PUBLIC HEALTH AND EMERGENCY MANAGEMENT

PAD 4844/5845
CLASSROOM VERSION

Course Overview
This course is designed to provide an overview of international and domestic public health events that have either evolved into disasters, or are born of disasters. In addition this course looks at preventing and preparing for public health disasters. A variety of threats and case studies are reviewed with an evaluation of future threats. Additionally, the discovery and reporting of events, using epidemiology and new reporting systems, are reviewed.

Course Texts
Case Studies In Public Health Preparedness And Response To Disasters
Landesman & Weisfuse, Copyright 2013
ISBN: 1449645194 / 978-1449645199

Course Objectives
Given that all disasters are public health events, the Public Health and Emergency Management class would have the following objectives: *(these are not listed in order of presentation or importance)*

After completing this course, students will be able to:

- Analyze public health issues that have arisen from natural disasters (i.e. hurricanes, floods, earthquakes, tsunamis, fires).
- Discuss public health workers as the front-line detection and defense mechanism against natural or intentional outbreak.
- Describe the use of the Incident Command System in the public health sector.
- Discuss the role of the public health system in terrorist attacks, and discuss its relation to comprehensive operations and response to such an incident (i.e. Aum Shinrikyo, 9/11, anthrax).
- Describe the historical and future uses of the Strategic National Stockpile, and identify other related CDC initiatives related to rapid detection protocol.
- Define epidemiology and describe patterns for identification of biological weapons of mass destruction, natural outbreaks, and global surveillance.
- Define and analyze the functions of the USAMRIID and USAMRICD programs as they relate to public health.

- Describe biological events, distinguish between natural and intentional outbreaks and the types of biological agents, identify planning and preparedness considerations, and discuss new and emerging research related to bio-terrorism.
- Identify and discuss historical public health events as they relate to emergency management, and describe how these events have influenced pandemic and biological preparedness efforts today (i.e. 1918 Spanish Influenza, Typhoid Mary).
- Define chemical agents and their classifications, and discuss chemical disasters and the public health response to toxic industrial chemical accidents and the use of chemical weapons (i.e. Bhopal, Dixie Sugar).
- Discuss historical nuclear and radiological disasters and identify short and long-term public health considerations and impacts (i.e. Chernobyl, Fukushima).
- Discuss agricultural disasters and their potential and realized public health impacts (i.e. Mad Cow, E-coli).
- Discuss environmental disasters and their potential and realized public health impacts.
- Discuss public health risk communication (i.e. SARS, man-made events).

Grading Scale

Undergrads

Evaluation Criteria	
Quizzes (3 @ 10 pts ea)	30%
Mid-term Exam	25%
Late Term Exam	25%
Research Paper	20%
	100%

Grads

Evaluation Criteria	
Quizzes (3 @ 10 pts ea)	30%
Mid-term Exam	20%
Late Term Exam	20%
Research Paper	30%
	100%

Grade	Top	Bottom	Spread
A	100	94	7
A-	93	90	4
B+	89	86	4
B	85	82	4
B-	81	79	3
C+	78	76	3
C	75	72	4
C-	71	69	3
D+	68	66	3

D	65	63	3
D-	62	60	3
F	59	0	59

Quizzes

Quizzes will be based exclusively on material in your homework readings.

Mid and Late Term Exam

Information covered on the exams will be based exclusively on slides and lectures.

Research Paper

Each student will pick an emerging public health issue and do a short analysis. Only two students may write on the same topic and, in special cases, we will consider smaller events. A detailed Rubric will be posted later in the semester.