

# FIRE AND EMERGENCY SERV ADMIN (FESA)

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## FESA 3101 Applied Writing

**Credit:** 1 (1-0-0)

The focus of this course is discovering students' place in a disciplinary discussion where students will demonstrate knowledge of discipline-specific academic resources, develop major issues within the discipline, and become active members of the community within the discipline. This course will focus on specific writing topics such as preparing an executive summary, preparing a budget proposal and bid process, preparation of grant proposals and other management level writing topics. TSI Restriction(s): Reading, and Writing

**Prerequisites:** Junior or senior standing; UNIV 2101 or Junior standing, Enrollment in FADM, FESA, or HSEC concentration.

**Restrictions:** Enrollment limited to students with a semester level of Junior or Senior. Enrollment is limited to students with a concentration in FESA-Fire Administration, Fire\_Emergency Services Admin or FESA-Homeland Security.

## FESA 3301 Emergency Medical Services Management

**Credits:** 3 (3-0-0)

Investigates the core functions of the emergency medical services (EMS) administrator and the concepts associated with EMS management and processes that contribute to the effectiveness of day-to-day operations within an EMS organization. Areas of study include strategic planning, customer service, quality management, human resources management, and data collection.

**Restrictions:** Graduate level students may not enroll.

## FESA 3302 EMS Planning and Devt

**Credits:** 3 (3-0-0)

Presents an overview of emergency medical services (EMS) system design and development. A history of EMS in the areas of public and private services is examined, along with a comparison of service delivery, strategic planning, and model system development and implementation, as well as their impact on emergency healthcare delivery.

**Restrictions:** Graduate level students may not enroll.

## FESA 3303 EMS Operations and Personnel MGMT

**Credits:** 3 (3-0-0)

Explores relationships of culture in recruitment, management, and retention of emergency medical services (EMS) personnel. Also examines the influence of effective personnel management on staffing and operational success for the EMS agency. Key areas of investigation include researching applicable human resources or personnel laws and regulations as well as ensuring that processes are in place for educating supervisory staff and employees, including how to monitor for compliance. Primary administrative functions include conducting employee performance reviews, developing personnel schedules, and investigating complaints.

**Restrictions:** Graduate level students may not enroll.

## FESA 3304 Foundations in EMS Education

**Credits:** 3 (0-0-0)

Provides a foundational understanding of emergency medical services (EMS) education for the EMS manager. General concepts such as learning styles and barriers to learning are discussed. Other course components include developing instructional goals and outcomes, curriculum and lesson plans, and various forms of learning aids, including how technology enhances the learning process. Finally, this course also reviews education evaluation tool development, concepts of program administration, and legal aspects of instruction.

**Prerequisites:** EMS Management EMS Planning and Development .

**Restrictions:** Graduate level students may not enroll.

## FESA 3305 Risk Management Practices in EMS

**Credits:** 3 (3-0-0)

Examines issues related to reduction or prevention of risk associated with the administration of emergency medical services (EMS). Areas of concern are related to human resource management, workplace safety, personnel safety, vehicle operations, and clinical proficiency. Current practices support a culture of safety with an emphasis on provider health and wellness, and system accountability as evidenced by the strategic implementation of programs aimed at improving awareness of risk-related issues, including promoting ownership for achieving organizational goals related to risk management.

**Prerequisites:** EMS Management EMS Planning Development .

**Restrictions:** Graduate level students may not enroll.

## FESA 3306 Research for the EMS Professional

**Credits:** 3 (3-0-0)

Introduces the EMS administrator to the fundamentals and importance of research for the EMS professional. Based on changes under healthcare reform, at no other time has the need for research specific to this profession been more critical. Accordingly, the goals of the course include understanding not only the research process but also how to critically review findings and apply solutions to real problems. Students discuss the relevance of research for the EMS profession, both in the clinical and administrative setting, review current research, and develop a research proposal on an issue of their choice.

**Prerequisites:** EMS Management EMS Planning Development .

**Restrictions:** Graduate level students may not enroll.

## FESA 3330 Political/Legal Fndtns Fire Sci

**Credits:** 3 (3-0-0)

This course examines the legal aspects of the fire service and political and social impacts of legal issues. This course includes a review of the American legal system, Texas legal system, local government systems and in-depth coverage of legal and political issues involving employment and personnel matters, administrative and operational matters, planning and code enforcement, and legislative and political processes with regard to the fire service. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.

**FESA 3332 Fire Prevention Org and Mgmt****Credits:** 3 (3-0-0)

This course examines the factors that shape fire risk and the tools for fire prevention, including risk reduction education, codes and standards, inspection and plans review, fire investigation, research, master planning, and various types or influence and strategies. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3334 Personnel Mgmt-Fire/Emerg Serv****Credits:** 3 (3-0-0)

An examination of the basic human resource management and development practices of the fire and emergency services professions. Topics include, but are not limited to the development of the merit system and civil service; public sector requirements of hiring, promotion, pay, and benefits; discipline and grievance handling; the development and impact of public-sector collective bargaining. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3336 Adv Prin Fire/Emer Safety Surv****Credits:** 3 (3-0-0)

This course will look at the basic principles and history related to the National Fire Fighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. The course will also emphasize their importance of safety and survival at the supervisory and managerial levels. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3338 Community Risk Reduction****Credits:** 3 (3-0-0)

This course examines concepts of community sociology, the role of fire-related organizations within the community, and their impact on the local fire problem, including fire service relationships within the community and other agencies, developing a community inventory, shaping community policy, master planning, and shaping community perceptions about the local fire service. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3340 Disaster Planning and Control****Credits:** 3 (3-0-0)

This course examines concepts and principles Disaster Planning and Control of fires, and natural and man-made disasters, including National Incident Management System - Incident Command Systems (NIMS ICS), mutual aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3342 Advanced Leadership for the Fire Officer****Credits:** 3 (3-0-0)

This course will enable students to meet the knowledge and skill requirements of NFPA 1021, Standard for Fire Service Officer Professional qualifications, Chapter 6. The class is designed to focus on advanced management of fire service divisions/programs. The course will focus on several key areas the mid-level fire officers are required to manage and lead. This course will require the students to complete skill requirements of a Fire Officer III as prescribed by Texas Commission on Fire Protection (TCFP). TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3344 Management of Fire Department Training Programs****Credits:** 3 (3-0-0)

This course will enable students to meet the requirements of NFPA 1041, Standard for Fire Service Instructor Professional qualifications. This course will expand the knowledge and ability of the student to develop comprehensive training curriculum and programs for use by single or multiple organizations; conduct organization needs analysis; and develop training goals and implementation strategies. This course will require the students to complete skill requirements of a Fire Instructor III as prescribed by Texas Commission on Fire Protection (TCFP). TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3346 Adv Firefight Strategy/Tactics****Credits:** 3 (3-0-0)

Emphasis on the use of incident management in large scale command problems and other specialized fire problems. Students will utilize the National Infrastructure Preparedness Plan (NIPP, 2013) to identify Critical Infrastructure and Key Resources (CIKR) needs and issues in relation to strategy and tactical requirements related to Homeland Security responses. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3348 Homeland Security/Homeland Def****Credits:** 3 (3-0-0)

This class will examine the policy and practices related to Homeland Security and Homeland Defense. Students will utilize the National Infrastructure Preparedness Plan (NIPP, 2013), Homeland Security and Homeland Defense documents to understand the policy and practices since the creation of the Department of Homeland Security. Students identify Critical Infrastructure and Key Resources (CIKR) needs and issues in relation to requirements related to Homeland Security response. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.

**FESA 3350 Intro-Fndmntl Homeland Securit****Credits:** 3 (3-0-0)

This course is an introductory course that examines many facets of Homeland Security in the United States as it relates to emergency response. There will be a review of the historical and contemporary governmental theories and practices of Homeland Security and emergency services at both the public and private levels. An examination of Homeland Security as it relates to national, regional, state and local emergency responses will be provided. The course also details the administrative, legislative and operational elements of Homeland Security with an understanding and appreciation of Presidential declarations, Presidential directives, judicial rulings, Congressional initiatives and constitutional rights as it applies to providing emergency services to the citizens of the United States. Other topics to be presented as they relate to emergency responders may include the threat of terrorism, manmade and natural disasters, governmental policy, intelligence and investigative techniques that support this overall objective. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3352 Homeland Security/Emerg Mgmt****Credits:** 3 (3-0-0)

This course will examine the evolution of emergency management, homeland security and emergency response in the wake of the events of 9-11 and Hurricane Katrina. It will survey multiple disciplines involved in the disaster processes and future directions in these fields. Students will also examine the success and failures of emergency management by examining such incidents as World Trade Center Attacks, Pentagon Attacks, Hurricane Katrina, Hurricane Ike, Los Angeles Riots and other emergency events that have shaped the relationship between the fire service and emergency management and the Federal Government. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 3356 Business Continuity: Understanding Disaster Response and Recovery****Credits:** 3 (3-0-0)

The course covers business continuity planning, from an emergency response methodology used to create and validate a plan for maintaining continuous business operations before, during, and after disasters or disruptive events. It also covers disaster recovery, which is aimed at stopping the effects of disasters as quickly as possible, and addressing the immediate aftermath. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:****FESA 3358 Exer, Dsgn, Eval Fire/Emg Serv****Credits:** 3 (3-0-0)

Exercise, Design, and Evaluation is intended to provides participants with the knowledge and skills to develop and conduct disaster exercises that will test a community's emergency operations plan and operational response capability. To this end, the course provides hands-on training in the design, conduct and evaluation of exercise so that participants will be able to develop and implement a comprehensive exercise program in their respective jurisdictions. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4101 Critical Thinking for Public Safety****Credit:** 1 (1-0-0)

The focus of this course is discovering students' place in a professional field where students will demonstrate knowledge of professional expectations and resources, demonstrate growth over their university experience, and become active members in their profession. TSI Restriction(s): Reading, Math, and Writing

**Prerequisites:** Senior standing; UNIV 3101 or FESA 3101 or Senior standing; Enrollment in FADM, FESA, or HSEC concentration.**Restrictions:** Enrollment limited to students with a semester level of Senior. Enrollment is limited to students with a concentration in FESA-Fire Administration, Fire\_Emergency Services Admin or FESA-Homeland Security.**FESA 4102 Grant Writing for Public Service****Credit:** 1 (1-0-0)

The Grant Writing for Public Service class is designed for students whose job assignment requires knowledge of grant writing. The course will teach students the mechanics of proposal writing and the political and social aspects of "grantsmanship," as they develop their skills in identifying sources of grant funding, doing useful research to support their applications, and designing their proposals to specific departmental needs. There will be several short writing assignments, an exam, and an independent project. Students may also be asked to engage in a collaborative grant project to help build their skills in collaboration and grant writing across a wider spectrum.

**Restrictions:** Graduate level students may not enroll.**FESA 4301 Finance of EMS Systems****Credits:** 3 (3-0-0)

Explores the practice and principles pertaining to the financial management of emergency medical services (EMS) systems. The curriculum will emphasize the importance of finance, budgeting and alternative funding sources, and the processes that contribute to assets and liabilities of an EMS system. It will also explore various financial issues often encountered by EMS professionals and models used for efficiently providing EMS.

**Prerequisites:** EMS Management EMS Planning Development .**Restrictions:** Graduate level students may not enroll.**FESA 4302 Leadership in EMS Systems****Credits:** 3 (3-0-0)

Provides students with knowledge, tools, and skills that will be needed to assume a leadership role in emergency medical services (EMS). Career advancement from field staff or lower-level supervisor requires transitioning from simple supervisory techniques to developing leadership qualities that will enable the individual to manage from a leadership position. Techniques that encourage motivation and teamwork are essential for organizational growth. Students learn how to apply basic leadership principles in organizational settings, assess leadership styles, and develop strategies to become leaders in EMS.

**Prerequisites:** EMS Planning Development .**Restrictions:** Graduate level students may not enroll.

**FESA 4303 Legal, Political and Reg Environment in EMS****Credits:** 3 (3-0-0)

Identifies the key points of the legal, political, and regulatory environment associated with the administration and workings of a modern emergency medical service (EMS). The importance of the collective body of laws and regulations are examined as it relates to EMS. This course focuses on the mechanics of the legal system, specific laws directly related to the provision and management of EMS, due process and disciplinary procedures for EMS personnel issues, the importance of quality documentation, and the study of specific acts of federal legislation such as the Emergency Medical Treatment and Labor Act (EMTALA), Health Insurance Portability and Accountability Act (HIPAA), and Consolidated Omnibus Budget Reconciliation Act (COBRA).

**Prerequisites:** EMS Management EMS Planning Development .**Restrictions:** Graduate level students may not enroll.**FESA 4304 EMS Roles During Emergencies & Disasters****Credits:** 3 (3-0-0)

Explores proper planning and response of emergency medical services (EMS) to public emergencies and crisis situations as EMS leaders must prepare for any situation that threatens public health, including the physical and mental impact on EMS professionals during a disaster. This course highlights some of the primary types of emergencies that EMS leaders must be prepared to encounter while meeting legal, political, or regulatory guidelines relevant to the role of the organization in the community with a focus on community-wide planning, the development of effective systems and operational plans, and a multiprofessional approach to emergency and disaster response.

**Prerequisites:** EMS Management EMS Planning Development .**Restrictions:** Graduate level students may not enroll.**FESA 4305 Mobile Integrated Health Care****Credits:** 3 (3-0-0)

Explores adaptations to the existing model of care that will be more suitable for emergency medical services (EMS) organizations under healthcare reform. Provides an overview of how mobile integrated health systems can contribute to improved patient outcomes, patient satisfaction, and integrate more seamlessly in the healthcare continuum. Additional topics include conducting community needs assessments, engaging stakeholders, and performance measurements for programs.

**Prerequisites:** EMS Management EMS Planning Development .**Restrictions:** Graduate level students may not enroll.**FESA 4306 EMS System Design-Capstone****Credits:** 3 (3-0-0)

Incorporates key elements of system design for emergency medical services (EMS) to facilitate preparation of a program proposal. Students discuss how various components of program development contribute to an eventual success of their proposals. Students incorporate academic and professional research into a final proposal that synthesizes program outcomes and may be used for future contributions or implementation in EMS. .

**Prerequisites:** Completion of 8 EMS management courses.**Restrictions:** Graduate level students may not enroll.**FESA 4310 Fire/Emergency Serv Administra****Credits:** 3 (3-0-0)

This course is designed to be a progressive primer for students who want more knowledge about fire and emergency services administration. The course examines the important skills and knowledge needed to manage/lead fire and emergency services department through the challenges and changes of the 21st century. Topics include Leadership skills, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems. A central part of the course focuses on how the leadership of a fire and emergency services department develops internal and external cooperation to create a coordinated approach to achieving the department's mission. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4312 Applications of Fire Research****Credits:** 3 (3-0-0)

This course examines the basic principles of research and methodology for analyzing current fire-related research. The course also provides a framework for conducting and evaluating independent research in the following areas: fire dynamics, fire test standards and codes, fire safety, fire modeling, structural fire safety, life-safety, firefighter health and safety, automatic detection and suppression, transportation fire hazards, risk analysis and loss control, fire service applied research and new trends in fire-related research. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4314 Public Safety Leadership/Ethic****Credits:** 3 (3-0-0)

This course will introduce students to a variety of issues within the context of leadership. Through a variety of learning methodologies such as written case studies, video case analysis, and interactive learning processes, the student will not only study leadership and ethics. A focus of this course is to provide public safety members with a greater understanding and appreciation of the concerns and issues involving leadership and ethics, which exist within the realm of public safety leadership. Further, it is the goal of this course for each student to exercise effective leadership in all aspects of life. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4316 Dev Data Base Outcome/Fire/EMS****Credits:** 3 (3-0-0)

This course will provide information and tools that fire service personnel and other public service managers can use to develop and prepare their agency to evaluate performance activities. The course will introduce the student to the self-assessment and accreditation processes as developed by Center for Public Safety Excellence (CPSE) and their accreditation programs administered by the Commission on Fire Accreditation International (CFAI) and the Commission on Professional Credentialing (CPC). The course will introduce students to basic analysis techniques using Microsoft Excel. Students will learn how to evaluate fire service data, develop recommendations, and identify needs and trends. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.

**FESA 4318 Terrorism and WMD****Credits:** 3 (3-0-0)

Examines the philosophies and tactics of terrorist groups, in relation to the use of weapons of mass destruction (WMD), and discusses emerging terrorism trends and WMD issues in context of the fire service. Also, covers the study of the methodology, incident response, and managing the consequences of events involving terrorist activities and WMD's. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4320 Fin Mgmt Public Budget Fire/EMS****Credits:** 3 (3-0-0)

Public budgeting is a complex and rapidly changing field. What public budgeting is depends on who asks the question and on prevailing collective views regarding the role and responsibility of government. Many questions and, thus, many answers are possible. But, who gets what and how governments generate the funds to finance public services are still the "big questions" of public budgeting. Students will be introduced to the principles and practices used by federal, state, and local governments to acquire and spend money within the context of American Democracy, capitalism, federalism, and economics. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4324 Adv Mgmt for Chief Fire Officer****Credits:** 3 (3-0-0)

This course will enable students to meet the knowledge and skill requirements of NFPA 1021, Standard for Fire Service Officer Professional qualifications, Chapter 7. The class is designed to focus on executive level chief officer management of fire service divisions/programs. The course will focus on several key administrative areas that the executive level fire officers are required to lead and manage. This course will require the students to complete skill requirements of a Fire Officer IV as prescribed by Texas Commission on Fire Protection (TCFP). TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4360 Homeland Secur Law/Policy/Pract****Credits:** 3 (3-0-0)

This course will provide an overview of the laws governing the respective powers and responsibilities of the different branches of government (executive, legislative, and judiciary) at the federal, state, and local level as they relate to emergency administration, preparedness and response on matters affecting homeland security. Homeland security is an American umbrella term for "the concerted national effort to ensure a homeland that is safe, secure, and resilient against terrorism and other hazards where American interests, aspirations, and ways of life can thrive to the national effort to prevent terrorist attacks within the United States, reduce the vulnerability of the U.S. to terrorism, and minimize the damage from attacks that do occur. With the creation of the Department of Homeland Security and the changes to emergency response policies and practices fire and emergency response personnel must have a sound understanding of the laws, policies and practices that govern the areas related to homeland security and emergency response. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4362 Intro Crit Infrastruc/Key Resr****Credits:** 3 (3-0-0)

The course will provide an overview of the nation's strategies for critical infrastructure protection. The course will examine the definition of critical infrastructure as it exists today. Students will examine the seventeen areas of critical infrastructure. Students will also gain insight and understanding into the public and private partnership that is involved in protecting Critical Infrastructure and Key Resources (CIKR). TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4364 Introduction to Cybersecurity for Public Safety****Credits:** 3 (3-0-0)

This course is an introduction to the field of Cybersecurity for those who are curious about it, and who want to be literate in the field. Learners will gain an overview of the Cybersecurity landscape including perspectives from both an international and national (USA) arenas along with a starter to the threat potential and the legal consequences. Students will be introduced how public safety can be impacted by cybersecurity attacks and other issues related to cybersecurity landscape. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:****FESA 4366 Analyz Public Policy Rltn FESA****Credits:** 3 (3-0-0)

This class introduces fire and emergency services personnel to analytical frameworks for thinking about various aspects of public policy process. We do not student a single context or policy, but rather, seek to understand how policy actors succeed (or fail) in obtaining their objectives in relation to fire and emergency services issues related to public safety. You will learn to think carefully about institutions and how to present your analysis to city leader and policy makers. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.**FESA 4368 Intro Unman Aerial Dev (UAV)****Credits:** 3 (3-0-0)

A first course in unmanned aerial vehicles (UAVs), aka "drones", and the technologies involved in their operation. Coverage includes UAV components, command, and control (C2) communication systems, basics of flight, regulatory and regulations, safety and societal considerations. TSI Restriction(s): Reading, Math, and Writing

**Restrictions:** Graduate level students may not enroll.