# EMERGENCY MANAGEMENT (EM)

### EM 5105 Foundations of Emergency Management (3)

History of the profession; contemporary emergency management concepts, functions, and practices for government, nonprofit organizations, and the private sector.

#### EM 5525 Disaster Recovery (3)

Prerequisite(s): EM 5105.

Processes for short- and long-term recovery for individuals, families, and communities; provision of recovery assistance by both public and voluntary sectors.

#### EM 5540 Hazard Mitigation (3)

Prerequisite(s): EM 5105. Mitigation concepts, implementation approaches, and planning.

### EM 5545 Emergency Preparedness (3)

Prerequisite(s): EM 5105.

Preparedness frameworks and strategies; techniques of emergency operations planning, exercise design and evaluation, and public education.

# EM 5555 Disaster Response (3)

Prerequisite(s): EM 5105.

Context of disaster response, response functions, assessment, resource mobilization and adjutication, and emergency operations center (EOC) operations.

#### EM 5611 Disasters and the Media (3)

Course examines the portrayal of disasters in electronic and print media. Emphasis will be on the impact that newspapers, websites, television, social media, and film have on affecting individual and societal constructions of natural disasters, terrorist attacks, and man-made disasters.

# EM 5615 Legal Aspects of Emergency Management (3)

Legal context and constraints for emergency management; administrative law, administrative discretion, and liability.

#### EM 5621 Exercise Design and Evaluation (3)

Introduction to the fundamentals of exercise design, development and implementation. Includes a reivew of different types of exercises, how they are used, and how they are conducted. Provides students with the knowledge and skills necessary to develop and conduct disaster exercises that test a community's emergency response plan and capabilities.

#### EM 5628 Maritime Transportation Security (3)

Historical aspects of shipping vulnerability including: seaports, ships, cargoes, operations, commerce, government coordination, international security conventions and practices, and related technology. Case studies of recent events and new initiatives in International maritime transportation security will be examined.

#### EM 5635 Terrorism and Homeland Security (3)

Prerequisite(s): EM 5105.

Incident management approaches for domestic and international terrorism; anti- and counter-terrorism organizational roles, responsibilities, and coordination, homeland security initiatives.

# EM 5648 Vulnerability and Capacity-Building (3)

#### Prerequisite(s): EM 5105.

Individual, social, economic and policy dimensions of vulnerability and client needs for disaster; service delivery strategies, coordination models, resource management and capacity building for nonprofit disaster relief organizations.

### EM 5665 Management Systems in Disaster (3)

Prerequisite(s): EM 5105, EM 5525, and EM 5555. Integration of emergency management functions, response structures, technology use, information management, and decision-making.

# EM 5668 Crisis Management for Business and Industry (3)

Prerequisite(s): EM 5105. Contingency planning, business impact analysis, business resumption processes, risk/crisis communication and management, disaster

processes, risk/crisis communication and management, disaster recovery and organizational continuity.

# EM 5670 Biosecurity (3)

A detailed review of global concerns for biosecurity including the history of biological warfare, bioterrorism, concerns for agroterrorism and current initiatives in biodefense. Included will be a thorough review of specific agents, the diseases they cause, detection methodologies, and consequence management considerations.

# EM 5675 Medical Aspects of Emergency Management (3)

Prerequisite(s): EM 5105.

Surveillance and rapid needs assessment, disaster epidemiology, disaster medical systems and approaches, and disaster mental health.

#### EM 5679 Applications of GIS for Emergency Management (3)

This course will explore how GIS technology is used in emergency management. Students will review disaster-related applications of spatial analysis techniques and use of GIS software accordingly.

### EM 5680 Current Issues in Homeland Security (3)

The examination of current issues and concerns with Homeland Security including upcoming National Special Security Events that mandate comprehensive security planning and response capabilities. Innovations and reactions from politicians and citizens will serve to offer students insight into the challenges of implementing and maintaining homeland security.

#### EM 5681 Disaster Analysis (3)

This course will focus on modeling and simulation of high consequence events as a means of preparing emergency managers for future disasters. Several types of high consequence disasters will be examined from the perspectives of preparedness, prevention, decision-making and effective response.

#### EM 5685 The Military's Role in Disaster Relief (3)

### Prerequisite(s): EM 5105.

A historical review of the military role in disaster relief and humanitarian support missions. Primary emphasis will be on recent case studies of major disasters. The course will also discuss the possible expanding role of the military in future natural disasters and CBRN events. Students will conduct a small research project to explore a current issue surrounding the use of the US military in domestically-based incidents.

# EM 5698 Emergency Management Leadership and Organizational Behavior (3)

Prerequisite(s): EM 5105.

Leadership and organizational theory for emergency management; conflict management, use of power, group dynamics, and team performance.

# EM 5730 Research Methods in Emergency Management (3)

Comprehensive coverage of major analytical and statistical tools used in emergency management program administration.

# EM 5892 Advanced Radiological Incident Operations (3)

The course provides students with the advanced skills necessary to safely respond to and manage incidents involving radiological hazards. Participants apply these skills in exercises based on realistic radiological indicent scenarios, set within the ICS structure. Students are required to complete the FEMA resident course PER-905 at the Center for Domestic Preparedness.

# EM 5895 Directed Studies (3)

Prerequisite(s): Approval of instructor and program director. In-depth study of selected topic of special project.

### EM 5896 Healthcare Leadership for All Hazards Incidents (3)

The course provides healthcare professionals with a foundation of knowledge on which to make critical decisions during various disaster scenarios affecting healthcare and public health systems. Students are required to complete the FEMA resident course MGT-901 at the Center for Domestic Preparedness.

# EM 5898 Advanced Public Information Officer for Health and Hospital Emergencies (3)

The Advanced Public Information Officer for Health and Hospital Emergencies course is a four-day course that combines lectures, facilitated discussion, activities, and exercises, allowing participants to apply knowledge and skills to manage a Joint Information Center (JIC) in a healthcare emergency situation. The course has a healthcare focus but benefits all reponse disciplines. Students are required to complete the FEMA resident course MGT-902 at the Center for Domestic Preparedness.

# EM 5956 Internship (3)

Prerequisite(s): Approval of instructor and program director. Supervised practice experience in a professional emergency management setting.

# EM 5980 Capstone in Emergency Management (3)

Prerequisite(s): Permission of Department.

Integration and synthesis of theory and practice for emergency management. Should be taken in the last term of program of study.

# EM 8032 Hazards Risk Management and Community Resilience (3)

Tools and methods used to manage risk associated with the hazards facing a community; role of emergency management programs in community resilience and sustainability.

# EM 8034 Risk-Based Response and Recovery Strategy Development and Operations (3)

Explores strategies public officials employ to cope with disasters and their impacts, risk-based operational considerations and management structures.

# EM 8043 Emergency Management Program Management (3)

Examines emergency management functional demands and program delivery on a day-to-day basis; considers managerial practices such as communication with the public, the meaning of public service, making effective presentations to governing boards and legislatures, effective meetings and group facilitation, citizen engagement, media relations, and ethics.

# EM 8412 Disaster Management Principles and Practice (3)

In depth analysis of disaster management principles and practice, including historical and emergent trends and conditions relevant to the current state-of-the-practice and standards, plus future development.

### EM 8414 Interdisciplinary Disaster Theory and Research (3)

Examination of the major theoretical topics, questions, and literature that inform the discipline and practice of emergency management, with topics including the nature of disaster, human and organizational behavior under stress, and risk perception and communication. An interdisciplinary approach whereby students think critically about the epistemological assumptions of alternative theoretical perspectives and divergent policy approaches.

# EM 8423 Institutional Context and Emergency Management Policy (3)

Analysis of political, administrative, and fiscal relationships among governments in the provision of emergency management programs and disaster relief policy in the American political system. Exploration of the role of society in shaping institutions and how these institutions influence and structure public policy making and administration.

# EM 8425 Systems Thinking and Applications in Emergency Management (3)

Analysis and application of systems thinking concepts and methodologies to problems encountered in emergency management.

#### EM 8530 Research Design (3)

Social science research methods including research design and approaches to inquiry (quantitative, qualitative, experimental, evaluation), the role of theory in empirical research, causal inference, and reporting and reviewing research.

### EM 8550 Advanced Data Analysis (3)

Prerequisite(s): EM 8530 - may be taken concurrently.

An examination of statistical and research techniques appropriate to emergency management applied research, including descriptive statistics, probability theory, sampling and statistical inference, hypothesis testing, regression and correlation analysis, analysis of variance, modeling and techniques for data reduction (e.g. factor analysis).

# EM 8564 Qualitative Research (3)

Prerequisite(s): EM 8530.

Examination of qualitative methods that can be applied in the study of disasters; explores a range of activities necessary to perform disaster field research.

# EM 8566 Evaluation Research (3)

#### Prerequisite(s): EM 8530.

Practical application of appropriate social science research methodology to assess the efficiency and effectiveness of public sector and nonprofit policies and programs, with topics including how to develop an evaluation plan; evaluation types such as process, impact, cost-benefit, and costeffectiveness evaluations; and management of evaluation projects.

#### EM 8568 Directed Research (1-6)

Prerequisite: Consent of program director. (1-6). Directed reading and research in fields of special interest. This course may be repeated for a total of six credit hours.

#### EM 8662 Cost-Benefit Analysis (3)

Prerequisite(s): EM 8530.

Research, measurement and methodological requirements for the assessment of benefits and costs of programs and projects.

# **EM 8671** Voluntary and Nonprofit Disaster Management (3) Prerequisite(s): EM 8034.

Unique considerations of nonprofit disaster management and service delivery, including volunteer administration, donations management, fundraising, and cross-sector collaboration.

#### EM 8673 Health Care Systems in Disaster (3)

#### Prerequisite(s): EM 8034.

Overview of emergency management considerations for health and medical professionals and range of medical, public health, behavioral and psychological problems associated with disaster; incident management processes and organization that integrate health and medical assets into the response.

#### EM 8675 Risk Communication (3)

Examines theories related to risk perception and behavior; principles of risk communication and special communication challenges with diverse audiences; and development of crisis and emergency risk communication plans.

# EM 8677 Crisis Leadership and Management (3)

Classic and contemporary theories and models of leadership,with emphasis on the role of leadership in crisis situations; principles of crisis management.

### EM 8678 IT Applications for Emergency Management (3)

Explores the importance of information in emergency management; information requirements and breakdowns; and information technologies applied to crisis and disaster situations.

#### EM 8679 Spatial Analysis and GIS for Emergency Management (3)

Disaster-related applications of spatial analysis techniques; use of GIS software.

#### EM 8742 Integrative Seminar (2)

On-campus integrative seminar during the first three years of program of study. Specialized topics include how to review and critique scholarly literature and research finding, how to present scholarly work at conferences, and how to write for journal publication. Opportunities for students to exchange ideas, present their work, and interact with faculty. Includes special topics of current interest.

#### EM 8744 Integrative Seminar (2)

On-campus integrative seminar during the first three years of program of study. Specialized topics include how to review and critique scholarly literature and research finding, how to present scholarly work at conferences, and how to write for journal publication. Opportunities for students to exchange ideas, present their work, and interact with faculty. Includes special topics of current interest.

#### EM 8746 Integrative Seminar (2)

On-campus integrative seminar during the first three years of program of study. Specialized topics include how to review and critique scholarly literature and research finding, how to present scholarly work at conferences, and how to write for journal publication. Opportunities for students to exchange ideas, present their work, and interact with faculty. Includes special topics of current interest.

# EM 8882 Directed Study (3)

Prerequisite(s): Consent of program director.

Independent study under the direction of the instructor. This course may be repeated for a total of 9 credit hours with the approval of the program director.

#### EM 8999 Dissertation Research (1-6)

(1-6). At least 18 credit hours required; course will be graded on a pass/ fail basis. Continuous enrollment is required subsequent to passing qualifying exams for admission to candidacy. Students may register for 1-6 credit hours per semester with approval from advisor/program director.