

Program of Instruction

Course Syllabus

Course Title: Fire & Arson Investigation – Module 2
Course Duration: 40 hours
Program: Investigation
Course Prerequisite: Fire & Arson Investigation – Module 1

Course Description: This is the second module of three 40-hour classes designed as the foundational level of education and training for fire and arson investigators. The program meets the Job Performance Requirements of NFPA 1033 “Professional Qualifications for Fire Investigator.” The investigation program includes comprehensive courses covering multiple topics and requiring significant student participation, reading and homework activity. Module II includes the following topics: Documentation of the investigation, physical evidence, origin & cause determination, analyzing the incident for cause and responsibility, failure analysis and analytical tools, explosions and incendiary fires. The text book included with the course is “Fire Investigator: Principles and Practice.” Primary resources for the program are NFPA 921 “Guide for Fire and Explosion Investigations” and “Kirk’s Fire Investigation.” The practical requirements for the class are individual and group investigations of a structured fire scene scenario. Module II must be taken consecutively with Module I. Firefighting gear is not required for the class but old clothes, gloves and work boots are recommended for the practical activity. Students are encouraged to bring personal cameras for the practical activity. The text book and NFPA 921 was provided the first day of Module 1 and should be brought to Modules 2. Students are encouraged to bring any reference material that they feel might be helpful to them.

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. (Post-Course Work)

Summary of Directions

Pre-Course Work: Read Chapters 14-22 in *Fire Investigator: Principles and Practice 4th edition*

Course Work: Students are expected to attend or make up all class hours in this course since it leads to a state level certification. Students are expected to attend class on time and to remain in class for the duration of the course. A student **MUST COMPLETE** all portions of this course, both classroom and practical in order to challenge the end-of-course exam

Post-Course Work: None

Course Policies:

Students are expected to utilize a “team” approach to the course discussion and activities. Students with experience or background in fire investigation are encouraged to share their experiences and help support less experienced students. The investigation program includes comprehensive courses covering multiple topics and requiring significant student participation, reading and homework activity.

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.

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:

The instructor will observe individual student participation in the classroom and group discussions. The instructor will collect and review required course material. A written exam utilizing Pro-Board testing standards will be completed by the student with at least 70% accuracy.

Textbook:

“Fire Investigator: Principles and Practice” 4th edition, Jones and Bartlett

Reference List:

NFPA 1033 “Professional Qualifications for Fire Investigator”, 2014 Edition

NFPA 921 “Guide for Fire and Explosion Investigations”, 2014 Edition

“Kirk’s Fire Investigation”

“Fire Investigator: Principles and Practice” 4th edition, Jones and Bartlett

Course Content

Chapter 14: Documentation of the Investigation

Chapter 15: Physical Evidence

Chapter 16: Origin Determination

Chapter 17: Fire Cause Determination

Chapter 18: Classification of Fire Cause

Chapter 19: Analyzing the Incident for Cause and Responsibility

Chapter 20: Failure Analysis and Analytical Tools

Chapter 21: Explosions

Chapter 22: Incendiary Fires

Course Schedule:

40-hour Format: Monday through Friday 8:00am – 5:00pm

Class Session	Text Chapter	Subject	Duration
1	14	Documentation of the Investigation	4 hours
1	15	Physical Evidence	3 hours
1		Evidence Activity	1 hour
			(8 hours)
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2	16	Origin Determination	4 hours
2	17	Cause Determination	3 hours
2	18	Classification of Fire Cause	1 hour
			(8 hours)
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3	19	Analyzing the Incident for Cause and Responsibility	1 hour
3	20	Failure Analysis and Analytical Tools	1 hour
3	21	Explosions	2 hours
3	22	Incendiary Fires	3 hours
		Skills Evaluation Introduction	1 hour
			(8 hours)
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4		Individual Skill Fire Investigation Evaluation	3 hours
4		Group Fire Investigation Activity	4 hours
4		Group Preparation Activity	1 hour
			(8 hours)
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5		Case Review Activity	2 hours
5		Group Presentation Activity	4 hours
5		Review	1 hour
		Exam	1 hour
			(8 hours)
			40 Hours Total

Module 3 Reading Assignments: Chapters 23 – 28

Course Schedule:

Weekend Format: Friday 6:00pm-10:00pm, Saturday & Sunday 8:00am-5:00pm

Class Session	Text Chapter	Subject	Duration
1 st Friday Evening	14	Documentation of the Investigation	4 hours
1 st Saturday	15	Physical Evidence	3 hours
1 st Saturday		Evidence Activity	1 hour
1 st Saturday	16	Origin Determination	4 hours
			(8 hours)
1 st Sunday	17	Cause Determination	3 hours
1 st Sunday	18	Classifications of Fire Cause	1 hour
1 st Sunday	19	Analyzing the Incident for Cause and Responsibility	1 hour
1 st Sunday	20	Failure Analysis and Analytical Tools	1 hour
1 st Sunday	21	Explosions	2 hours
			(8 hours)
2 nd Friday Evening	22	Incendiary Fires	3 hours
2 nd Friday Evening		Skills Evaluation Introduction	1 hour
			(4 hours)
2 nd Saturday		Individual Skill Fire Investigation Evaluation	3 hours
2 nd Saturday		Group Fire Investigation Activity	4 hours
2 nd Saturday		Group Preparation Activity	1 hour
			(8 hours)
2 nd Sunday		Case Review Activity	2 hours
2 nd Sunday		Group Presentation Activity	2 hours
2 nd Sunday		Review	1 hour
2 nd Sunday		Exam	1 hour
			(8 hours)
			40 Hours Total

Mod 3 Reading Assignments: Chapters 23 – 28