]</i> 10. Describe how to evaluate emergency preparedness plans. <i>[NFPA® 1031, 5.3.7]</i>
<p>Practical Applications</p>	<p>Final project: Using the provided fire safety inspection checklist, perform an inspection on a business in your fire district. Your final upload should include:</p> <ul style="list-style-type: none"> • Picture of the business that you are inspecting • 500-word description of the fire hazards associated with this building along with any violations that you noticed during your inspection. • Completed fire safety inspection checklist. <p>(If you are not presently working within a fire district, choose a building in your community.)</p>
<p>Class Participation</p>	<p>Your class participation grade will consist of 1 discussion post along with 1 response to your classmates for each lesson. The recommended wordcount is 100 words for your initial post and 20 words for each response. Your grade will be based off of the quality of your posts.</p>
<p>Grading Scale</p>	<p>Quizzes 20% Class participation 20% Course project 20% Midterm exam 20% Final exam 20%</p>