**STATE OF NEW JERSEY  
DEPARTMENT OF COMMUNITY AFFAIRS**

**DIVISION OF FIRE SAFETY**

**FIRE INSPECTOR CERTIFICATION COURSE**

**Module 2**

**Theory of Code Enforcement**

*in cooperation with*

**Kean University Fire Safety Training Program**



**Time:** 3 hours

**Teaching/Learning Level:** *Cognitive- knowledge; and Psychomotor- perception, set and guided response.*

**Learning/Teaching Aids:**

* Syllabus
* Board/easel pad
* Markers
* PC/laptop
* LCD Projection unit or Smart TV system
* Projection screen
* NJ Uniform Fire Code ‘Redbook’ NJAC 5:70-1 et seq.
* ICC, IFC-NJ 2015 NJ Edition
* NJ UCC Applicable Adopted code referenced sections
* IFSTA ‘Fire Inspection and Code Enforcement’ 8th ed.
* NJ Fire Inspector Student Manual

**Behaviors to Foster**:

Encouragestudents to listen carefully, take notes and to actively participate by asking questions and offering experiences that will foster discussion during lectures. It is imperative that they absorb and retain as much information as possible to assist them in having a solid foundation of knowledge for application in this field, as well as successful completion of the exam for this course and the State Certification exam.

**Task:**

1. Comprehension of the ‘Theory of Fire Code Enforcement’ lecture
2. Classification of Buildings
3. Breakdown of code enforcement process
4. Breakdown of the Uniform Construction code
5. Breakdown of the Uniform Fire code
6. Use groups

**Standard:** N.J.A.C. 5:71-4.9(f)1

**Prerequisite Knowledge:** NONE.

**Suggestive:** High school diploma or G.E.D.

**Prerequisite Skills:** Ability to listen effectively; follows directions; take notes; and retain knowledge.

**Resources/References:** Required/Recommended

1. New Jersey Uniform Fire Safety Act N.J.S.A 52:27D-192.
2. New Jersey Uniform Fire Code N.J.A.C. 5:70-1 et seq.
3. ICC, IFC-NJ 2015 NJ Edition
4. NJ Uniform Construction Code ‘Bluebook’ NJAC 5:23-1 et seq.
   1. Selected chapters
   2. General reference
5. IFSTA Fire Inspection & Code Enforcement, 8th ed.
6. NFPA Standard 1031 Fire Prevention Inspector
7. NFPA Fire Code (standard 1) 2018
8. NFPA Fire Protection Handbook, 18th ed. or newer

**Lesson 2**

**Motivation: (State Need to Know)**

*(A reminder to instructors; it is best if the instructor uses an example from a recent or current event that is pertinent to the lesson.*

**Student Performance Objective (SPO):**

SPO-1 The student will shall define the path of legal authority.

SPO-2 The Student will understand how buildings are designed and constructed

SPO-3 The student shall identify the difference between a UFC & UCC.

SPO-4 The student shall identify the different use groups.

**Enabling Objectives (EO):**

EO 1-1-1 Review the importance of arriving on time with all materials necessary for class.

EO 1-1-2 Review the need for undisturbed class activities. Emphasize the loss in coherence when disruptions occur.

EO 1-1-3 Emphasize the need for the student to combine note taking with class participation to increase comprehension of the material being provided.

EO 1-1-4 Emphasize the importance of the ‘legal authority’ necessary to perform the duties of a ‘Fire Inspector’ and how knowledge of the definitions applying to fire hazards, fire prevention and fire protection assist the Fire Inspector in applying that authority.

EO 1-1-5 Emphasize the amount of knowledge needed concerning buildings and the activities that may be performed in them to properly address hazards and provide solutions.

**Overview/Main Points:**

* On time: Students are to be on time and ready for class to begin as scheduled.
* Prepared: Students shall prepare for the class by bringing class materials, writing instruments and notepaper, by reviewing material from the previous lesson and by completing homework.
* Distractions: All pagers and cell phones shall be turned off or placed on vibrate mode. Students shall refrain from distracting or disrupting behavior such as excessive talking.
* Listening: Students are to listen carefully and take notes as they feel are needed.
* Participation: Students are expected to ask questions and share experiences that relate to the class topic.
* Legal authority. Legal authority must exist for proper code enforcement.
* Definitions. Knowledge of what the terms fire hazard, fire prevention, and fire protection mean are necessary to begin the assimilation of knowledge necessary to be a fire inspector.
* Codes and Standards. Knowledge of the difference and enforceability of codes and standards is required by the fire inspector.
* Knowledge. The fire inspector must possess knowledge about the buildings to be inspected, the systems within those buildings and how to handle or store the materials utilized.

**INSTRUCTOR NOTES Initial Instructions:**

Prior to this lesson the instructor shall have reviewed the lesson plan for this module, the PowerPoint presentation with notes and the student handouts to refresh the instructors knowledge on this topic.

**Opener: Start with a motivator (need to know) related to objectives and the lesson; State objectives and main points.**

**Teaching points**

(See instructor notes for the PowerPoint file)

**Summary:**

Summarize the material covered in this lesson by reviewing the SPOs listed and the Main Points during the Evaluation. At the end of the Summary/Evaluation remind the students of the next class date/time and the homework that must be completed to successfully participate in class and comprehend the material provided during the next lesson.

**Module 2**: **Course introduction and theory of fire code enforcement**

**Student Performance Objective (SPO):**

SPO-1 The student will define the path of legal authority.

SPO-2 The student will understand how buildings are designed and constructed.

SPO-3 The student shall identify the difference between a UFC & UCC.

SPO-4 The student shall identify the difference between use groups and LHU.

**Enabling Objectives (EO):**

EO 1-1 Emphasize the importance of the ‘legal authority’ necessary to perform the duties of a ‘Fire Inspector’ and how knowledge of the definitions applying to fire hazards, fire prevention and fire protection assist the Fire Inspector in applying that authority.

EO 1-2 Emphasize the amount of knowledge needed concerning buildings and the activities that may be performed in them to properly address hazards and provide solutions.

**Review/Main Points:**

* On time: Students are to be on time and ready for class to begin as scheduled.
* Prepared: Students shall prepare for the class by bringing class materials, writing instruments and notepaper, by reviewing material from the previous lesson and by completing homework.
* Distractions: All pagers and cell phones shall be turned off or placed on vibrate mode. Students shall refrain from distracting or disrupting behavior such as excessive talking.
* Listening: Students are to listen carefully and take notes as they feel are needed.
* Participation: Students are expected to ask questions and share experiences that relate to the class topic.
* Legal authority. Legal authority must exist for proper code enforcement.
* Protection mean are necessary to begin the assimilation of knowledge necessary to be a fire inspector.
* Codes and Standards. Knowledge of the difference and enforceability of codes and standards is required by the fire inspector.
* Knowledge. The fire inspector must possess knowledge about the buildings to be inspected, the systems within those buildings and how to handle or store the materials utilized.

**Evaluation:**

**Oral Review:** Utilizing the SPOS and Main Points, oral assess the students comprehension of the material provided during this lesson.

**Other Evaluation:** (*If there are assigned quizzes for this lesson, state that fact here.)*

Instructors may use course quizzes, or create and use lesson quizzes and other learning reinforcements. Quizzes are diagnostic and may be given as in-class group assignments to generate discussion or as home assignments and used as review prior to starting the next session.

**Homework**

***Readings***

IFSTA 8th Ed. (FI&CE) Chapter 3

N.J.S.A. 52:27D et seq.

***Assignment***

* IFSTA Worksheet #3
* On the sheet provided on the next page, list ten (10) buildings or structures in your home town or an area that you know. Determine the building construction type, and the building code use group. The space entitled “LHU Code” should be left blank.

**APPENDIX**

**LEVEL OF INSTRUCTION**

|  |  |
| --- | --- |
| **Cognitive**   1. Knowledge 2. Comprehension 3. Application 4. Analysis 5. Synthesis 6. Evaluation | **Psychomotor**   1. Perception 2. Set 3. Guided Response. 4. Mechanism 5. Complex Overt Response 6. Adaptation 7. Origination |

**DESCRIPTIONS:**

**Cognitive:**

1. Knowledge: remembers, recalls; the lowest learning level. Defines, describes, identifies, labels, lists, matches, names, outlines, reproduces, selects, states.

2. Comprehension: grasps meaning, interprets material, estimates future trends; the lowest level of understanding. Converts, defends, gives examples, distinguishes, estimates, explains, extends, generalizes, infers, paraphrases, predicts, rewrites, summarizes.

3. Application: uses material in new and concrete situations, applies rules, methods, concepts, principles, laws, theories; requires higher understanding level. Changes, computes, demonstrates, solves, discovers, manipulates, modifies, operates, predicts, prepares, uses, produces, relates.

4. Analysis: breaks material into components to understand structural organizational; higher intellectual level than comprehension and application requiring understanding of both structure and content. Breaks down, diagrams, differentiates, infers, discriminates, relates, distinguishes, identifies, illustrates, outlines, points out, selects, separates, subdivides.

5. Synthesis: able to put parts together to form a new whole, stresses creative behaviors, emphasizes forming new patterns or structures. Categorizes, combines, complies, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, relates, revises, reconstructs, reorganizes, writes/rewrites, summarizes, tells.

6. Evaluation: able to judge value of material for a given purpose based on definite criteria. Highest in cognitive hierarchy as this contains elements of all other categories plus conscious value judgements based on clearly defined criteria. Appraises, compares, concludes, relates, contrasts, criticizes, describes, discriminates, explains, justifies, interprets, summarizes, supports.

**Psychomotor:**

1. Perception: uses organs or sense to obtain cues to guide motor activity. Chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects, separates.

2. Set: readiness to take a particular type of action; includes mental, physical or emotional set. Begins, displays, explains, moves, shows, proceeds, reacts, responds, starts, volunteers.

3. Guided Response: early stages in learning a complex skill; includes imitation, trial and error. Assembles, builds, calibrates, displays, constructs, dismantles, dissects, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches, works.

4. Mechanism: performs acts where learned responses have become habitual and moves with confidence and proficiency; same as guided response.

5. Complex Overt Response: skillful motor performance of complex movement. Performs proficiently, quickly, smoothly, accurately with minimum energy, without hesitation. Same as guided response.

6. Adaptation: skills are so well developed that movement patterns can be modified to fit special requirements or meet problem situations. Adapts, alters, changes, rearranges, reorganizes, revises, varies.

7. Origination: creates new movement patterns to fit a unique situation or problem. Emphasizes creativity based on highly developed skills. Arranges, combines, composes, constructs, designs, originates.

**Bibliography**

1. UCC International Fire Code IFC 2006
2. BOCA National Building Code/1996
3. BOCA National Building Code Commentary/1996
4. BOCA National Fire Prevention Code Commentary/1996

**Available from:**

International Code Council Inc.

4051 West Flossmoor Road

Country Club Hills, Il 60478-5795

<http://www.iccsafe.org>

1. Building Construction for the Fire Service, 5th edition Brannigan, F. L., ed.,
2. NFPA 30 Flammable and Combustible Liquids Handbook, 2018 edition
3. Fire Alarm Signaling Systems, 2016
4. NFPA 72 National Fire Alarm Code Handbook, NFPA 72-2013
5. NFPA Fire Protection Systems, Inspection, Test & Maintenance Manual, 4th edition Carson, W. G., and Klinker, R. L., eds.,
6. NFPA Fire Protection Handbook, 20th edition Cote, A. E., ed.,
7. NFPA101 Life Safety Code Handbook, 2018 edition Cote, R., ed.,
8. LP-Gas Code Handbook, 6th edition Lemoff, T. C., ed.,
9. NFPA 50 National Fuel Gas Code Handbook, 4th edition Lemoff, T. C.,
10. NFPA 12Automatic Sprinkler Systems Handbook, 8th edition Puchovsky, M. T., ed.,
11. Fire Pump Handbook, 1st edition Puchovsky, M. T., and Isman, K. E., eds.,
12. Electrical Installations in Hazardous Locations, 2nd edition Schram, P. J., and Early, M. W., eds.,
13. NFPA 70 (NEC) National Electrical Code Handbook’
14. NFPA 1 Fire Code 2018
15. NFPA 1031 Fire Prevention Inspector
16. SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design of Buildings, 1st edition
17. SFPE Handbook of Fire Protection Engineering, 2nd edition

**Available from:**

National Fire Protection Association, Inc.

One Batterymarch Park

Quincy, Massachusetts 02269

1-617-770-3000

[www.nfpa.org](file:///C:\Users\kgrant\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.IE5\N6HAQ0ED\www.nfpa.org)

**‘*NJ Uniform Fire Code ‘Redbook’* NJAC 5:70-1 et seq.**

**Available from:**

State of New Jersey

Department of Community Affairs

Division of Fire Safety

CN 809

Trenton, NJ 08625-0809

**‘*NJ Uniform Construction Code Bluebook’* NJAC 5:23-1 et seq.**

**Available from:**

State of New Jersey

Department of Community Affairs

Division of Codes and Standards

CN 306

Trenton, NJ. 08625-0306

***‘Fire Inspection and Code Enforcement’* 8th edition**

**Available from:**

IFSTA

International Fire Service Training Association

Fire Protection Publications

Oklahoma State University

930 N. Willis

Stillwater, OK 74078-8045

<https://www.ifsta.org/shop/fire-inspection-and-code-enforcement-8th-edition/36299>

1-405-654-4055

***‘2016 Emergency Response Guidebook’***

**Available from:**

U.S. Department of Transportation

PHMSA Office of Hazardous Materials Safety

<https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg>(Distributed through your local Office of Emergency Management) or NJSP or HMRU

**‘*NIOSH Pocket guide for Hazardous Substances’***

**Available from:**

[National Technical Information Service (NTIS)](http://www.ntis.gov/)

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<https://www.cdc.gov/niosh/npg/default.html>