

CURRICULUM OVERVIEW

Fire and Emergency Services

Career and Technical Education Series



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Fire and Emergency Services Course Overview

Emergency and fire-management services are essential infrastructure components of a community. They provide a resource for dealing with numerous types of emergencies, including fires, motor vehicle, and industrial accidents, and medical emergencies. In addition, these services provide fire prevention and community-outreach programs. This course provides students with the basic structure of these organizations as well as the rules and guidelines that govern pre-employment education requirements. The vehicles, equipment, and emergency-mitigations strategies that are commonly used in the emergency- and fire-management field are also explored. Students will understand the goals of an emergency-management service and how they are implemented and managed, including personnel, budget, and labor-management challenges in the organization. Finally, the course also provides students with an overview of large-scale emergency incidents that overwhelm local agencies. Various preparedness plans are discussed. In the end, students will have been exposed to the typical characteristics and framework of modern emergency- and fire-management organizations and will have a better understanding of a career in this field.

- **Modern Emergency and Fire Management Services:** This unit discusses the organizational structure of modern emergency medical and fire service systems. It also explains educational requirements for many states for firefighters, EMT, and paramedic positions, and describes common state and local laws that govern emergency-management educational requirements. Additionally, personal characteristics and requirements beyond education were explored.
- **Tools of the Trade:** This unit explores the various types of apparatuses used by fire departments in the United States and explains how emergency workers can predict which equipment will be most appropriate in a disaster scenario. The unit also shows how to identify target hazards in a community and how to determine the appropriate special-operations apparatus for a given scenario. Finally, the unit explains how to predict what regulations are required for protection in specialized locations.
- **Emergency and Fire Management Skills in Action:** This unit describes the main goals of an emergency and fire management department at the scene of an emergency by explaining the steps in a command sequence and the required results of the steps. This unit also explains how an incident manager chooses which apparatuses are deployed to accomplish various missions. Finally, this unit explores the historical changes that have occurred in fire departments in the United States, specifically focusing on the changes in apparatuses over the years.
- **Organizing and Managing an Emergency and Fire Management System:** This unit focuses on how communities are shifting their expectations with respect to fire-personnel roles. It also examines the workforce-diversity changes that have affected emergency-management departments, and challenges and benefits associated with these changes. Finally, it shows how a local government may impact the operations of an emergency agency through funding, and how workers sometimes respond by demanding collective bargaining.
- **Advanced Situations for Emergency and Fire Management Operations:** In this unit, students discover different types of disasters, their trends, and their consequences on communities, as well as the risks factors and steps that can minimize these risks. The unit also explains the various levels and components of a disaster-management plan with examples of what a mutual-aid agreement would provide an emergency-management agency to show how this would assist incident mitigation. This unit also builds upon previously learned concepts of demographic changes by investigating the potentials for mass-casualty incidents, especially related to the mass transit of people and cargo.

Unit 1: Modern Emergency and Fire Management Services		
Fire and Emergency Services	Assignments	
	1. Course Overview	10. Employment Standards and Requirements
	2. People in Emergency and Fire Management Systems	11. Conveying Information in Fire Management
	3. Roles, Duties, and Responsibilities	12. Project: Written Situational Report
	4. Project: Recruitment Brochure or Advertisement	13. Quiz: Characteristics of an Emergency- and Fire-Management Employee
	5. Problem Solving within the Ranks	14. Special Project*
	6. Project: Near-Miss Analyses	15. Test
	7. Quiz: Overview of Emergency Medical and Fire Service Structure	16. Course Project Part 1: Who is Your Local Fire Department?*
	8. Education for a Future Emergency Management Employee	17. Glossary and Credits
	9. Project: Local Education Requirements for Entry-Level EMT, Firefighter and Paramedic Positions	
Unit 2: Tools of the Trade		
Fire and Emergency Services	Assignments	
	1. Types of Modern Emergency Vehicles	10. Specialty Apparatus Applications
	2. Project: Local Fire or EMS Station Apparatus	11. Project: Potential Hazardous Business Investigation
	3. Functions of Modern Emergency Vehicles	12. Quiz: Specialty Emergency Vehicles
	4. Equipment on Modern Emergency Vehicles	13. Special Project*
	5. Project: Equipment Historical Analysis	14. Test
	6. Quiz: Emergency Vehicles and Apparatus	15. Course Project Part 2: How Does Your Fire Department Prepare to Help You?*
	7. Specialized Fire Apparatus	16. Glossary and Credits
	8. Project: Special-Operations Apparatus	
	9. Specialized Fire Apparatus Functions	
Unit 3: Emergency and Fire Management Skills in Action		
Fire and Emergency Services	Assignments	
	1. Mission Possible: Emergency Scene Priorities	10. Which Apparatus for the Task at Hand?
	2. Anatomy of an Action Plan	11. Project: Fire Apparatus Assignments
	3. Project: Action Plan Chart	12. Quiz: Fire Apparatus History
	4. Strategies and Tactics at the Scene	13. Special Project*
	5. Project: Strategies and Tactics Analysis	14. Test
	6. Quiz: Getting a Handle on the Emergency Incident	15. Course Project Part 3: How Can Your Fire Department Help You?*
	7. Apparatus and Crews: The Worker Bees	16. Glossary and Credits
	8. The History of Fire Apparatus and Firefighting	
	9. Project: Fire Apparatus History Research	
Unit 4: Organizing and Managing an Emergency and Fire Management System		
Fire and Emergency Services	Assignments	
	1. Emergency Management, Now and Then	9. Department Mission: Doing More with Less
	2. Project: Local Emergency Services, an Interview	10. Project: Customer-Service Programs in Local Communities
	3. The Changing Demands and Expectations of the Community	11. People Who Influence How an Emergency Agency Operates
	4. Scientific Advances: The Good and the Bad	12. Quiz: Influences Within and Outside Fire Departments
	5. Project: Fire Safety in the Home	13. Special Project*
	6. Quiz: Shifting Demographics and Diverse Expectations	14. Test
	7. The Winds of Change in Emergency Management Departments	15. Course Project Part 4: How is Your Fire Department Changing?*
	8. Project: Demographics in Community and Fire Department	16. Glossary and Credits

Unit 5: Advanced Situations for Emergency and Fire Operations	
Fire and Emergency Services	Assignments
	1. Anatomy of a Disaster
	2. Project: Natural Disaster Chart
	3. Disaster Response and Planning
	4. Managing the Resources: NIMS / ICS
	5. Project: NIMS Command Chart
	6. Quiz: Disasters and Catastrophes
	7. Demographics and the Risks of Mass Transit
	8. Transportation Modes and Emergencies
	9. Project: Transportation Emergencies Chart
	10. Mitigating the Transportation Emergency Situation
	11. Project: Hazardous Materials Research
	12. Quiz: Mass Transit and Mass Casualty Incidents
	13. Special Project*
	14. Test
	15. Course Project Part 5: What is Your Fire Department Prepared For?*
	16. Glossary and Credits

Unit 5: Advanced Situations for Emergency and Fire Operations	
F&ES	Assignments
	1. Course Project Part 6: How Volunteering Makes a Difference*
	2. Review
	3. Exam

(*) Indicates alternative assignment