

Master of Science (MS) Emergency Planning and Response

(Revision: May 29, 1998)

This program is designed to provide students with the conceptual basis and managerial, communication and analytical skills required for designing, testing and implementing an effective response to workplace and community emergencies involving the potential loss of human life and property due to fire, explosion, the release of hazardous chemicals, structural failures, and terrorist acts.

Requirements for Admission

A person may enroll in a maximum of two (2) courses in this graduate program without formally enrolling as a graduate Student at Anna Maria College (AMC).

Undergraduate students enrolled at AMC or other colleges/universities in the colleges of Worcester Consortium may enroll in various courses in this program only with the consent of the Program Director and their undergraduate advisor.

Persons who desire formal admission to this graduate program must possess at least a Bachelor Degree (e.g., A.B., B.A., or B.S.) and demonstrate an acceptable score on either the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE). If the student already possesses a Master of Arts (M.A.) or a Master of Science (M.S.) or an earned Doctoral Degree, the Program Director will wave the MAT/GRE requirement.

Graduation Requirements

- 1. Thirteen (13) courses of three semester hours each, of which five (5) shall be required courses and eight (8) shall be electives.
- 2. Successful completion of a written thesis. The thesis requirement is in addition to the 13-course requirement.
- 3. An overall average of 3.0. No course grade less than a B-minus shall apply to this program.
- 4. File with the Graduate Office an Intent to Graduate Form no later than February 1 of the year in which the degree is expected. Forms for this purpose are available at all times.

Curriculum:

Program Requirements*

(note: ♦ indicates course description on file and instructor identified)

The candidate for the Master of Science degree must have successfully completed the following courses:

- 1. ◆ Principles of Emergency Planning and Response
- 2. Risk Management
- 3. ♦ Essentials of Emergency Management
- 4. ◆ Incident Command System (ICS)
- 5. ◆ Principles of Occupational Health and Safety

Electives * (Select 8)

- 1. Hazardous Material and Waste Management
- 2. ◆ Management of Biohazards
- 3. Financial Dimensions of Emergency Response
- 4. Human Resource Management
- 5. Properties of Hazardous Materials
- 6. Information Processing for Emergency Response Operations
- 7. Medical Surveillance of Emergency Response Personnel
- 8. Technical Rescue Operations and Techniques
- 9. ◆ Missing Person Search Operations
- 10. ◆ Introduction to Terrorism
- 11. ◆ Counter Terrorism Mitigation
- 12. ◆ Incident Command System in Operations Management
- 13. Emergency Medical Services: Techniques and Applications
- 14. Emergency Service Infection Control
- 15. ◆ Introduction to Critical Incident Stress Management
- 16. ◆ Management of Multiple Casualty/Fatality Events
- 17. Forensic Mental Health Dimensions of Terrorism
- 18. ◆ Public and Private Partnerships in Emergency Response
- 19. Interpersonal Skill Development in Emergency Management
- 20. ◆ Introduction to the Preservation of Cultural Resources
- 22. Internship
- 23. Special Project
- Additional courses to be added

^{*} Depending upon experience, the student may petition the director to substitute an elective in lieu of a particular required course.

Required Thesis Courses

- 1.
- Thesis I (one semester)
 Thesis II (one semester) 2.

Instructors/Advisors

1. Don Carlton

Exercise Officer, MA Emergency Management Agency

2. John Crawford

Lieutenant, MA State Police

3. Hayden Duggin

Clinical Director, On-Site Academy

4. David W. Gavigan

Colonel, HQ MA National Guard

5. Joan F. Roche

Director of Training, MA Emergency Management Agency

6. A. David Rodham

Undersecretary, MA Executive Office of Public Safety

7. Thomas P. Rodger

Area II Director, MA Emergency Management Agency

8. Curt R. Rudge

Chief Ranger, MA Department of Environmental Management

9. Gregor Trinkaus-Randall

Preservation Specialist, MA Board of Library Commissioners

Course Descriptions

OSH 712: Principles of Emergency Planning and Response (3)

Key elements of emergency response plans, with particular emphasis given to holistic planning in both industrial and municipal settings, the relevance of hazard and risk assessment techniques to emergency response operations, personnel training, and multi-level coordination in both planning and operational phases of emergency response.

EPR 601: Essentials of Emergency Management (3)

This is an overview of emergency management concepts and functions. Primary emphasis is on the importance of teamwork among all players in an emergency or disaster situation. Topics include (but are not limited to): the need for emergency management; the emergency management process; the team approach to management; the evaluation of emergency management techniques and methods.

EPR 602: Incident Command System (ICS) (3)

Presents the National Interagency Incident Management System (NIIMS) model Incident Command System as a management tool for responders. This model is the nationally recognized standard Incident Command System. The course introduces students to the basic principles associated with ICS. It covers organization, facilities, and standard terminology. It presents organization and operation, resource management, and provides examples of how the essential principles of ICS are used in incident and pre-planned event management. The course emphasizes the flexibility of ICS to start from small-scale incidents and expand into large-scale multi-jurisdictional operations. Planning, operational, logistical, and fiscal considerations related to the management of complex incidents and events are also discussed. The course will also review the role of the Emergency Operations Center as it relates to the Incident Command System.

EPR 603: Incident Command System in Operations Management (3)

Course is aimed at industry managers and chiefs of departments who will provide policy guidance and administrative authority to Incident Commanders. This course gives a brief history of National Interagency Incident Management System (NIIMS) model of the Incident Command System (ICS). Brief overview of the ICS, especially Unified Command models. Presents ICS as a risk management tool. It presents legal aspects of incident management, especially as it pertains to hazardous materials response. How to institutionalize ICS in an organization and reinforce its use. Course will discuss considerations in the selection process of Incident Commanders, Command, and General Staff members. Course emphasizes the value of ICS use in planned events such as off loading of large hazardous materials shipments, oil terminal operations, public gatherings, entertainment and sporting events. Course will discuss training and certification of team members in an ICS System.

EPR 607: Public and Private Partnerships for Emergency Response (3)

This course focuses on the emerging private, public partnerships designed to provide the community with a safe place in which to work and live. The primary focus is on the need for industry and government to work together to prevent and mitigate emergency incidents. Topics include FEMA's Disaster Resistant Communities, IBH's Blueprint for Achievement and Seal of Approval programs, the Public Private Partnership 2000 Program, and other innovative approaches.

EPR 608: Interpersonal Skill Development in Emergency Management (3)

The course is intended to enhance student capacity to lead and influence others in the demanding setting of emergency incidents. The primary focus is on the development of those interpersonal skills having particular relevance to conflict management, objective-oriented use of power and group dynamics, and effective leadership.

EPR 620: Introduction to Terrorism (3)

A comprehensive overview of terrorism, its origins and developing trends. Selected terrorist groups (foreign and domestic) will be studied with respect to organization, operations, goals, financing and logistic support. Covering both historical and contemporary terrorist incidents, this course will give special emphasis to strategies and tactics used by terrorists as well as to actual and potential preventive actions taken by governmental authorities.

EPR 621: Counter Terrorist Mitigation (3)

Beginning with a detailed analysis of the chemical, biological, and physical agents of mass destruction, this course will focus on terrorists' strategies for obtaining and delivering such agents and on the latest detection and surveillance methods available to governments to prevent terrorist acts. Attention will also be given to other means of destruction available to terrorists, including those based on modern communication and data processing systems.

EPR 640: Missing Person Search Operations (3)

A search for a lost or missing person is a complicated process requiring comprehensive management skills. Students will learn to employ search management techniques to evaluate individual situations, establish the urgency of the search, establish and monitor the search area, call out and employ appropriate community resources, and suspend both successful and unsuccessful search missions. This class will also include a detailed review of procedures used to locate drowning victims in various types of water bodies.

EPR 660: Introduction to Critical Incident Stress Management (3)

This course is designed to give the student a solid grounding in understanding and managing critical incident stress reactions in people exposed to traumatic events, with particular emphasis given to the nature of trauma and the mitigation of its impacts. The course explores (a) the types

of critical incidents and their associated features, (b) acute, delayed, and cumulative stress reactions of normal persons exposed to abnormal events, (c) the "rescue personality," and (d) basic debriefing methodology.

EPR 661: Management of Multiple Casualty/Fatality Events (3)

This course exposes students to disaster psychology and current main trends in practical applications of disaster theory. Using lessons learned from historical events involving multiple casualties, students will learn the phases of disasters and the normal reactions that accompany them. Disaster crisis counseling methods and an overview of the roles of debriefings, defusings, and demobilizations are examined in the context of limiting the incidence of post-traumatic stress disorder.

EPR 662: Forensic Mental Health Dimensions of Terrorism (3)

This course is designed to provide an overview of forensic mental health concepts as they apply to terrorist incidents, including developmental and other current paradigms having potential predictive and/or explanatory utility. Concepts of criminal responsibility and competence to stand trial are also reviewed as they specifically apply to terrorist incidents.

EPR 670: Introduction to the Preservation of Cultural Resources (3)

Cultural resources have long been omitted from emergency planning and response. These resources include books, documents, audio and video tapes, magnetic media, photographs, artworks on different media, cemeteries, textiles, furniture, sculpture, historic buildings, and historic districts, among others. This course will provide a basic understanding of the importance of these materials to society and their requirements for survival. Attention will focus upon the composition and preservation needs of these materials and steps that can be taken to extend their lives under normal circumstances.

EPR 671: Disaster Mitigation for Cultural Resources (3)

When one examines emergency management plans and response/recovery activities of governmental agencies, it quickly becomes evident that the emphasis is on saving lives and restoring essential services - as it should be. However, cultural resources play an important role in peoples' lives and society, and yet, they are rarely, if ever, included in disaster mitigation/response/recovery plans of non-cultural institutions and government agencies. This course will address the specialized requirements of cultural resources and the concerns that curators, librarians, archivists, etc., as well as non-cultural resources personnel, must keep in mind when undertaking emergency planning, response, and recovery for either an institution-specific emergency or for a regional/catastrophic disaster. It will also examine the ways in which cultural institutions can begin to become involved with such agencies to make their presence known and to be included in their emergency plans.

OSH 676: Management of Biohazards (3)

A survey of the various types of biohazards, including hazards presented by infectious diseases and other biological agents. Specific attention is given to methods for the identification of biohazards, control of exposure, management of biohazard wastes, personnel training and other relevant regulatory requirements and issues.