



Standardized Curriculum Form Ontario, Canada

**Office of the Fire Marshal and Emergency Management
Curriculum based on
NFPA 1033, Chapter 4, 2014 Edition**

FIRE INVESTIGATOR

**National Fire Protection Association Standard for
Fire Investigator Professional Qualifications**

Notice

NFPA-referenced material set within this document is reproduced with permission from NFPA 1033-2014, *Standard for Professional Qualifications for Fire Investigator*, copyright © 2013, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented only by the standard in its entirety.

Enquiries regarding testing and certification should be directed to:

**Manager
Academic Standards and Evaluation Unit
Ministry of Community Safety and Correctional Services
Office of the Fire Marshal and Emergency Management
25 Morton Shulman Avenue, 5th Floor
Toronto, Ontario
M3M 0B1
OFMTestingandCertification@ontario.ca**

April 2017

Components of the OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form

The OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Forms in Ontario, Canada, are based on internationally-recognized, competency-based, professional qualification standards through the National Fire Protection Association (NFPA). Columns within this form from pages 4 and onward are composed of:

NFPA Objective

National Fire Protection Association Objectives are major competencies and Job Performance Requirements (JPR) within a professional qualifications standard that learners must acquire before successful completion of voluntary testing and certification. To attain these competencies, the OFMEM is offering flexible training delivery models centered on being accessible, attainable, and affordable.

Requisite Knowledge

As defined in published NFPA Professional Qualifications Standards, Requisite Knowledge is “Fundamental knowledge one must have in order to perform a specific task”. This can be acquired by referring to the various suggested readings described below. Information used to construct multiple choice test questions in the Provincial Certification Exam for FIRE INVESTIGATOR is derived from these materials.

Requisite Skills

As defined in published NFPA Professional Qualifications Standards, Requisite Skills are “The essential skills one must have in order to perform a specific task”. This can be acquired by referring to the various suggested readings described below along with the latest version of the Office of the Fire Marshal and Emergency Management’s Skills Sheets Booklet for FIRE INVESTIGATOR. This booklet is used by Provincial Examiners to evaluate Requisite Skill requirements for those voluntarily seeking certification to NFPA 1033, Chapter 4, 2014 Edition.

Suggested Readings

A total of 50 multiple choice questions in the Provincial Certification Exam for FIRE INVESTIGATOR (NFPA 1033-2014) will appear on the test, and are derived from the following suggested readings:

<u>Publisher/Title/Edition</u>	<u>Key Word Reference</u>
1. NFPA 1033, <i>Standard for Professional Qualifications for Fire Investigator</i> , 2014 Edition • Refer to Chapter 4 regarding Fire Investigator (pgs. 7 - 10)	NFPA 1033, 2014 Ed.
2. NFPA 921, <i>Guide for Fire and Explosion Investigations</i> , 2017 Edition • Refer to Chapters 3 to 27 (pgs. 13 - 298)	NFPA 921, 2017 Ed.
3. IFSTA, <i>Fire Investigator</i> , 2 nd Edition • Refer to Chapters 1 to 17 (pgs. 1 - 473)	IFSTA FI, 2 nd Ed.
OR	
4. Jones and Bartlett, <i>Fire Investigator, Principles and Practice to NFPA 921 and 1033</i> , 4 th Edition • Refer to Chapters 1 to 27 (pgs. 1 - 417)	J&B FIPP, 4 th Ed.
Along with (Optional)	
5. Pearson, <i>Kirk’s Fire Investigation</i> , 7 th Edition • Refer to textbook for more detailed information on Fire Investigation material	Kirk’s FI, 7 th Ed.

Knowledge Test Weighting (Out of 100%)

This column references percentage of multiple choice questions that will appear on the Provincial Certification Exam for knowledge-based testing for FIRE INVESTIGATOR.

Questions are validated by a Provincial Advisory Committee (PAC), and used for voluntary, knowledge-based testing of those seeking certification to NFPA 1033, Chapter 4, 2014 Edition through the Academic Standards and Evaluation Unit of the Office of the Fire Marshal and Emergency Management. A mark of 70% or better is required to receive a “Pass” on the knowledge test.

Skill Sheet

This column references skill objectives that will be evaluated by the Office of the Fire Marshal and Emergency Management, to test Requisite Skill requirements of FIRE INVESTIGATOR for those voluntarily seeking certification to NFPA 1033, Chapter 4, 2014 Edition.

**Office of the Fire Marshal and Emergency Management
Provincial Advisory Committee for FIRE INVESTIGATOR**

NFPA 1033, Chapter 4, 2014 Edition

Jason VanSlack, H.B.E.S., B.Ed., M.Ed.
Educational Consultant
OFMEM, Academic Standards and Evaluation Unit, ON (Canada)

Jeff Attwell
Acting Academic Manager
Ontario Fire College, ON (Canada)

Ken Benoit
OFC Instructor
Ontario Fire College, ON (Canada)

Larry Cucco
Division Chief, Fire Investigations
Toronto Fire Services, ON (Canada)

Scott Evenden
Acting Operations Manager, Fire Investigation Services
OFMEM, ON (Canada)

Jimmy Fata, CFEI
Assistant Division Chief, Fire Investigations
Ottawa Fire Services, ON (Canada)

Kyle Kieraszewicz
Fire Prevention Inspector
London Fire Department, ON (Canada)

Jeff Minten
Fire Investigation Supervisor, Fire Investigation Services
OFMEM, ON (Canada)

Bill Reid
Fire Prevention Inspector
Clarington Emergency and Fire Services, ON (Canada)

This document has been reviewed and approved by the Manager of the Academic Standards and Evaluation Unit of the Office of the Fire Marshal and Emergency Management (OFMEM) in Ontario, Canada:

Name: *Kalpana Rajgopalan*

Date: *April 28, 2017*

© Queen's Printer for Ontario, 2017.

The "OFMEM Standardized Curriculum Form (SCF)" for NFPA 1033, 2014 Edition - Fire Investigator is protected by Crown copyright, which is held by the Queen's Printer for Ontario. If credit is given and Crown copyright is acknowledged, the OFMEM Standardized Curriculum Form may be reproduced for non-commercial purposes.

The OFMEM SCF may only be reproduced for commercial purposes under a licence from the Queen's Printer.

To request a licence to reproduce the OFMEM Standardized Curriculum Form for commercial purposes, or for information on Crown copyright generally, please contact:

*Senior Copyright Analyst
Publications Ontario
(416) 326-5153*

Copyright@ontario.ca



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



Course: FIRE INVESTIGATOR

Standard: NFPA 1033, Chapter 4, 2014 Edition

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.1 General					
4.1.1*					
The fire investigator shall meet the job performance requirements defined in Sections 4.2 through 4.7.					
4.1.2*					
The fire investigator shall employ all elements of the scientific method as the operating analytical process throughout the investigation and for the drawing of conclusions.					
4.1.3*					
Because fire investigators are required to perform activities in adverse conditions, site safety assessments shall be completed on all scenes and regional and national safety standards shall be followed and included in organizational policies and procedures.	Standards, policies and procedures in Ontario and Canada set for fire investigators to perform site safety assessments (e.g. authority to investigate a fire scene, personnel required on scene, use of safety equipment and clothing, occupational health and safety requirements and levels of training needed, identification of hazardous materials in homes, commercial and business structures, procedures when entering a burned structure and steps to mitigate risks, etc.)		NFPA 921, 2017 Ed. Chapter 13 IFSTA FI, 2nd Ed. Chapter 2 J&B FIPP, 4th Ed. Chapters 1, 2, 17 Kirk's FI, 7th Ed. Chapter 17 Applicable standards, policies and procedures in Ontario and Canada	10% of questions	



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.1.4*					
The fire investigator shall maintain necessary liaison with other interested professionals and entities.	Basis and extent of an investigator's authority to conduct a fire investigation in Ontario.		NFPA 921, 2017 Ed. Chapter 12 IFSTA FI, 2nd Ed. Chapter 1 J&B FIPP, 4th Ed. Chapters 1, 2, 17	2% of questions	
4.1.5*					
The fire investigator shall adhere to all applicable legal and regulatory requirements.	Legal and regulatory requirements in Ontario and Canada (e.g. legal liability for negligence, freedom of information and protection of privacy, access to information, right to entry, evidence preservation, etc.)		NFPA 921, 2017 Ed. Chapters 3, 12, 20 IFSTA FI, 2nd Ed. Chapters 1, 8, 17 J&B FIPP, 4th Ed. Chapters 1, 2, 17 Kirk's FI, 7th Ed. Chapters 1, 7, 14, 16, 17 Applicable Acts and Regulations in Ontario and Canada	6% of questions	
4.1.6					
The fire investigator shall understand the organization and operation of the investigative team within an incident management system.	Preservation of evidence at the fire scene by first arriving fire units/police authorities.		NFPA 921, 2017 Ed. Chapter 17 IFSTA FI, 2nd Ed. Chapter 2 J&B FIPP, 4th Ed. Chapters 1, 2, 17	2% of questions	



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.2 Scene Examination					
Duties shall include inspecting and evaluating the fire scene, or evidence of the scene, and/or conducting a comprehensive review of documentation generated during the examination(s) of the scene if the scene is no longer available, so as to determine the area or point of origin, source of ignition, material(s) ignited, and act or activity that brought ignition source and materials together and to assess the subsequent progression, extinguishment, and containment of the fire.					
4.2.1					
Secure the fire ground, given marking devices, sufficient personnel, and special tools and equipment.	Fire ground hazards	Use of marking devices	NFPA 921, 2017 Ed. Chapters 4, 17, 23 IFSTA FI, 2nd Ed. Chapters 2, 9, 11 J&B FIPP, 4th Ed. Chapters 10, 11, 27 Kirk's FI, 7th Ed. Chapter 1	6% of questions	Skill Sheet #1
	Types of evidence				
	The importance of fire scene security				
	Evidence preservation				
	Issues relating to spoliation.				
4.2.2*					
Conduct an exterior survey, given standard equipment and tools.	The types of building construction	Assess fire ground and structural condition	NFPA 921, 2017 Ed. Chapters 3, 5, 6, 7, 9, 10, 13, 17, 18, 24, 26 IFSTA FI, 2nd Ed. Chapters 1, 2, 3, 5, 9, 10, 11, 12, 13, 14 J&B FIPP, 4th Ed. Chapters 5, 11	2% of questions	Skill Sheet #1
	The effects of fire upon construction materials	Observe the damage from and effects of the fire			
	Types of evidence commonly found in the perimeter	Interpret burn patterns			
	Evidence preservation methods				
	The effects of fire suppression				
	Fire behavior and spread				
	Fire patterns				
	A basic awareness of the dangers of hazardous				



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
	materials		Kirk's FI, 7 th Ed. Chapters 1, 3, 4, 6, 7, 10, 12, 13, 17		
4.2.3					
Conduct an interior survey, given standard equipment and tools.	The types of building construction and interior finish and the effects of fire on those materials	Assess structural conditions	NFPA 921, 2017 Ed. Chapters 3, 5, 6, 18	2% of questions	Skill Sheet #1
	The effects of fire suppression	Observe the damage and effects of the fire	IFSTA FI, 2 nd Ed. Chapters 1, 2, 3, 5, 9, 11, 12, 13, 14, 15		
	Fire behavior and spread	Discover the impact of fire suppression efforts on fire flow and heat propagation			
	Evidence preservation methods	Evaluate protected areas to determine the presence and/or absence of contents	J&B FIPP, 4 th Ed. Chapters 5, 11		
	Fire patterns				
	Effects of building contents on fire growth				
	The relationship of building contents to the overall investigation				
	Weather conditions at the time of the fire				
	Fuel moisture		Kirk's FI, 7 th Ed. Chapters 1, 2, 3, 7		
4.2.4					
Interpret fire patterns, given standard equipment and tools and some structural or content remains.	Fire dynamics, fire development, and the interrelationship of heat release rate, form, and ignitibility of materials	Interpret the effects of burning characteristics on different types of materials	NFPA 921, 2017 Ed. Chapters 3, 5, 6, 9	2% of questions	Skill Sheet #1
			IFSTA FI, 2 nd Ed. Chapters 1, 2, 3, 5, 11, 14, 15, 16		
			J&B FIPP, 4 th Ed. Chapters 4, 24, 26		
			Kirk's FI, 7 th Ed. Chapters 2, 3, 4, 5, 6, 7, 10		



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.2.5					
Interpret and analyze fire patterns, given standard equipment and tools and some structural or content remains.	Fire behavior and spread based on fire chemistry, fire dynamics, and physics	Interpret variations of burn patterns on different materials with consideration given to heat release rate, form, and ignitability	NFPA 921, 2017 Ed. Chapter 5	2% of questions	Skill Sheet #1
	Fire suppression effects	Distinguish impact of different types of fuel loads	IFSTA FI, 2nd Ed. Chapters 1, 2, 3, 5, 8, 11, 14, 16		
	Building construction	Evaluate fuel trails			
		Analyze and synthesize information			
			Kirk's FI, 7th Ed. Chapter 4		
4.2.6					
Examine and remove fire debris, given standard equipment and tools.	Basic understanding of ignition processes, characteristics of ignition sources, and ease of ignition of fuels	Employ search techniques that further the discovery of fire cause evidence and ignition sources	NFPA 921, 2017 Ed. Chapters 17, 27	2% of questions	Skill Sheet #1
	Debris-layering techniques	Use search techniques that incorporate documentation	IFSTA FI, 2nd Ed. Chapters 1, 2, 9, 10, 11, 15, 16		
	Use of tools and equipment during the debris search	Collect and preserve evidence			
	Types of fire cause evidence commonly found in various degrees of damage		J&B FIPP, 4th Ed. Chapters 16, 17, 24		
	Evidence-gathering methods and documentation				
4.2.7					
Reconstruct the area of origin, given standard and, if needed, special equipment and tools as well as sufficient personnel.	The effects of fire on different types of material	Examine all materials to determine the effects of fire	NFPA 921, 2017 Ed. Chapters 3, 9, 18	2% of questions	Skill Sheet #1
	The importance and uses of reconstruction	Identify and distinguish among different types of fire-damaged contents	IFSTA FI, 2nd Ed. Chapters 1, 2, 5, 10, 11, 14, 15, 16		
		Return materials to their original position using protected areas and fire patterns			



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
			Kirk's FI, 7 th Ed. Chapters 7, 10		
4.2.8*					
Inspect the performance of building systems, including detection, suppression, HVAC, utilities, and building compartmentation, given standard and special equipment and tools.	Different types of detection, suppression, HVAC, utility, and building compartmentation such as fire walls and fire doors	Determine the system's operation and its effect on the fire	NFPA 921, 2017 Ed. Chapters 3, 9, 19 IFSTA FI, 2 nd Ed. Chapters 1, 2, 5, 6, 7, 11, 12, 16 J&B FIPP, 4 th Ed. Chapters 5, 6, 7 Kirk's FI, 7 th Ed. Chapters 7, 10	4% of questions	Skill Sheet #1
	Types of expert resources for building systems	Identify alterations to, and failure indicators of, building systems			
	The impact of fire on various systems	Evaluate the impact of suppression efforts on building systems			
	Common methods used to defeat a system's functional capability				
	Types of failures				
4.2.9					
Discriminate the effects of explosions from other types of damage, given standard equipment and tools.	Different types of explosions and their causes	Identify explosive effects on glass, walls, foundations, and other building materials	NFPA 921, 2017 Ed. Chapters 3, 23 IFSTA FI, 2 nd Ed. Chapters 1, 2, 4, 11, 13 J&B FIPP, 4 th Ed. Chapter 21 Kirk's FI, 7 th Ed. Chapter 12	2% of questions	Skill Sheet #1
	Characteristics of an explosion	Distinguish between low- and high-order explosion effects			
	The difference between low- and high-order explosions	Analyze damage to document the blast zone and origin			
4.3 Documenting the Scene					
Duties shall include diagramming the scene, photographing, and taking field notes to be used to compile a final report.					



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.3.1					
Diagram the scene, given standard tools and equipment.	Commonly used symbols and legends that clarify the diagram	Ability to sketch the scene	NFPA 921, 2017 Ed. Chapters 14, 16, 17, 27 IFSTA FI, 2nd Ed. Chapters 1, 10, 13, 17 J&B FIPP, 4th Ed. Chapter 14 Kirk's FI, 7th Ed. Chapter 7	4% of questions	Skill Sheet #2
	Types of evidence and patterns that need to be documented	Basic drafting skills			
	Formats for diagramming the scene	Evidence recognition and observational skills			
4.3.2*					
Photographically document the scene, given standard tools and equipment.	Working knowledge of high-resolution camera and flash	Ability to use a high-resolution camera, flash, and accessories	NFPA 921, 2017 Ed. Chapter 16 IFSTA FI, 2nd Ed. Chapters 1, 10 J&B FIPP, 4th Ed. Chapter 14 Kirk's FI, 7th Ed. Chapters 7, 17	4% of questions	Skill Sheet #2
	The types of film, media and flash available				
	The strengths and limitations of each				
4.3.3					
Construct investigative notes, given a fire scene, available documents (e.g., prefire plans and inspection reports), and interview information.	Relationship between notes, diagrams, and photos	Data-reduction skills	NFPA 921, 2017 Ed. Chapters 14, 16, 25 IFSTA FI, 2nd Ed. Chapters 10, 12, 16, 17 J&B FIPP, 4th Ed. Chapter 14 Kirk's FI, 7th Ed. Chapters 7, 15	2% of questions	Skill Sheet #2
	How to reduce scene information into concise notes	Note-taking skills			
	The use of notes during report writing and legal proceedings	Observational and correlating skills			



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.4 Evidence Collection/Preservation					
Duties shall include using proper physical and legal procedures to identify, document, collect, and preserve evidence required within the investigation.					
4.4.1					
Utilize proper procedures for managing victims and fatalities, given a protocol and appropriate personnel.	Types of evidence associated with fire victims and fatalities	Observational skills	NFPA 921, 2017 Ed. Chapter 25	4% of questions	Skill Sheet #3
	Evidence preservation methods	The ability to apply protocols to given situations	IFSTA FI, 2nd Ed. Chapters 1, 11, 13 J&B FIPP, 4th Ed. Chapter 23 Kirk's FI, 7th Ed. Chapter 15		
4.4.2*					
Locate, document, collect, label, package, and store evidence, given standard or special tools and equipment and evidence collection materials.	Types of evidence	Ability to recognize different types of evidence and determine whether evidence is critical to the investigation	NFPA 921, 2017 Ed. Chapter 17	4% of questions	Skill Sheet #3
	Authority requirements		IFSTA FI, 2nd Ed. Chapters 1, 2, 8, 9, 11, 13, 16		
	Impact of removing evidentiary items on civil or criminal proceedings (exclusionary or fire-cause supportive evidence)		J&B FIPP, 4th Ed. Chapters 15, 26, 27		
	Types, capabilities, and limitations of standard and special tools used to locate evidence		Kirk's FI, 7th Ed. Chapter 7		
	Types of laboratory tests available				
	Packaging techniques and materials Impact of evidence collection on the investigation				
4.4.3					
Select evidence for analysis given all information from the investigation.	Purposes for submitting items for analysis	Evaluate the fire incident to determine forensic, engineering, or laboratory needs	NFPA 921, 2017 Ed. Chapter 17	2% of questions	Skill Sheet #3
	Types of analytical services available Capabilities and limitations of the services		IFSTA FI, 2nd Ed.		



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
	performing the analysis		Chapter 16 J&B FIPP, 4 th Ed. Chapter 20		
4.4.4					
Maintain a chain of custody, given standard investigative tools, marking tools, and evidence tags or logs.	Rules of custody and transfer procedures	Ability to execute the chain of custody procedures	NFPA 921, 2017 Ed. Chapter 17	2% of questions	Skill Sheet #3
	Types of evidence (e.g., physical evidence obtained at the scene, photos, and documents)	Accurately complete necessary documents	IFSTA FI, 2 nd Ed. Chapters 1, 11, 17		
	Methods of recording the chain of custody		J&B FIPP, 4 th Ed. Chapters 15, 27 Kirk's FI, 7 th Ed. Chapter 7		
4.4.5					
Dispose of evidence, given jurisdictional or agency regulations and file information.	Disposal services available	Documentation skills	NFPA 921, 2017 Ed. Chapter 17	2% of questions	Skill Sheet #3
	Common disposal procedures and problems		IFSTA FI, 2 nd Ed. Chapter 11 J&B FIPP, 4 th Ed. Chapter 15		
4.5 Interview					
Duties shall include obtaining information regarding the overall fire investigation from others through verbal communication.					



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.5.1					
Develop an interview plan, given no special tools or equipment.	Persons who can provide information that furthers the fire cause determination or the affixing of responsibility	Planning skills	NFPA 921, 2017 Ed. Chapters 14, 15 IFSTA FI, 2nd Ed. Chapters 8, 10, 12 J&B FIPP, 4th Ed. Chapters 12, 19 Kirk's FI, 7th Ed. Chapters 7, 16, 17	4% of questions	Skill Sheet #4
	Types of questions that are pertinent and efficient to ask of different information sources (first responders, neighbors, witnesses, suspects, and so forth)	Development of focused questions for specific individuals			
	Pros and cons of interviews versus document gathering	Evaluation of existing file data to help develop questions and fill investigative gaps			
4.5.2					
Conduct interviews, given incident information.	Types of interviews	Adjust interviewing strategies based on deductive reasoning	NFPA 921, 2017 Ed. Chapters 12, 14 IFSTA FI, 2nd Ed. Chapter 12 J&B FIPP, 4th Ed. Chapter 12	2% of questions	Skill Sheet #4
	Personal information needed for proper documentation or follow-up	Interpret verbal and nonverbal communications			
	Documenting methods and tools	Apply legal requirements applicable			
	Types of nonverbal communications and their meaning	Exhibit strong listening skills			
4.5.3					
Evaluate interview information, given interview transcripts or notes and incident data.	Types of interviews	Data correlation skills and the ability to evaluate source information (e.g., first responders and other witnesses).	NFPA 921, 2017 Ed. Chapter 14 IFSTA FI, 2nd Ed. Chapters 12, 16, 17 J&B FIPP, 4th Ed. Chapter 12 Kirk's FI, 7th Ed. Chapter 17	2% of questions	Skill Sheet #4
	Report evaluation methods				
	Data correlation methods				



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.6 Post-Incident Investigation					
Duties shall include the investigation of all factors beyond the fire scene at the time of the origin and cause determination.					
4.6.1					
Gather reports and records, given no special tools, equipment, or materials.	Types of reports needed that facilitate determining responsibility for the fire (e.g., police reports, fire reports, insurance policies, financial records, deeds, private investigator reports, outside photos, and videos) and location of these reports	Identify the reports and documents necessary for the investigation	NFPA 921, 2017 Ed. Chapter 14 IFSTA FI, 2nd Ed. Chapters 8, 11, 16, 17 J&B FIPP, 4th Ed. Chapters 10, 12 Kirk's FI, 7th Ed. Chapters 7, 17	4% of questions	Skill Sheet #5
		Implement the chain of custody			
		Organizational skills			
4.6.2					
Evaluate the investigative file, given all available file information.	File assessment and/or evaluation methods including:	Information assessment	NFPA 921, 2017 Ed. Chapter 4 IFSTA FI, 2nd Ed. Chapters 10, 16 J&B FIPP, 4th Ed. Chapters 12, 14, 20 Kirk's FI, 7th Ed. Chapter 1	2% of questions	Skill Sheet #5
	<ul style="list-style-type: none"> • Accurate documentation practices • Requisite investigative elements 	Correlation			
		Organizational skills			



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.6.3					
Coordinate resources, given the investigative file, reports, and documents.	How to assess one's own expertise	Apply expert resources to further the investigation by networking with other investigators to identify experts	NFPA 921, 2017 Ed. Chapters 12, 15	2% of questions	Skill Sheet #5
	Qualification to be called for expert testimony	Questioning experts relative to their qualifications	IFSTA FI, 2nd Ed. Chapters 1, 11, 16, 17		
	Types of expert resources (e.g., forensic, CPA, polygraph, financial, human behavior disorders, and engineering)	Developing a utilization plan for use of expert resources	J&B FIPP, 4th Ed. Chapters 13, 19		
	Methods to identify expert resources		Kirk's FI, 7th Ed. Chapters 1, 14, 17		
4.6.4					
Establish evidence as to motive and/or opportunity, given an incendiary fire.	Types of motives common to incendiary fires	Financial analysis	NFPA 921, 2017 Ed. Chapters 3, 24	2% of questions	Skill Sheet #5
	Methods used to discover opportunity	Records gathering and analysis	IFSTA FI, 2nd Ed. Chapters 12, 13, 16		
	Human behavioral patterns relative to fire-setting	Interviewing	J&B FIPP, 4th Ed. Chapter 22		
		Interpreting fire scene information and evidence for relationship to motive and/or opportunity	Kirk's FI, 7th Ed. Chapters 1, 7, 16		
4.6.5*					
Formulate an opinion concerning origin, cause, or responsibility for the fire, given all investigative findings.	Analytical methods and procedures (e.g., hypothesis development and testing, systems analysis, time lines, link analysis, fault tree analysis, and data reduction matrixing).	Analytical and assimilation skills	NFPA 921, 2017 Ed. Chapters 18, 20	2% of questions	Skill Sheet #5
			IFSTA FI, 2nd Ed. Chapters 8, 14, 16 J&B FIPP, 4th Ed. Chapters 2, 17, 19, 26 Kirk's FI, 7th Ed. Chapters 1, 7, 14, 16		



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
4.7 Presentations					
Duties shall include the presentation of findings to those individuals not involved in the actual investigations.					
4.7.1*					
Prepare a written report, given investigative findings, documentation, and a specific audience.	Elements of writing	Writing skills	NFPA 921, 2017 Ed. Chapters 12, 16 IFSTA FI, 2nd Ed. Chapter 17 J&B FIPP, 4th Ed. Chapters 10, 14 Kirk's FI, 7th Ed. Chapters 1, 17	6% of questions	Skill Sheet #6
	Typical components of a written report	Ability to analyze information			
	Types of audiences and their respective needs or requirements	Determine the reader's needs or requirements			
4.7.2					
Express investigative findings verbally, given investigative findings, notes, a time allotment, and a specific audience.	Types of investigative findings	Communication skills	IFSTA FI, 2nd Ed. Chapters 16, 17 J&B FIPP, 4th Ed. Chapter 10 Kirk's FI, 7th Ed. Chapter 17	2% of questions	Skill Sheet #6
	The informational needs of various types of audiences	Ability to determine audience needs			
	The impact of releasing information	Correlate findings			
4.7.3					
Testify during legal proceedings, given investigative findings, contents of reports, and consultation with legal counsel.	Types of investigative findings	Communication and listening skills	NFPA 921, 2017 Ed. Chapter 12 IFSTA FI, 2nd Ed. Chapters 1, 12, 16, 17 J&B FIPP, 4th Ed. Chapter 10	4% of questions	Skill Sheet #6
	Types of legal proceedings	Ability to differentiate facts from opinion			
	Professional demeanor requirements	Determine accepted procedures, practices, and etiquette during legal proceedings			
	Understanding of due process and legal proceedings				



OFMEM Academic Standards and Evaluation Unit Standardized Curriculum Form



NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weighting	Skill Sheet #
			Kirk's FI, 7 th Ed. Chapter 17		