EMERGENCY MANAGEMENT AND HOMELAND SECURITY (2235)

2235:100 Introduction to Digital Forensics (3 Credits)
An overview of digital forensics and computer-related issues facing government and businesses. Specific focus on forensic examinations and methodologies used in the field.

2235:105 Introduction to Disaster, Hazards & Risk (3 Credits)
Provides a research based and practitioner overview of how people perceive and react to extreme events before, during, and after disasters.

2235:201 Police Academy: Administration & Legal (3 Credits)

2235:202 Police Academy: Homeland Security (3 Credits)

2235:203 Police Academy: Traffic (3 Credits)
Prerequisite: Acceptance into the Police Academy. Corequisites: 2235:201, 2235:202, 2235:204 and 2235:205. Overview of motor vehicle offenses, traffic crash investigation, speed measuring and sobriety testing required to pass the Ohio Peace Officer Training program.

2235:204 Police Academy: Practicals I (3 Credits)
Prerequisite: Acceptance into the Police Academy. Corequisites: 2235:201, 2235:202, 2235:203 and 2235:205. Classroom and practical skills training in firearms, patrol, and driving to satisfy all state requirements for the Ohio Peace Officer Training Program.

2235:205 Police Academy: Practicals II (3 Credits)
Prerequisite: Acceptance into the Police Academy. Corequisites: 2235:201, 2235:202, 2235:203 and 2235:204. Classroom and skills in defense tactics, physical fitness and First Aid/CPR/AED & WMD Awareness to satisfy requirements to become an Ohio Peace Officer.

2235:210 Occupational Safety & Risk (3 Credits)
Introduction to the field of health and safety as related to business and industrial operations. Emphasis is placed on hazard/risk analysis and the regulatory environment.

2235:220 Environmental Law & Regulations (3 Credits)
Introduction to the legal system and to the laws and regulations dealing with water, air, land, noise and other sources of pollution.

2235:221 Environmental Law & Regulations II (3 Credits)
Prerequisite: 2235:220 and permission. Designed to provide students the opportunity to apply common regulatory reporting mechanisms in a practical manner utilizing a variety of software programs recognized in the environmental field.

2235:230 Water & Atmospheric Pollution (3 Credits)
Prerequisites: 2235:105 and 3100:104. Basic concepts of aquatic and atmospheric systems and the processes which pollute them. Emphasis on control and monitoring of cultural, industrial, and agricultural pollution sources. Laboratory.

2235:232 Environmental Sampling Laboratory (2-3 Credits)
Corequisite: 2235:230. Field experience with a wide range of environmental sampling techniques and equipment.

2235:280 Cybercrime (3 Credits)
Examines crime and deviance in cyberspace. Particular focus is on the prevention of computer intrusion in the workplace.

2235:281 Computer Forensic Methods (3 Credits)
Prerequisite: 2235:100. Examination of computer forensic methods employed to identify, collect, recover, authenticate, preserve, analyze, and document electronic evidence for criminal or civil legal purposes.

2235:282 Digital Forensic Imaging (3 Credits)
This course cover the general principles of photography and practical elements and advanced concepts of forensic photography.

2235:283 Cyber Warfare (3 Credits)
Prerequisite: 2235:100 or 3800:100. Examines the participants, tools and techniques in digital conflicts and explores how to defend against espionage, hactivism, non-state actors and terrorists.

2235:284 Windows Forensics (3 Credits)
Prerequisite: 2235:281. An examination of the tools, methodology, and advanced digital forensic analysis of the Windows Registry and the Microsoft Windows operating systems.

2235:285 Disasters in Film and Media (3 Credits)
Examines how contemporary culture perpetuates myths of natural and technological disasters. Students deconstruct and analyze reality from the myths in various types of media.

2235:305 Principles of Emergency Management and Homeland Security (3 Credits)
An overview of emergency management and homeland security history, theory, terms, concepts, organization, and roles. Emphasizes natural and technological hazards, and risk assessment processes.

2235:340 Disaster Research Methods (3 Credits)
Introduction to scientific method and processes, research ethics, and qualitative and quantitative methods. Use of research for appropriate decision making.

2235:350 Disaster Preparedness & Response (3 Credits)
Prerequisite: 2235:305. Legal requirement, planning formats, and response procedures are presented. Special focus community risk assessment: hazard analysis, vulnerability assessment, and community response capability assessment.

2235:360 Introduction to Terrorism (3 Credits)
Corequisite: 2235:305. Examines terrorism from historical, international, transnational, and domestic perspectives. Includes political and religious terrorism along with emergency management considerations.

2235:365 Disaster Mitigation (3 Credits)
Prerequisite: 2235:305. Examines disaster prevention and risk reduction. Focuses on such concepts as sustainability, resiliency, non-structural and structural mitigation and various sectors’ responsibilities.

2235:366 Disaster Recovery (3 Credits)
Prerequisite: 2235:305. Provides foundations for disaster relief and recovery planning, stages of recovery, resources used, and formation of public/private partnerships for recovery action and resource allocation.

2235:368 Professionalism in Emergency Management and Homeland Security (3 Credits)
Prepares students for career entry into Emergency Management and Homeland Security areas. Professionalism, resume building, interview techniques, and resource sites will be examined.
2235:370 Hazard Science and Management (3 Credits)
Overview of hazards theory, the science of hazard development, and various hazard types. Emphasis on emergency management and homeland security perspectives in regard to various hazard management related topics.

2235:381 Computer Forensic Methods II (3 Credits)
Prerequisite: 2220:281. Obtaining and analyzing digital information from computer storage media to determine details of origin and content.

2235:382 File System Analysis (3 Credits)
Prerequisite: 2235:281. The analysis of volumes, partitions, and data files to understand the design of file systems and data structures.

2235:383 Ethical Hacking (3 Credits)
Prerequisite: 2235:283. An examination of the tools, methods, and structured approaches to conducting basic security testing to protect computer networks from attacks.

2235:384 Intelligence: Cyber and Homeland Security (3 Credits)
This course introduces students to the role and operation of the intelligence community within the homeland security framework: History, mission, structure, capabilities, and methods.

2235:401 Crisis Leadership (3 Credits)
This course presents leadership research from an interdisciplinary perspective. Content is drawn from the fields of business, training, simulation, organizational theory, government, and others. This course covers early leadership theories, horizontal theories, crisis training models and approaches, and crisis cognitive processing strategies. Students will examine the overall system of building better crisis leaders.

2235:406 Disaster Management Technology (3 Credits)
Prerequisite: 2235:305. Provides an overview of the various types of technology utilized in disasters, emergency management and homeland security. Topics include communications, watches, warnings, and operational challenges.

2235:407 Hazardous Weather Observations (3 Credits)
Overview of meteorological variables and weather data useful to EM including meteorological instruments, forecasts, model, radar and satellite imagery, thunderstorms, tornadoes, winter storms and hurricanes.

2235:420 Disaster Vulnerability (3 Credits)
Prerequisite: 2235:305. Analysis of citizen actions regarding major disasters including perspectives of individuals and emergency managers using case studies, theories, and social problems.

2235:425 Private Sector Disaster Applications (3 Credits)
Prerequisite: 2235:305. Examines emergency management and homeland security business components in the private and public sectors. Emphasizes business continuity plans along with case studies in hazards and disasters.

2235:430 Contemporary Issues in Emergency Management and Homeland Security (3 Credits)
Discussion of relevant issues impacting the field of emergency management and homeland security by analyzing various case studies.

2235:435 Cyber Issues in Emergency Management and Homeland Security (3 Credits)
Prerequisite: 2235:305. Discussion and analysis of cyber issues impacting the public, private, and nonprofit sectors of emergency management and homeland security.

2235:440 Intrusion Detection (3 Credits)
Prerequisites: 2440:340 and 2440:388, both with a grade of C or better, and junior or greater standing. This course will introduce students to the various methods used to detect external and internal intrusion of computer systems.

2235:441 Network Forensics I (3 Credits)
Prerequisites: 2220:281 with a grade of C or better and junior or greater standing. This course will provide the student with basic knowledge of surveillance of networking devices, identifying and preventing attacks and incident response.

2235:442 Wireless Forensics (3 Credits)
Prerequisite: 2235:441 with a grade of C or better and junior or greater standing. The forensic identification and tracking of attacks on wireless networks and mobile communications devices.

2235:443 Network Forensics II (3 Credits)
Prerequisite: 2235:441 with a grade of C or better or junior or greater standing. Deployment, building and running an NSM operation using open source software and vendor neutral tools with the Linx Operating System.

2235:480 Emergency Management & Homeland Security Capstone (3 Credits)
Prerequisite or Corequisite: 2235:495. Ties together relevant concepts in emergency management and homeland security to help prepare graduates for professional careers integrating theory and applications.

2235:490 Current Topics in Emergency Management (1-4 Credits)
Prerequisites: 2235:305 and 2235:350. A variety of course topics on current subjects related to emergency management and disaster preparedness. May be repeated for up to 12 credits.

2235:495 Emergency Management & Homeland Security Internship (3 Credits)
Prerequisite: 30 hours in program and permission from program director. Supervised work experience in emergency management and/or homeland security to increase student understanding by applying program education to an applied work experience.

2235:497 Independent Study in Emergency Management (1-4 Credits)
Prerequisites: 2235:305 and 2235:350. Selected topics, special areas of study in emergency management, disaster preparedness under the supervision of a faculty member with whom specific arrangements have been made.