

# Program of Instruction

## Course Syllabus

**Course Title:** Fire Inspector I

**Course Duration:** 40 Hours

**Program:** Prevention

**Course Prerequisites:** None

**Required for National Certification (ProBoard):**

Hazardous Materials Awareness

**Course Description:**

Fire Inspector I is the first required course of the Office of the Illinois State Fire Marshal's Basic Fire Prevention Officer certification program. Fire Inspector I is a classroom based 40-hour educational delivery designed to prepare an individual to conduct foundational fire and life safety inspections. The class is structured for those individuals who are pursuing a fire prevention related career or who want to establish a quality understanding of fire inspection related issues.

**Course Requirements and/or Recommendations:** These can be divided into three categories: those completed prior to arriving in class (Pre-Course Work), those completed during class, such as homework assignments and quizzes (Course Work), and requirements completed after class but prior to receiving a certificate of completion.

Summary of Directions

Pre-Course Work: None

Course Work: Students are expected to utilize a "team" approach to the course discussion and activities. Students with experience or background in subject matter are encouraged to share their knowledge.

Post-Course Work: None

**Textbook:** Fire Inspection and Code Enforcement, 8<sup>th</sup> Edition. 2016, IFSTA

The textbook will be provided to the student on the first day of class.

**Course Policies:**

**Attendance Policy:** IFSI requires students to attend (100%) or make up all course content that leads to certification. Students are expected to attend on time and to remain in class for the duration of the course. Students MUST COMPLETE all portions of a certification course, both classroom and practical, to be eligible to receive their certification.

If a student misses any portion of class with an accumulated absence of 20% or less of scheduled class time, it will be the student's responsibility to arrange the make-up of the missed course content with the instructor(s) or program manager. The student must make up the specific course content that s/he missed, not just the hours. Make-ups are limited to 20% of scheduled class time. Make-ups must be documented on the class roster. If a student's absence is greater than 20% refer to "True Emergences" section of the IFSI Examination Policy.

**Safety Policy:** Students shall understand and follow all instructions pertaining to operational safety, as stated by instructors or as written in course materials. Instructors and students shall be mindful of safety at all times. Conduct judged to be unsafe shall be grounds for dismissal from the course.

**Academic Integrity Policy:** IFSI has the responsibility for maintaining academic integrity so as to protect the quality of the education provided through its courses, and to protect those who depend upon our integrity. It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Any violation of the code of conduct is grounds for immediate dismissal from the course.

**Grading Policy:** Decisions regarding certificates of course completion shall be made solely by the lead instructor of the course. All grading of exams shall be conducted by the Curriculum/Testing Office. All grading of practical exercises shall be based upon the standards set by the regulatory agency referenced in the course material and IFSI.

Retesting: If a student fails to pass an exam, retesting takes place on set dates at regional sites across the state. More information is provided in the course completion e-mail and on the IFSI website.

**American Disabilities Act:** As guaranteed in the Vocational Rehabilitation Act and in the American Disabilities Act, if any student needs special accommodations they are to notify their instructor and provide documentation as soon as possible so arrangements can be made to provide for the student's needs. If arrangements cannot be made at the class site, the student will test at an alternative time and place where the special accommodations can be made.

**Evaluation Strategy:**

Written and practical skills testing are conducted at the end of the course. A written exam is conducted at the conclusion of the course. A score of 70% or higher is passing.

## **Course Content:**

Chapter: 1

Title: Duties and Authority

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to describe the duties of inspectors.

Chapter: 2

Title: Codes, Standards, and Permits

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to explain codes, standards, complaint processes, and permits.

Chapter: 3

Title: Fire Behavior

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to understand fire behavior and how it relates to inspections.

Chapter: 4

Title: Construction Types and Occupancy Classifications

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to identify construction types and single-use occupancy classifications.

Chapter: 5

Title: Building Construction

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to identify accepted types of construction building materials and the fire risks associated with them.

Chapter: 6

Title: Building Components

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to describe building components and the fire-related hazards they present.

Chapter: 7

Title: Means of Egress

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to recognize the components of means of egress.

Chapter: 8

Title: Site Access

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to explain basic requirements concerning site access.

Chapter: 9

Title: Fire Hazard Recognition

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to recognize unsafe behaviors and hazardous conditions based on chapter content.

Chapter: 10

Title: Hazardous Materials

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to observe and communicate code compliance for the classification, properties, labeling, transportations, storage, handling, and use of hazardous materials.

Chapter: 11

Title: Water Supply Distribution Systems

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to identify and explain water supply distribution systems.

Chapter: 12

Title: Water-Based Fire-Suppression Systems

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to recognize and explain water-based fire suppression systems.

Chapter: 13

Title: Special-Agent Fire-Extinguishing Systems and Portable Extinguishers

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to describe components and operation of special-agent fixed fire suppression systems and how to determine the operational readiness of portable fire extinguishers.

Chapter: 14

Title: Fire Detection and Alarm Systems

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to identify inspection duties required for fire alarm and alarm signaling system components.

Chapter: 15

Title: Plans Review and Field Verification

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to explain the need for a plans review and actions taken during a plans review.

Chapter: 16

Title: Inspection Procedures

Terminal Learning Objective:

At the conclusion of this module, the student shall be able to explain the duties of an Inspector I in relation to inspection procedures.

**Required Reading:**

**Text:** Fire Inspection and Code Enforcement, 8<sup>th</sup> Edition. 2016, IFSTA

**Module:**

**Pages:**

1. Duties and Authority.....	pp. 13-24
2. Standards, Codes, and Permits.....	pp. 41-55
3. Fire Behavior.....	pp. 73-108
4. Construction Types and Occupancy Classifications.....	pp. 115-145
5. Building Construction.....	pp. 153-171
6. Building Components.....	pp. 193-219
7. Means of Egress.....	pp. 241-267
8. Site Access.....	pp. 285-302
9. Fire Hazard Recognition.....	pp. 307-334
10. Hazardous Materials.....	pp. 379-448
11. Water Supply Distribution Systems.....	pp. 465-498
12. Water-Based Fire-Suppression Systems.....	pp. 503-538
13. Special-Agent Fire Extinguishing Systems.....	pp. 563-594
& Portable Extinguishers	
14. Fire Detection and Alarm Systems.....	pp. 607-642
15. Plans Review and Field Verifications.....	pp. 651-655
16. Inspection Procedures.....	pp. 689-724

**Reference List:**

Fire Inspection and Code Enforcement, 8<sup>th</sup> Edition. 2016, IFSTA

NFPA 101, Life Safety Code, 2015 & 2018 Edition

NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, 2014 Edition.

NFPA 5000, Building Construction and Safety Code, 2015 & 2018 Edition

## Course Schedule 40-Hour Week Format

### DAY ONE

<u>Event</u>	<u>Duration</u>
Course Business & Orientation	1 hour
Chapter 1 – Duties and Authority	1 hour
Chapter 2 – Standards, Codes, and Permits	2 hours
<b>Lunch</b>	
Fire Code Activity – IFC & Life Safety Code Familiarization	3 hours
Learning Activities 2-I-1, 2-I-2	1 hour

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### DAY TWO

<u>Event</u>	<u>Duration</u>
Chapter 3 – Fire Behavior	1 hour
Chapter 4 – Construction Types & Occupancy Classifications	2 hours
Fire Code Activity – IFC & Life Safety Code - Occupancy Classifications	2 hours
<b>Lunch</b>	
Chapter 5 – Building Construction	2 hours
Learning Activities 4-I-1	1 hour

### **DAY THREE**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Chapter 6 – Building Components	1 hour 30 minutes
Chapter 7 – Means of Egress	2 hours
<b>Lunch</b>	
Chapter 8 – Site Access	1 hour
Chapter 9 – Fire Hazard Recognition	2 hours
Chapter 11 – Water Supply Distribution Systems	1 hour
Learning Activities 7-I-1, 8-I-1, 9-I-1, 9-I-2	30 minutes

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### **DAY FOUR**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Chapter 12 – Water-Based Fire Suppression Systems	2 hours
Chapter 13 – Special Agent Fire Extinguishing Systems & Portable Extinguishers	2 hours
<b>Lunch</b>	
Inspection Activity Student Activity Practical Evolutions Field Exercise	4 hour

## **DAY FIVE**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Chapter 14 – Fire Detection and Alarm Systems	1 hour
Chapter 15 – Plans Review and Field Verification	1 hour
Chapter 16 – Inspection Procedures	1 hour
Chapter 10 – Hazardous Materials	1 hour
<b>Lunch</b>	
Inspection & Plan Review Activity	2 hours
Learning Activities, 12-I-1, 13-I-1, 14-I-1, 16-I-1, 16-I-2, 16-I-3	1 hour
Exam	1 hour



## **Course Schedule** **Weekend Format**

### **Friday (Day 1)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Module 0 – Course Business & Orientation	1 hour
Module 1 – Duties and Authority	1 hour
Module 2 – Standards, Codes, and Permits	2 hours

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### **Saturday (Day 2)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Module 3 – Fire Behavior	1 hour
Module 4 – Construction Types & Occupancy Classifications	2 hours
Module 5 – Building Construction: Materials	2 hours
<b>Lunch</b>	
Module 6 – Building Construction: Components	2 hours
2-I-1, 2-I-2, 4-I-1	1 hour

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### **Sunday (Day 3)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Module 7 – Means of Egress	2 hours
Module 8 – Water Supply Distribution Systems	1 hour
Module 9 – Water-Based Fire-Suppression Systems	1 hour 30 minutes
<b>Lunch</b>	
Module 10 – Special-Agent Fire-Extinguishing Systems & Extinguishers	2 hours
Learning Activities 7-I-1, 8-I-1, 9-I-1, 10-I-1	1 hour 30 minutes

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### **Friday (Day 4)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Module 11 – Fire Detection and Alarm Systems	1 hour
Module 12 – Fire Hazard Recognition	1 hour 30 minutes
Module 13 – Site Access	1 hour
Learning Activities 11-I-1, 12-I-1, 12-I-2, 13-I-1	30 minutes

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**Saturday (Day 5)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Module 16 – Plans Review and Field Verification	2 hours
Module 17 – Inspection Procedures	1 hour 30 minutes
Learning Activities 17-I-1, 17-I-2, 17-I-3	30 minutes
<b>Lunch</b>	
Inspection Activity Student Activity Practical Evolutions Field Exercise	4 hours

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**Sunday (Day 6)**

<b><u>Event</u></b>	<b><u>Duration</u></b>
Inspection Activity	2 hours
Module 14 – Hazardous Materials: Descriptions & Identification Methods	2 hours
<b>Lunch</b>	
Module 15 – Hazardous Materials: Storing, Handling, Dispensing, Transporting, Using, and Disposing	2 hours
Review & Exam	2 hours