MASTER COURSE OUTLINE

Prepared By: Date: August 2017

COURSE TITLE

Technology in Emergency Management

GENERAL COURSE INFORMATION

Dept.: HSEM	Course Num: 130	(Formerly:)
CIP Code: 43.0301	Intent Code: 21	Program Code: 968
Credits: 3		
Total Contact Hrs Per Qtr.: 33		
Lecture Hrs: 33	Lab Hrs: 0	Other Hrs: 0
Distribution Designation: None		

COURSE DESCRIPTION (as it will appear in the catalog)

This class provides a detailed overview of the technology used, and also clearly explains how the technology is applied in the field of emergency management. Students will learn how to utilize technology in emergency planning, response, recovery and mitigation efforts and they'll uncover the key elements that must be in place for technology to enhance the emergency management process. Course overviews include: Web Emergency Operations Center (EOC), using technology with training and exercises, reverse 911 notification systems, video conferencing/downlinks and Geographic Information System (GIS)/ Global Positioning System (GPS) capabilities.

PREREQUISITES

HSEM 102 Introduction to Emergency Management

TEXTBOOK GUIDELINES

Chosen by instructor

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills:

1. Explore what technology tools are needed during disaster.
2. Examine the role of technology in the support of emergency planning, response, recovery and mitigation efforts.
3. Identify the key elements that must be in place for technology to enhance the emergency management process.
4. Describe the applications of the Internet, telecommunications, and networks to emergency management.
5. Analyze Geographic Information System and Global Positioning System tools and their applications
6. Identify and use components of an emergency management information system.
7. Predict hazards with direct and remote sensing data.
8. Explore the advantages and disadvantages of different warning systems.
9. Identify operational problems that the emergency management community faces.

10. Identify and describe some of the cultural factors associated with the introduction and use (or lack) of technology applications in emergency management.
11. Examine the potential impact of new technologies on emergency management.

INSTITUTIONAL OUTCOMES
None

COURSE CONTENT OUTLINE
A.   Using Technology as a Tool
B.   Emergency Management and the Internet Information Highway
C.   Networks and Communication Systems: Working Together
D.   Geographic Information System (GIS) and Global Positioning System (GPS) Tools: Maps and Geographic Systems
E.   Direct and Remote Sensing: Describing and Detecting Hazards
F.   Emergency Management Decision Support Systems: Using Data to Manage Disasters
G.   Hazards Analysis and Modeling: Predicting the Impact
H.   Warning Systems: Alerting the Public to Danger
I.   Operational Problems and Technology: Making Technology Work for You
J.   Trends in Technology

DEPARTMENTAL GUIDELINES *(optional)*
PO5 should be assessed: Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

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DIVISION CHAIR APPROVAL   **DATE**