

**Course: Fire/Arson Investigation**  
**March, 2000**

<b>Standard</b>	<b>Reference</b>	<b>Remarks</b>
1021—2-5.1	SM 4, 5, 6, 16	Prerequisite Skills: the ability to determine basic fire cause
1021—2-5.1	FAI	Evaluate available information
1021—2-5.1	SM 14, 15	Prerequisite Skills: the ability to conduct interviews and write reports
1021—2-5.1	SM 5,6	Prerequisite Knowledge: Common causes of fire
1021—2-5.1	SM 2	Prerequisite Knowledge: fire growth and development
1021—2-5.2	SM 10	Secure an incident scene
1021—2-5.2	SM 11-3	Prerequisite Knowledge: evidence preservation
1021—2-5.2	SM 10	Prerequisite Skills
1021—2-5.2	SM 10-11	Prerequisite Knowledge: importance of fire scene security
1021—2-5.2	SM 11-6	Prerequisite Knowledge: types of evidence
1021—3-5.2	SM 10, 14	Prerequisite Skills: The ability to communicate verbally and in writing
1021—3-5.2	SM 12	Prerequisite Knowledge: methods used by arsonists
1021—3-5.2	SM 5, 6	Prerequisite Knowledge: common causes of fire
1021—3-5.2	SM 4, 5, 6	Prerequisite Knowledge: basic cause and origin determination
1021—3-5.2	SM 12	Prerequisite Knowledge: methods used by arsonists
1021—3-5.2	SM 10	Prerequisite Knowledge: documentation of preliminary fire investigative procedures
1021—3-5.2	SM 14	Prerequisite Skills: To apply Knowledge using deductive Skills
1021—3-5.2	FAI 4	Determine the point of origin and preliminary cause of a fire
1021—3-5.2	SM 2	Prerequisite Knowledge: fire growth and development
1033—3-2.1	SM 11-6	Requisite Knowledge: types of evidence
1033—3-2.1	SM 10-11	Secure the fire ground
1033—3-2.1	SM 10-11	Requisite Knowledge: importance of fire scene security
1033—3-2.1	SM 11-3	Requisite Knowledge: evidence preservation
1033—3-2.1	SM 10-4	Requisite Knowledge: fire ground hazards
1033—3-2.2	SM 10-13	Conduct an exterior survey
1033—3-2.3	SM 10, 4, 16	Requisite Skills: evaluate protected areas to determine the presence and/or absence of contents

1033—3-2.3	SM 10, 4, 16	Requisite Skills: discover the impact of fire suppression efforts on fire flow and heat propagation
1033—3-2.4	SM 4, 2	Interpret burn patterns
1033—3-2.4	SM 4, 2	Requisite Knowledge: Knowledge of fire development and the interrelationship of heat release rate
1033—3-2.4	SM 4, 16	Requisite Skills
1033—3-2.4	SM 2	Requisite Knowledge: form
1033—3-2.4	SM 4, 2	Requisite Knowledge: ignitibility of materials
1033—3-2.5	SM 4, 2, 16	Requisite Skills: ignitibility
1033—3-2.5	SM 4	Correlate burn patterns
1033—3-2.5	SM 10-5	Requisite Knowledge: fire suppression effects
1033—3-2.5	SM 3	Requisite Knowledge: building construction
1033—3-2.5	SM 2, 16	Requisite Skills: form
1033—3-2.5	SM 4, 2, 16	Requisite Skills: distinguish impact of different types of fuel loads
1033—3-2.5	SM 4, 2, 16	Requisite Skills: evaluate fuel trails
1033—3-2.5	SM 16	Requisite Skills: analyze and synthesize information
1033—3-2.5	SM 2	Requisite Knowledge: Knowledge of fire behavior and spread based on fire chemistry and physics
1033—3-2.5	SM 4, 2, 16	Requisite Skills: Interpret variations of burn patterns on different materials with considerations given to heat release rate
1033—3-2.6	SM 11	Requisite Skills: collect and preserve evidence.
1033—3-2.6	SM 11	Requisite Knowledge: types of fire cause evidence commonly found in various degrees of damage
1033—3-2.6	SM 10	Requisite Skills: use search techniques that incorporate documentation
1033—3-2.6	SM 11	Requisite Knowledge: evidence-gathering methods and documentation
1033—3-2.6	SM 2	Requisite Knowledge: ease of ignition of fuels
1033—3-2.6	SM 10	Requisite Knowledge: debris-layering techniques
1033—3-2.6	SM 2	Requisite Knowledge: characteristics of ignition sources
1033—3-2.6	SM 2	Requisite Knowledge: basic understanding of ignition processes
1033—3-2.6	SM 10	Requisite Knowledge: use of tools and equipment during the debris search
1033—3-2.6	SM 11	Examine and remove fire debris
1033—3-2.6	SM 10	Requisite Skills: employ search techniques that further the discovery of fire cause evidence and ignition sources
1033—3-2.7	10 IG	Requisite Skills: return materials to their original position using protected areas and burn patterns
1033—3-2.7	10, 2, 3, 4 IG	Requisite Skills: identify and distinguish among different types of fire-damaged contents

1033—3-2.7	10, 2, 3, 4 IG	Requisite Skills: examine all materials to determine the effects of fire
1033—3-2.7	SM 10	Requisite Knowledge: the importance and uses of reconstruction
1033—3-2.7	SM 2, 3, 4	Requisite Knowledge: Knowledge of the effects of fire on different types of material
1033—3-2.7	SM 10-14	Reconstruct the area of origin
1033—3-2.8*	SM 3	Requisite Knowledge: different types of detection
1033—3-2.8*	SM 5	Requisite Knowledge: types of expert resources for building systems
1033—3-2.8*	SM 3	Requisite Knowledge: the impact of fire on various systems
1033—3-2.8*	SM 3	Requisite Knowledge: common methods used to defeat a system's functional capability
1033—3-2.8*	SM 3	Requisite Skills: determine the systems operation and its effect on fire
1033—3-2.8*	SM 3	Requisite Skills: identify alterations to building systems
1033—3-2.8*	SM 3	Requisite Skills: evaluate the impact of suppression efforts on building systems
1033—3-2.8*	SM 3	Requisite Knowledge: building compartmentation such as fire walls, and fire doors
1033—3-2.8*	SM 3	Requisite Knowledge: suppression
1033—3-2.8*	SM 3	Requisite Knowledge: utility
1033—3-2.8*	SM 3, 5	Inspect the performance of building systems
1033—3-2.9	SM 7	Discriminate the effects of explosions
1033—3-2.9	SM 7	Requisite Skills: analyze damage to document the blast zone and origin
1033—3-2.9	SM 7, 4	Requisite Skills: identify explosive effects on glass, walls, foundations, and other building materials
1033—3-2.9	SM 7	Requisite Knowledge: characteristics of an explosion
1033—3-2.9	SM 7	Requisite Knowledge: different types of explosions and their causes
1033—3-2.9	SM 7-11	Requisite Knowledge: the difference between low- and high-order explosions
1033—3-2.9	SM 7	Requisite Skills: distinguish between low- and high-order explosion effects
1033—3-3.1	SM 10	Requisite Skills: evidence recognition and observational Skills
1033—3-3.1	SM 10	Requisite Knowledge: commonly used symbols and legends that clarify the diagram
1033—3-3.1	SM 10	Requisite Knowledge: formats for diagramming the scene
1033—3-3.1	SM 10, 14	Diagram the scene
1033—3-3.1	SM 10	Requisite Skills: ability to sketch the scene
1033—3-3.1	SM 10	Requisite Knowledge: types of evidence and patterns that need to be documented
1033—3-3.2*	SM 10	Photographically document the scene
1033—3-3.3	SM 10, 14	Construct investigative notes
1033—3-3.3	14 IG	Requisite Skills: data-reduction Skills

1033—3-3.3	SM 10, 14, 13	Requisite Knowledge: use of notes during report writing and legal proceedings
1033—3-3.3	14 IG	Requisite Skills: note-taking Skills
1033—3-3.3	SM 10, 14	Requisite Knowledge: relationship between notes, diagrams, and photos
1033—3-3.3	SM 10, 14	Requisite Knowledge: how to reduce scene information into concise notes
1033—3-3.3	14 IG	Requisite Skills: observational and correlating Skills
1033—3-4	SM 11	Requisite Knowledge: evidence preservation methods
1033—3-4	SM 9	Evidence Collection/Preservation. Utilize proper procedures for managing victims and fatalities
1033—3-4	SM 9	Requisite Knowledge: types of evidence associated with fire victims and fatalities
1033—3-4.2	SM 11, 16	Locate, collect, and package evidence
1033—3-4.2	11 IG	Requisite Skills: Ability to recognize different types of evidence
1033—3-4.2	SM 11	Requisite Knowledge: types of evidence
1033—3-4.2	SM 11	Requisite Knowledge: impact of evidence collection on the investigation
1033—3-4.2	SM 11	Requisite Knowledge: packaging techniques and materials
1033—3-4.2	11 -Appendix A	Requisite Knowledge: types, capabilities, and limitations of standard and special tools used to locate evidence
1033—3-4.2	11 IG	Requisite Skills: determine evidence critical to the investigation
1033—3-4.3	SM 11	Requisite Knowledge: purposes for submitting samples
1033—3-4.3	SM 11	Requisite Knowledge: purposes for submitting samples
1033—3-4.3	SM 11	Requisite Skills: Evaluate the fire incident to determine forensic, engineering, or laboratory needs
1033—3-4.3	SM 11, 6	Select appropriate evidence for analysis
1033—3-4.4	SM 10, 11	Maintain a chain of custody
1033—3-4.4	SM 10	Requisite Knowledge: rules of custody and transfer procedure
1033—3-4.4	SM 11	Requisite Knowledge: types of evidence
1033—3-4.4	SM 10	Requisite Knowledge: methods of recording the chain of custody
1033—3-5.1	SM 15	Requisite Skills: evaluation of existing file data to help develop questions and fill investigative gaps
1033—3-5.1	SM 15	Develop an interview plan
1033—3-5.1	SM 5, 6, 7, 8, 9, 10, 15	Requisite Knowledge: persons who can provide information that furthers the fire cause determination or the affixing of responsibility
1033—3-5.1	SM 15	Requisite Skills: development of focused questions for specific individuals
1033—3-5.1	SM 15	Requisite Skills: planning Skills

1033—3-5.1	SM 15	Requisite Knowledge: types of questions that are pertinent and efficient to ask of different information sources
1033—3-5.1	SM 15	Requisite Knowledge: pros and cons of interview versus document gathering
1033—3-5.2	SM 15	Requisite Skills: exhibit strong listening Skills
1033—3-5.2	SM 15	Requisite Knowledge: documenting methods and tools
1033—3-5.2	SM 15	Requisite Knowledge: types of nonverbal communications and their meaning
1033—3-5.2	SM 15	Requisite Knowledge: personal information needed for proper documentation or follow-up
1033—3-5.2	SM 15	Requisite Skills: adjust interviewing strategies based on deductive reasoning
1033—3-5.2	SM 15	Requisite Knowledge: Knowledge of types of interview
1033—3-5.2	SM 15	Requisite Skills: interpret verbal and nonverbal communications
1033—3-5.3	SM 15	Requisite Skills: ability to evaluate source information
1033—3-5.3	SM 14-8	Requisite Skills: data correlating Skills
1033—3-5.3	SM 15	Requisite Knowledge: types of interviews
1033—3-5.3	SM 15	Evaluate interview information
1033—3-5.3	SM 14-8	Requisite Knowledge: data correlating methods
1033—3-5.3	SM 14-8	Requisite Knowledge: report evaluation methods
1033—3-6.1	SM 14	Requisite Knowledge: types of reports needed that facilitate determining responsibility for the fire
1033—3-6.1	SM 14, 10	Requisite Skills: implementing the chain of custody
1033—3-6.1	SM 14	Requisite Skills: identify the proper reports and documents necessary for the investigation
1033—3-6.1	SM 14	Gather reports and records
1033—3-6.1	SM 14	Requisite Knowledge: location of these reports
1033—3-6.1	SM 14-8	Requisite Skills: organizational Skills
1033—3-6.2	SM 14	Requisite Knowledge: proper and acceptable documentation
1033—3-6.2	SM 14	Requisite Skills: correlation Skills and organizational Skills
1033—3-6.2	SM 14	Requisite Skills: information assessment
1033—3-6.2	SM 14	Evaluate the investigative file
1033—3-6.2	SM 14	Requisite Knowledge: proper contents of investigative findings and gathered documentation
1033—3-6.2	SM 14	Requisite Knowledge: file assessment and/or evaluation methods
1033—3-6.3	SM 13, 14	Requisite Skills: recognize the value of expert resources to further the investigation
1033—3-6.3	SM 13	Coordinate expert resources
1033—3-6.3	SM 4, 5, 6, 7, 10, 11, 13	Requisite Knowledge: types of expert resources

1033—3-6.3	SM 14	Requisite Knowledge: Knowledge of the investigator's own expertise, qualifications needed for expert testimony
1033—3-6.4	SM 14	Requisite Skills: records gathering and analysis
1033—3-6.4	SM 14	Requisite Skills: financial analysis
1033—3-6.4	SM 12	Requisite Knowledge: understanding human behavioral patterns relative to fire settings
1033—3-6.4	SM 14, 15, 12	Requisite Skills: interpreting fire scene information and evidence for relationship to motive and/or opportunity
1033—3-6.4	SM 15	Requisite Skills: interviewing
1033—3-6.4	SM 12	Requisite Knowledge: types of motives common to incendiary fire investigation
1033—3-6.4	SM 12	Establish evidence as to motive and/or opportunity
1033—3-6.5	SM 14	Formulate an opinion of the person(s) and/or product(s) responsible for the fire
1033—3-6.5	SM 14-8	Requisite Knowledge
1033—3-7.1	SM 15, 16	Prepare a written investigation report
1033—3-7.1	SM 15	Requisite Knowledge: typical components of a written report
1033—3-7.1	SM 15	Requisite Knowledge: elements of writing
1033—3-7.1	SM 15	Requisite Knowledge: types of audiences and their respective needs
1033—3-7.2	SM 15	Requisite Knowledge: impact of releasing information
1033—3-7.2	SM 14	Requisite Skills: ability to correlate findings
1033—3-7.2	SM 16, 15	Express investigative findings verbally
1033—3-7.2	SM 15	Requisite Knowledge: informational needs of various types of audiences
1033—3-7.2	SM 15, 16	Requisite Skills: Communication Skills
1033—3-7.2	SM 5, 6, 10, 15	Requisite Knowledge: types of investigative findings
1033—3-7.2	SM 15	Requisite Skills: ability to determine audience needs
1033—3-7.3	SM 13	Requisite Knowledge: understanding of the types of legal proceedings
1033—3-7.3	SM 5, 6, 10, 15	Requisite Knowledge: types of investigative findings
1033—3-7.3	SM 15, 10	Requisite Skills: Communication and listening Skills
1033—3-7.4	SM 15, 16	Conduct public informational presentations
1033—3-7.4	SM 15, 16	Conduct public informational presentations