

**Law, Public Safety, Corrections and Security Career Cluster
Essentials of Fire and Emergency Services
Course Number: 43.46000**

Course Description:

This course addresses the essential components needed for fire and emergency services. Students will be prepared for their third-course options that include the following: firefighting, emergency medical responder, and public safety communications. Students will explore career options, interagency communications, medical services, and basic firefighting standards. The prerequisites for this course are Introduction to Law, Public Safety and Corrections and Security.

Course Standard 1

LPSCS-EFES-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé

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Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict

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Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

LPSCS-EFES-2

Distinguish between the various fire and emergency agencies and the functions, roles and responsibilities of those agencies within the federal, state and local public safety systems.

- 2.1 Analyze the relationship between the fire agencies, emergency medical service, and rescue organizations.
- 2.2 Compare paid versus volunteer fire and emergency agencies.
- 2.3 Research current trends including communities requiring multiple certifications for fire and emergency personnel.

Course Standard 3

LPSCS-EFES-3

Create a timeline of the history of fire and emergency services and identify the events that have had an impact on current codes, rules, and laws.

- 3.1 Research the history of fire and emergency services.
- 3.2 Analyze case studies of fire and emergency services including major fires and other disaster events.
- 3.3 Analyze the rise of domestic attack and the impact on regulations, codes, and laws.
- 3.4 Critique local, state and federal response to various disasters that have occurred.

Course Standard 4

LPSCS-EFES-4

Utilize up-to-date technology equipment and applications, as well as other appropriate equipment necessary to facilitate the management of fire and emergency management situations.

- 4.1 Execute protocols for managing emergency situations using radio equipment, computer technology, and public address/warning systems, and mass notification systems.
- 4.2 Demonstrate operating telecommunications equipment common to emergency and fire management.
- 4.3 Demonstrate proper documentation utilized by fire and emergency management services.
- 4.4 Demonstrate maintaining emergency equipment within established criteria, including required equipment checks and training of personnel who utilize the equipment.

Course Standard 5

LPSCS-EFES-5

Execute safety procedures and protocols associated with local, state, and federal regulations.

- 5.1 Evaluate emergency situations and select procedures that reduce personal safety risks.
- 5.2 Demonstrate reporting violations of safety regulations according to regulations and established protocol.
- 5.3 Prepare and train on medical, fire, environmental, technological, or other situations where hazardous materials are present.
- 5.4 Analyze the role of Hazardous Material Placards in transportation incidents. (Utilize appropriate resources such as the (ERG) Emergency Response Guidebook.)
- 5.5 Demonstrate performing simulated exercises on proper procedures to handle hazardous materials.
- 5.6 Explain the dangers associated with firefighting and the firefighter safety culture.

- 5.7 Summarize the dangers of being exposed to pathogen and demonstrate methods to protect from the risks associated to pathogen exposure.
- 5.8 Identify and describe the elements of personal accountability systems.
- 5.9 Categorize hazards experienced with public utilities.
- 5.10 Describe clothing and protective equipment, including the care and cleaning used by firefighters and emergency personnel.
- 5.11 Evaluate dangers of protective equipment including overheating and respirations issues.
- 5.12 Explain how a self-contained breathing apparatus (SCBA) works and when it how it is used in an emergency situation.

Course Standard 6

LPSCS-EFES-6

Compare and contrast the different career fields, the organizational structure, and the rules and regulations in fire and emergency services.

- 6.1 Evaluate the emotional and physical challenges that an employee in the fire and emergency fields may face.
- 6.2 Research career requirements (training, preparation, and certification) for various careers in fire and emergency services.
- 6.3 Explain the role of the public safety communication officer and how they interact with various public safety agencies.
- 6.4 Identify and explain the chain of command and the organizational structure of the fire and emergency departments.
- 6.5 Analyze the scope of the department operations and their standard operational procedures (SOP).
- 6.6 Identify municipal, state, and federal rules and regulations that apply to all positions within a department.
- 6.7 Distinguish the different companies within fire services including an engine, truck (ladder), a rescue squad, a brush, hazardous material, an Emergency Medical/ ambulance, and a special rescue.

Course Standard 7

LPSCS-EFES-7

Demonstrate professional communication skills utilized in fire and emergency scenarios.

- 7.1 Utilize active and passive listening skills in fire and emergency situations.
- 7.2 Demonstrate using appropriate verbal and nonverbal communications skills in fire and emergency situations.
- 7.3 Analyze the role of cultural diversity and language barrier as it applies to fire and emergency situations.
- 7.4 Determine problems and solutions when public safety communications officer process calls from people with hearing and speech impairments.

Course Standard 8

LPSCS-EFES-8

Implement an appropriate Incident Command System to effectively manage an incident scene.

- 8.1 Formulate and implement an action plan at a simulated emergency scene.
- 8.2 Determine what is involved at the emergency scene and what may have contributed to the situation.

- 8.3 Demonstrate notifying appropriate agencies for support (i.e. Electric and gas companies).
- 8.4 Establish a priority system to guide actions during implementation of an action plan.
- 8.5 Execute steps involved in managing logistical procedures at the incident, including identifying equipment used and returned to service and documentation of the events.

Course Standard 9

LPSCS-EFES-9

Recommend improvements to community and school prevention and preparedness plans.

- 9.1 Analyze emergency plans for government and the private sector.
- 9.2 Explore fire prevention training.
- 9.3 Demonstrate preparing an emergency and disaster supply kit.
- 9.4 Demonstrate selecting appropriate protective equipment.
- 9.5 Identify aspects of response scene safety and compare types of response techniques and methodologies.

Course Standard 10

LPSCS-EFES-10

Analyze the chemistry of fire.

- 10.1 Analyze fire, the fire triangle, and tetrahedron.
- 10.2 Identify and describe chemical, mechanical and electrical energy heat sources.
- 10.3 Research incipient, flame spread; flash over; steady state; clear burning; growth of fire from ignition to free burning, including the effects of ventilation and oxygen deprivation on flame spread.
- 10.4 Evaluate the three methods of heat transfer and the three physical stages of matter in which fuels are commonly found.
- 10.5 Examine the hazards of finely divided fuels as they relate to the combustion process.
- 10.6 Research flash point, fire point and ignition temperature.
- 10.7 Determine concentrations of oxygen in air as it affects combustion.
- 10.8 Identify and describe products of combustion commonly found in structural fires that create a life hazard.
- 10.9 Compare thermal balance and imbalance and define units of heat measurement.

Course Standard 11

LPSCS-EFES-11

Access rescue operations in fire and emergency situations.

- 11.1 Demonstrate proper procedures when working in a smoke filled environment.
- 11.2 Analyze responses to being lost or disoriented in a hostile environment.
- 11.3 Explain the proper procedure to search a building and apply search pattern methods to given scenarios.
- 11.4 Describe rescue techniques used in hostile environments.
- 11.5 Observe/demonstrate rescue carries and drags.

Course Standard 12

LPSCS-EFES-12

Evaluate the use of fire hoses, nozzles, portable lighting, appliances, and ladders.

- 12.1 Identify and explain the sizes, types, amount, and use of hoses carried on a pumper, and the use of nozzles, hose adapters, and hose appliances.
- 12.2 Demonstrate connecting a fire hose to a hydrant.

- 12.3 Analyze the techniques for coupling fire hoses and extending a hose, and how to inspect and maintain the fire hoses, couplings, and nozzles.
- 12.4 Examine hydrant-to-pumper hose connections.
- 12.5 Determine the uses of portable lighting and the safety procedures involved when utilizing lighting equipment.
- 12.6 Identify and describe ladder components and types, and access the importance of ground ladder maintenance.
- 12.7 Evaluate the necessity of following proper procedures in carrying, positioning, raising ladders, and climbing ladder.

Course Standard 13

LPSCS-EFES-13

Identify the leading causes of fire, methods for preventing fires, and safety procedures involved in fire prevention.

- 13.1 Identify and describe the leading causes of fire and how those might be prevented.
- 13.2 Explain the principles of ventilation and the advantages and effects of ventilation.
- 13.3 Identify and explain the types of sprinkler systems and the main control valve on an automatic sprinkler system.
- 13.4 Research the procedures for conducting fire inspections.
- 13.5 Identify and describe dangerous building conditions that may be created by fire.
- 13.6 Demonstrate action techniques when trapped or disoriented in a fire situation.
- 13.7 Determine procedures to be used in electrical emergencies.
- 13.8 Evaluate school exit drill procedures.
- 13.9 Develop a pre-fire planning diagram of a building and an accident prevention program.
- 13.10 Develop an accident prevention program for a school or a community.

Course Standard 14

LPSCS-EFES-14

Utilize current guidelines and techniques in responding to various medical emergencies and situation involving injury, illness and exposure.

- 14.1 Respond to emergency situations with an emphasis on scene safety and the identification of additional resources and hazards that may exist.
- 14.2 Demonstrate adhering to protocol and regulations for infection control and utilizing proper personal protective equipment (PPE) in emergency situations.
- 14.3 Demonstrate adhering to infection and exposure control and safety guidelines to protect the public health.
- 14.4 Demonstrate conducting triage under simulated disaster conditions.
- 14.5 Demonstrate performing head to toe patient assessments.
- 14.6 Determine mechanism of injury when possible for trauma patients.
- 14.7 Demonstrate airway maintenance and treatment for shock.
- 14.8 Identify and explain methods to ensure proper circulation including chest compressions, controlling bleeding, and adequate perfusion.
- 14.9 Demonstrate performing proper bandaging and immobilization of patient injury adhering to scope of practice.
- 14.10 Appraise emergency medical scenarios for proper response including diabetic, cardiac, poisoning, allergic response, heat and cold stress emergencies.