



## Public Health and Emergency Management PAD 4844/5845 // Online

### 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 Format

The class format will consist of PowerPoint presentations, video lectures (including possible guest lecturers – if they're cool enough), class discussions via the Discussion Board, test and quizzes, and a research paper. The instructor reserves the right to change the syllabus as needed during the course to incorporate or respond to new information.

### 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

<b>Evaluation Criteria</b>	
Quizzes (2 @ 10 pts ea)	20%
Mid-term Exam	25%
Late Term Exam	25%
Research Paper	20%
<u>Discussion Board</u>	10%
	100%

<b>Grade</b>	<b>Top</b>	<b>Bottom</b>	<b>Spread</b>
<b>A</b>	100	94	7
<b>A-</b>	93	90	4
<b>B+</b>	89	86	4
<b>B</b>	85	82	4
<b>B-</b>	81	79	3
<b>C+</b>	78	76	3
<b>C</b>	75	72	4
<b>C-</b>	71	69	3
<b>D+</b>	68	66	3
<b>D</b>	65	63	3
<b>D-</b>	62	60	3
<b>F</b>	59	0	59

### Quizzes

Quizzes will be based exclusively on material in your homework readings. Details will be posted with the quizzes.

### Mid and Late Term Exam

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

### Discussion Board

Most weeks a new prompt will be posted to the Discussion Board that students must respond to. The prompt may be about last week's topic or readings, current events, or anything else EM and PH related. Students must write an original response AND a respond to another student for a total of two postings. Original responses must answer the prompt in a meaningful way in 3-5 sentences. When

writing a response to another posting the student must provide some contribution in the form of additional information or a (respectful) disagreement.

Students must post every week to earn full credit for the assignment. Postings will be graded on the Monday of the following week and any late posts will only count for half credit.

### **Research Paper**

Each student will pick an emerging public health issue and do a short analysis. Only two students will be able to write about each topic. A detailed Rubric will be posted later in the semester.

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