

COURSE OUTLINE
Fire Investigation

SECTION I

SUBJECT AREA AND COURSE NUMBER: Fire Technology – FTA 219

COURSE TITLE: Fire Investigation

COURSE CATALOG DESCRIPTION: This course presents methods for determining cause and place of fire origin, investigative techniques for accidental and incendiary fire, evidence recognition and preservation, and conducting interviews of suspects and witnesses. This course also covers issues in the litigation process associated with fire investigations.

LECTURE HOURS PER WEEK: 3 **CREDIT HOURS:** 3

LAB HOURS PER WEEK: 0

PREREQUISITES: FTA 116, CHE 111, and PHY 122 or permission of instructor

SECTION II

- A. **SCOPE:** Student will study federal, state, municipal, and private fire/explosion investigation agencies. NFPA 921 will be used as an approach to fire cause and origin. Students will learn the importance of evidence collection, evidence preservation, and techniques of interviewing. Case studies will be used.
- B. **REQUIRED WORK:** Students will be expected to complete all assigned readings and homework and submit all written work on time.
- C. **ATTENDANCE AND PARTICIPATION:** Regular attendance and class participation are expected.
- D. **METHODS OF INSTRUCTION:** The methods of instruction are determined by each instructor and may include, but are not limited to, lecture/discussion, case studies, small group tasks, collaborative learning, experimental/exploration, distance learning, student presentation, or use of technologies such as audio-visual materials, computers, and internet.

E. OBJECTIVES, OUTCOMES, AND ASSESSMENT: The following objectives and outcomes represent the department's core requirements for student achievement.

LEARNING OBJECTIVES	LEARNING OUTCOMES	ASSESSMENT METHODS
To demonstrate an understanding of :	Student will:	As measured by:
1. The student's role in the learning process	a) Attend regularly, on time, and stay for entire class period; b) Complete assignments and contribute positively to the class	Attendance records Class records
2. NFPA 921	Demonstrate complete understanding of all components of NFPA 921	Class discussion and exam
3. Basic fire science and fire behavior	Explain the theory of combustion	Exam
4. The relevant steps in the fire investigation process	Explain rules and methods for evidence collection, preservation, and interviewing techniques	Class discussion/exam
5. NFPA 1033	Detail the requirements of a code compliant investigator	Exam
6. The complete fire investigation process	Participate in a fire investigation critique	Case study

F. TEXTS AND MATERIALS: As selected by instructor

G. INFORMATION TECHNOLOGY: As determined by instructor.