

Course Title: *Public Health Preparedness & Response: Competency Based Local, Regional, National and Global Public Health Participation*

Course Number: *ENOH0561J-030-Fa13-7*

Course Location: *Room 306*

Course Date & Time: *Monday 2:30 PM – 5:00 PM*

Course Instructor: *George DiFerdinando, Jr., MD, MPH, FACP*

Adjunct Professor Department of Epidemiology

Director, NJ Center for Public Health Preparedness

diferdgc@umdnj.edu, diferdgc@sph.rutgers.edu

609 – 688-1921

Office Hours: *Monday, Room 109, 1:00PM – 2:30PM*

Required Course Text: *Emergency Public Health: Preparedness and Response*

Kapur GB, Smith JP, Jones & Bartlett Learning, 2011

<http://www.amazon.com/Emergency-Public-Health-Preparedness-Response/dp/0763758701>

Additional/Supplemental Readings/Resources: *Moodle*

Course Description:

Public Health Preparedness and Response is a one semester course that teaches the theory and practice of public health emergency preparedness and response, based on the ASPH Public Health Preparedness & Response Core Competency Model (<http://www.asph.org/document.cfm?page=1081>). The course addresses planning for public health response to natural (severe weather, temperature extremes, earth quakes, droughts, tsunami, pandemics) and technological events (transportation crashes, chemical spills), as well as to intentional attacks using CBRNE (chemical, biological, radiological, nuclear, and explosive) agents; special emphasis in examples and exercises is placed on environmental hazards and events.

The public health infrastructure of the United States and the world exists in a wide variety of structures and with varying responsibilities at the global, Federal, State, and local levels. To provide coordinated response in all types of emergencies, public health practitioners must be aware of and be competent in their roles, as well as being integrated into community emergency management.

Selected Department Competencies Addressed:

Each Department identifies competencies for each degree offered. The competencies addressed in this course for the MPH for the Department of *Environmental Health* include:

- Competencies Primarily Gained in this Course:
 - Describe the major environmental health problems to the general public as well as specific communities within this population.
 - Describe the federal and state regulatory programs that relate to environmental (community) and worker (occupational) protection
 - Specify current environmental risk assessment approaches and methods for a particular hazard or risk in the community
- Competencies Reinforced in this Course:
 - Explain the basic mechanism of toxicology and dose-response regarding environmental toxicants
 - Develop a testable model of environmental exposures and adverse health outcomes

Please visit the Department webpages on the School of Public Health's website at <http://sph.rutgers.edu/> for additional competencies addressed by this course for other degrees and departments.

Course Objectives: By the completion of this course, students will be able to:

1. Describe the public health preparedness & response core competencies for individual members of the public health workforce, and capabilities for public health organizations.
2. Describe the essentials of public health preparedness and response, including control of infectious diseases, outbreak investigation, environmental health protection, and the role of emergency operations planning and exercises.
3. Explain the 5 phases of emergency response – Prevention, Preparedness, Response, Recovery, and Mitigation.
4. Describe, in detail, the environmental hazards discussed as examples in this course, including radiological, nuclear, chemical, and climate related hazards. This description includes
 - i. Related health problems to the general public and specific individuals
 - ii. Basic toxicology and dose-response
 - iii. Federal, state, and local regulations and response
 - iv. Relation between exposure and adverse outcomes
 - v. Risk assessment approaches.
5. Describe the responsibilities and capabilities of federal, state and local public health agencies to respond to incidents in an 'all hazards' approach.
6. Identify the initial and long-term roles of different public health professionals during a public health emergency event.

7. Identify populations with special sensitivities, needs, and/or vulnerabilities to emergencies.
8. Describe the likely mental health, psychological, and psychosocial effects of crises, emergencies, and disasters.
9. Explain how different public health and non-public health agencies, as well as private profit and not-for-profit entities, coordinate emergency preparedness and response activities and services.
10. Define strategies for limiting the impact of a public health emergency event, including mitigation.

Course Requirements and Grading:

Course work is evaluated as follows:

Activity	Percentage
<i>Punctual attendance at all classes</i>	5%
<i>Class discussion, paper summaries, and presentations</i>	10%
<i>Online Quizzes: Dates: Due <u>10/4</u>; Due <u>10/25</u>; Due <u>11/15</u>; Due <u>12/16</u></i>	30%
<i>Paper Topic: Due before class, November 4</i>	5%
<i>Paper Outline: Due before class, November 18</i>	10%
<i>Paper 20 pages+: Due by 5pm, Friday, December 6</i>	40%
<i>Total</i>	100%

Student Research Papers

Students are to write a major paper, due by email. The paper should be approximately 20+ pages, (not including references) due by 5PM Friday, December xx).

I will work with each of you to help determine your paper topic. You will develop a researchable question for each paper based on the subjects you provide. No two students may have the exact same research paper topic.

Please note that your papers should be well researched, organized, written and edited, proofread and polished with footnotes/ endnotes and a reference page or bibliography of your major sources. The paper will be graded according to the "grading rubric."

You are welcome and encouraged to share draft copies, detailed outlines, research notes, etc., before you turn in your final version. Advice given on your preliminary work almost always helps you choose a better topic.

Draft Review Day: One of the class sessions in November will be identified as a review and discuss day for draft papers.

Presentations:

You are expected to provide the class with two presentations, on October xx and November xx.

The first presentation will be 5-10 minutes on a topic of your choice. Depending on class size, these will be scheduled during one or more classes in October.

The second will be a 10-15 minute summary presentation of your paper with a maximum of 18 slides.

Both presentations should be in PowerPoint. You will be graded based on a rubric

Reading summaries:

Everyone will summarize/highlight key points of one or more assigned readings and discuss them in the following week's class. This should be approximately 1 to 2 pages and should be posted in your "drop box" prior to class.

Course Schedule: *Attached*

School of Public Health Honor Code: The School of Public Health Honor Code is found in the student bulletin (sph.rutgers.edu/academics/catalog/index.html). Each student bears a fundamental responsibility for maintaining academic integrity and intellectual honesty in his or her graduate work. For example, all students are expected to observe the generally accepted principles of scholarly work, to submit their own rather than another's work, to refrain from falsifying data, and to refrain from receiving and/or giving aid on examinations or other assigned work requiring independent effort. In submitting written material, the writer takes full responsibility for the work as a whole and implies that, except as properly noted by use of quotation marks, footnotes, etc., both the ideas and the works used are his or her own. In addition to maintaining personal academic integrity, each student is expected to contribute to the academic integrity of the school community by not facilitating inappropriate use of her/his own work by others and by reporting acts of academic dishonesty by others to an appropriate school authority. It should be clearly understood that plagiarism, cheating, or other forms of academic dishonesty will not be tolerated and can lead to sanctions up to and including separation from the Rutgers School of Public Health.

Policy Concerning Use of Recording Devices and Other Electronic Communications Systems:

When personally owned communication/recording devices are used by students to record lectures and/or classroom lessons, such use must be authorized by the faculty member or instructor who must give either oral or written permission prior to the start of the semester and identify restrictions, if any, on the use of mobile communications or recording devices.

Date	Class Week	Topic and Readings	Readings
Sept 9	1	Lecture : Protecting Populations During Emergencies Exercise : How to Use the Federal Emergency Management Agency (FEMA) Independent Study (IS) Training System Lecture : PHP&R Competencies & Capabilities	Kapur Ch. 1 Computer Exercise PowerPoint
Home Exercise		IS-318, Module 3: Assessing Risk http://emilms.fema.gov/IS318/MP03moduleMenu.htm IS-100.B: Introduction to Incident Command System (ICS) ICS-100 http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-100.b	From the FEMA Emergency Management Institute
Sept 16	2	Lecture : Hazards & Risk, Emergencies, Crisis & and Disasters Exercise : Hazard Categories Lecture : Government Capacity: Federal State & Local Agendas and Responsibilities	Kapur Ch. 2 Kapur Ch. 3
Home Exercise		IS-1.a Emergency Manager: An Orientation to the Position http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-1.a	From the FEMA Emergency Management Institute
Sept 23	3	Lecture : The 5 Phases of Emergency Management: Prevention, Preparedness, Response, Recovery, and Mitigation, & the ICS Exercise : ICS Exercise Lecture : The 5 Phases of Emergency Management: The National Response Framework (NRF) and the National Incident Management System (NIMS)	Online FEMA ICS Course “ Kapur Ch. 4
Home Exercise		IS-808: Emergency Support Function (ESF) #8 – Public Health and Medical Services http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-808 IS-662: Improving Preparedness and Resilience through Public-Private Partnerships http://emilms.fema.gov/is662/index.htm	From the FEMA Emergency Management Institute
Sept 30	4	Lecture: PH&R Competencies & Capabilities Exercise: NJ ESF-8 Lecture: Non-Governmental Roles: Public Private Partnerships, NGOs	 Kapur Ch. 6 & 7
Home Exercise		Disease Surveillance (Public Health Emergency Training Series) http://www.sph.umn.edu/details/course/6391/ Isolation and Quarantine (Public Health Emergency Training Series) http://www.sph.umn.edu/details/course/6392/ Quiz 1 (Weeks 1-4) Online	From the University of Minnesota (U-SEEE PERL) Center Online
Oct 7	5	Quiz 1 (Weeks 1-4) In Class Review Lecture: Epidemiology in PHP&R Lecture: Pre-disaster & post-disaster assessment	 Kapur Ch. 9 & 10
Home Exercise		Overview of Rapid Needs Assessments (RNAs) http://cphp.sph.unc.edu/training/HEP_RNA1/certificate.php Methods of RNAs http://cphp.sph.unc.edu/training/HEP_RNA2/certificate.php	From the UNC CPHP Training Web Site http://cphp.sph.unc.edu/training/index.php
Oct 14	6	Lecture: RNA, Technology in PH R&R Exercise: RNA In Class Review	 Kapur Ch. 8 & 11
Home Exercise		IS-56: Hazardous Materials Contingency Planning http://emilms.fema.gov/IS56/index.htm IS-340: Hazardous Materials Prevention http://emilms.fema.gov/is340_HazMat/index.htm	From the FEMA Emergency Management Institute
Oct 21	7	Environmental Hazards as a Paradigm for Public Health Preparedness & Response: Hazardous Materials	 Kapur Ch. 17 & 22
		IS-3: Radiological Emergency Management http://emilms.fema.gov/IS3/FEMA_IS/is03/index.htm Quiz 2 (Weeks 5-7) Online	From the FEMA Emergency Management Institute

Date	Class Week	Topic and Readings	Readings
Oct 28	8	Quiz 2 (Weeks 5-7) In Class Review Environmental Hazards as a Paradigm for PHP&R: Radiological Materials	Kapur Ch. 18 & 23
Home Exercise		Start IS-806: ESF#6 – Mass Care, Emergency Assistance, Housing, and Human Services http://emilms.fema.gov/is806/index.htm Complete Paper Topic	From the FEMA Emergency Management Institute
Nov 4	9	Paper Topic Due Environmental Hazards as a Paradigm for PHP&R: Climate & Climate Change	
Home Exercise		Finish IS-806: ESF #6 – Mass Care, Emergency Assistance, Housing, and Human Services http://emilms.fema.gov/is806/index.htm	From the FEMA Emergency Management Institute
Nov 11	10	Lecture: Mass care, Emergency Assistance, Housing, and Human Services, including role of Voluntary Organizations	
Home Exercise		Emergency Risk Communication http://www.nwcp.org/training/opportunities/online-courses/emergency-risk-communication-for-public-health-professionals Test 3 (Weeks 8-10) Online	From the Northwest Center for Public Health Practice
Nov 18	11	Test 3 (Weeks 8-10) In Class Review Lecture: Risk Communication in PHP&R – Crisis and Emergency Response Risk Communication (CERC) Exercise: Creating a CERC Message Map Outline Due	
Home Exercise		Disaster Behavioral Health http://www.nwcp.org/training/opportunities/online-courses/disaster-behavioral-health	From the Northwest Center for Public Health Practice
Nov 25	12	Lecture: Preparedness for Special Populations: Behavioral and Mental Health Services Exercise: Outline Discussion	Kapur Ch. 24 & 26
Home Exercise		IS-36: Multi-hazard Planning for Childcare http://emilms.fema.gov/is36/index.htm Special Populations (Public Health Emergency Training Series) http://www.sph.umn.edu/details/course/6389/	From the FEMA EMI and the University of Minnesota (U-SEEE PERL) Center
Dec 2	13	Student Presentations Lecture: Preparedness for Vulnerable Populations: Children	Kapur Ch. 25
Home Exercise		FINISH YOUR PAPERS!	
Dec 6		Paper Due by 5pm via Email	
Dec 9	14	Lecture: International Public Health P&R	Kapur Ch. 5, 6 & 7
Dec 16	15	Final - Test 4 (Weeks 11-14) and Cumulative	