

University of Illinois Fire Service Institute

Course Syllabus

Course Title: Fire Inspector

Course Duration: 40 Hours Classroom

Program: Prevention

Course Prerequisites: None

Required for National Certification (ProBoard): Hazardous Materials Awareness

Course Description:

Fire Inspector is a 40-hour educational delivery designed to prepare an individual to conduct advanced level fire and life safety inspections. The class is focused on those who are pursuing a fire prevention related career or who want to establish an advanced understanding of fire inspection related issues. Topics in the course include in-depth instruction into: Inspection Procedures, Fire Hazard Recognition, Installed Systems, Means of Egress, Plan Review and Emergency Planning and Preparedness. Individuals with or without fire service background will benefit from the course.

Course Requirements:

Course Work – 40 hours of classroom instruction

Textbook: Fire Inspection and Code Enforcement, 9th Edition, 2023 IFSTA. This textbook will be provided on the first day of the in-person class.

Course Policies:

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.

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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.

Course Content:

Module: Chapter 1

Title: Duties and Authority

Terminal Learning Objective: At the conclusion of this module, the student will describe the duties of inspectors.

Module: Chapter 2

Title: Fire Dynamics

Terminal Learning Objective: At the conclusion of this module, the student will describe the basic principles of fire science.

Module: Chapter 3

Title: Construction and Structural Systems

Terminal Learning Objective: At the conclusion of this module, the student will identify the different types of construction, materials used, and types of structural systems.

Module: Chapter 4

Title: Building Components and Services

Terminal Learning Objective: At the conclusion of this module, the student will describe the different building components and services.

Module: Chapter 5

Title: Occupancy Classifications

Terminal Learning Objective: At the conclusion of this module, the student will describe the occupancy classifications.

Module: Chapter 6

Title: Means of Egress

Terminal Learning Objective: At the conclusion of this module, the student will describe what is necessary to evaluate and determine code-compliant means of egress, including components, occupant load calculations, and occupancy egress requirements.

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Module: Chapter 7

Title: Site Access

Terminal Learning Objective: At the conclusion of this module, the student will identify the requirements and interior and exterior barriers for site access.

Module: Chapter 8

Title: Fire Hazard Recognition

Terminal Learning Objective: At the conclusion of this module, the student will identify fire hazards throughout a structure.

Module: Chapter 9

Title: Hazardous Materials

Terminal Learning Objective: At the conclusion of this module, the student will identify codes, storage, identification and MAQs (Maximum Allowable Quantity) of hazardous materials.

Module: Chapter 10

Title: Water Supply Distribution Systems

Terminal Learning Objective: At the conclusion of this module, the student will identify the principles of water supply and distribution systems.

Module: Chapter 11

Title: Water-Based Fire Suppression Systems

Terminal Learning Objective: At the conclusion of this module, the student will describe water-based fire protection systems by identifying their components, system types, and their functions.

Module: Chapter 12

Title: Portable Extinguishers and Special Agent Fire Extinguishing Systems

Terminal Learning Objective: At the conclusion of this module, the student will describe the principles of fire classifications and extinguishing systems to the selection, use, and inspection of portable fire extinguishers and related equipment.

Module: Chapter 13

Title: Fire Detection and Alarm Systems

Terminal Learning Objective: At the conclusion of this module, the student will describe the principles of fire detection and alarm systems, including system components, operation, and inspection requirements.

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Module: Chapter 14

Title: Plan Review

Terminal Learning Objective: At the conclusion of this module, the student will describe the plan review process, including the plan views, symbols, system plan evaluations, and field verification process.

Module: Chapter 15

Title: Additional Fire Inspector Duties

Terminal Learning Objective: At the conclusion of this module, the student will identify emergency planning and code administration processes, including permitting, enforcement, and appeals.

Module: Chapter 16

Title: Inspection Procedures

Terminal Learning Objective: At the conclusion of this module, the student shall be able to explain the procedure for preparing and conducting an inspection of a building, including violations and follow-up protocols.

Reference List:

Fire Inspection & Code Enforcement, 9th Edition 2023, IFSTA

International Building Code 2024 Edition

International Fire Code 2021 thru 2024 Edition

NFPA 101, Life Safety Code, 2021 Edition

NFPA 1030 Standard for Professional Qualifications for Fire Inspector and Plan Examiner, 2023 Edition.

NFPA 5000, Building Construction and Safety Code, 2018 Edition.

Recommended Items for Class:

Clipboard

Station Duty Uniform (For Thursday's site visits)

Laptop

Your Department's Inspection Forms

Your City or Fire District's Code Amendments

Your current Code Book, International Fire Code, or Life Safety Code.

A state-issued ID for the exam.

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Course Schedule

DAY ONE

Event	Duration
Course Business	1 Hour
OSFM Practicum, Pro Board, ICC	1 Hour
Introduction to the Code Books	1 Hour
Lunch	
Fire Code Activity - IFC & Life Safety Code Familiarization	5 Hours

DAY TWO

Event	Duration
Chapter 16 - Inspection Procedures Drill 1 - Plan Review Application	1 Hour
Chapter 1 - Duties & Authorities Drill 13 – Complaints & Permit	1 Hour
Chapter 2 - Fire Dynamics Drill 11 - Fire Growth Potential	2 Hours
Lunch	
Chapter 3 - Construction and Structural Systems Drill 3 - Construction Type	2 Hours
Chapter 4 - Building Components and Services Drill 14 – Permit Application	2 Hours

DAY THREE

Event	Duration
Chapter 5 - Occupancy Classifications Drill 9 - Occupant Classification and Load	1.5 Hours
Chapter 06 - Means of Egress Drill 12 - Occupancy & Means of Egress	1.5 Hours
Chapter 07 - Site Access Drill 6 – Inspection for Emergency Access	1 Hour
Lunch	
Chapter 08 - Fire Hazard Recognition Drill 5 - Emergency Planning & Preparedness	2 Hours
Chapter 09 - Hazardous Materials	1 Hour

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Drill 4 - Hazmat Conditions and Compliance	
Chapter 10 - Water Supply & Distribution Drill 8 - Verify Fire Flows	1 Hour

DAY FOUR

Event	Duration
Chapter 11 - Water Based Fire Protection Drill 7 - Fire Protection System	1.5 Hours
Chapter 12 – Portable Extinguishers/Special Agents	1.5 Hours
Lunch	
Site Visits	3 Hours
Chapter 13 – Fire Detection & Alarm Systems Drill 10 – Fire Protection Systems	1 Hours

DAY FIVE

Event	Duration
Chapter 14 – Plan Review Drill 2 – Recommend Modifications to Codes Drill 16 - Inspection Report	2 Hours
Chapter 15 – Additional Fire Inspector Duties Drill 15 – Legal Proceedings	2 Hours
Lunch	
PEC's	3 Hours
Exam	1 Hour