

# EMERGENCY MANAGEMENT DISASTER SCIENCE (EMDS)

## **EMDS 500 Emergency Management Policy and Practices 3 Hours**

Provides an in-depth look at the history of disaster response and emergency management both within the U.S. and globally. The student will develop a thorough working knowledge of The Incident Command System, including application for small to large incidents, integration of command across local, state, federal and international response agencies.

*Recent Term(s) Offered: winter 2022; fall 2022; winter 2023; fall 2023; spring 2024; fall 2024*

## **EMDS 501 Understanding Natural and Technological Disaster Risks 3 Hours**

Explores the technical aspects of natural and technological hazards through the lens of knowledge leaders across the applicable science and engineering disciplines. Students will gain essential skills required to gather and accurately interpret relevant data regarding potential impacts of various disaster types on the populous and critical infrastructure.

*Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024*

## **EMDS 502 Terrorism, Violence, Resiliency, and Response 3 Hours**

Explores the complex and dynamic issues around acts of terror and extreme violence, and their impact on organizations and society as a whole. In addition, specific challenges relative to the application of incident management structures to these unique events will be discussed.

*Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024*

## **EMDS 503 Advanced Disaster Planning, Management, and Preparedness 3 Hours**

Course focuses on the application of key concepts of emergency management disaster science in plan development, training, and emergency exercise practices.

*Recent Term(s) Offered: spring 2022; spring 2023; spring 2024*

## **EMDS 504 Trends in Disaster Preparedness and Management 3 Hours** (repeatable max of 6 hrs)

Guided discussions with emergency management professionals focused on individual and group research into the dynamic elements that comprise emergency management in today's world.

*Recent Term(s) Offered: summer 2022; summer 2023; summer 2024*

## **EMDS 505 Continuity of Operations Programs 3 Hours**

Guides students through an in-depth exploration of the requirements, concepts, and benefits of continuity of operations planning (COOP). This planning process is applicable to operations at all levels of government, business, industry, education, etc. Topics include vulnerability / threat assessment, planning steps, plan scope, formats, and validation and testing.

*Recent Term(s) Offered: fall 2022*

## **EMDS 506 Critical Infrastructure Assessment and Protection 3 Hours**

Reviews various categories of critical infrastructure including transportation routes and assets, vital buildings, places of assembly, and high value terror targets. Focus on identification and assessment of vulnerabilities and potential impacts on human life, commerce and governance, property and the environment. In addition to evaluation of protective measures and mitigation strategies that offer the best protection options.

*Recent Term(s) Offered: spring 2023*

## **EMDS 510 Incident Meteorology for Safety Professionals 3 Hours**

Weather plays a critical role during the planning stages of any event (schools, athletics, concerts, hospitals, transportation, infrastructure, gatherings), which can alter costs, affect safety, and potentially drive the overall success. Students will develop an understanding of common weather data (radar and observations), the forecast process, and the various supporting roles meteorologists serve. Students will also learn communication strategies and the operations workflow from governing agencies to the end user.

*Recent Term(s) Offered: summer 2022; summer 2023*