

UNIVERSITY OF NORTH TEXAS  
**Emergency Administration and Planning**

**EADP 4890 - Public Health and Disasters**

May 31 – June 30, 2004

Instructor: Witold Migala PhD, MPH  
Semester: Summer I, 2004 (May 31 - June 30)  
Schedule: Mon. & Wed. 6:00 pm - 9:50 pm  
Location: Wooten Hall 316

**Course Description**

The objective of the course is to explore the pervasive relationship of public health in the contemporary emergency and disaster prevention, response and recovery environment. Discussions will examine the changing and unique role of the public health field in emergency management, paying special attention to epidemiology, integration with traditional emergency services, medical and first responders, public safety, bioterrorism preparedness and the need for comprehensive pre-education of professional and public communities. The class will cultivate insight into the necessary integration of public health in the development of effective emergency response contingencies specific to natural, accidental and intentional disaster events. Students will be expected to gain insight into the need for a reinforced and integrated public health system to augment traditional emergency response capabilities as well as to provide early detection and identification capabilities representative of intentional biological events in order to optimize response and recovery activities.

**Required Readings**

- ◇ Readings will be distributed in class or assigned via alternate media (internet, newspaper, magazine, journal, etc.).
- ◇ Each class will begin with a discussion of current events related to public health and natural, accidental or intentional disaster or emergency events. Students will be expected to regularly participate and contribute input and materials towards this activity.

**Course Policies**

- Attendance is strongly recommended since much of the materials reflected on exams will be derived from class lectures and presentations. Attendance will also contribute towards the final grade.
- It is understood that many of the class participants will be arriving to class from work and punctuality is encouraged although special circumstances will be taken into consideration.
- Public health and disaster management is an emerging field with great opportunity for exploration and elaboration. Discussion is therefore strongly encouraged.
- Readings, when assigned, are to be completed for discussion during the following class.
- Respect, courtesy and professionalism are expected at all times, without exception.
- Students are encouraged to discuss and make prior arrangements with the instructor to accommodate special needs and circumstances.
- Incompletes will be given according with departmental policy.
- Plagiarism and other forms of cheating will automatically result in a failing grade.

## Grading

Students will earn points from a variety of different performance measures, including a midterm and final exam, tabletop exercise performance, class projects, class participation and a term paper. Grading will be calculated according to the following:

Attendance / participation	25
Class Projects	25
Tabletop Exercise	50
Midterm	150
Term paper	100
Final Exam	150
<b>Total</b>	<b>500</b>

The following scale will be used for final letter grading based on the average of accumulated points:

90 - 100%	=	A
80 - 90%	=	B
70 - 80%	=	C
60 - 70%	=	D
59% or below	=	F

### *Attendance*

Roll will be taken regularly and will amount to approximately 5% of the student's grade. While attendance may seem to affect a small portion of the overall grade, much of the materials that will be covered in the midterm and final exam as well as student skills graded during in-class exercises will be derived from lectures, videos and class presentations (in addition to assigned readings).

### *Participation*

Public health and emergency management is an emerging field that invites much exploration through discussion. Part of the final grade will be the student's participation in the course. One of the course requirements will be for students to bring examples of current events related to public health and the emergency management community. This will require the student to tangibly demonstrate their participation by bringing to class newspaper, journal or magazine articles reflecting current relevant events. Again, although participation amounts to only 5% of the overall class grade, it is anticipated that many of the discussions and materials discussed will be revisited during exams. Also, since the role of public health has become integral to the emergency response structure, development of individual and group performance in class and group activities is critical since this will be an expectation in real-world settings. Therefore, the student's participation in group activities, both individually and as a team, will contribute to the final participation grade.

### *Tabletop Exercise*

Students will participate in simulated disaster tabletop exercises. These exercises will assign students according to their interests and/or current job responsibilities to play public health and supporting roles in an Incident Command System in response to a fictitious intentional, natural or accidental biological disaster events. Members will be expected to effectively represent their role both individually and as part of the team. This exercise will examine and test the student's ability to mobilize information that had been presented through lectures, readings, videos and other presentations.

### *Class Project*

Occasional group and class projects will be developed to elaborate on current events and help resolve differing perspectives on appropriate public health policy and interventions in disaster events. Students may be asked to identify points of contention that reflect polarized opinion within the class and then debate the benefits and detriments of alternate methods of crisis and consequence public health management. At least one of these exercises will require the group to establish functional Incident Command Systems to demonstrate the effectiveness of their selected method of mitigating the effects of a disaster and precipitating recovery through effective response planning.

### *Term Paper*

A critical component of the contemporary public health professional is the ability to effectively express themselves in writing. Writing skills are essential to the effective development of all public health programs. Most importantly, written skills are required both to justify funding to establish pre-event capabilities and then to document post-event activities to ensure reimbursement. A fundamental reality of disaster response capabilities is that funding is critical. The student will be asked to develop a grant proposal that will include a narrative describing the planned development of a public health disaster response infrastructure, including descriptions and justifications for specific personnel, equipment and supply needs, and development of a budget. The student will be graded on the overall integrity of the planned public health system, the justification for personnel and support costs and the quality of the narrative. This activity will allow the student an opportunity to integrate elements of the course with their own creativity. Representing 20% of the overall grade, the paper will be graded primarily on the insight, quality and professionalism of the presentation.

### *Midterm/Final Exam*

60% of the student's grade will be determined by the midterm and final exam. These will consist of true/false, matching and multiple choice, short answer and short essay questions. The students will be advised of the structure of the tests in advance. Students who miss the exams without giving prior notification will need to make arrangements with the instructor to be given an alternate exam. Make-ups for the midterm and final exam will be limited to very special circumstances and with prior instructor approval only.

### **Dates to Remember**

First Day of Class / Orientation	May 31
Escalation of Ideology Exercise	June 2
Midterm	June 14
Term paper due	June 23
Tabletop Exercise	June 23
Final Exam	June 30

**WEEK 1: May 31**

- Introductions and overview of course.
- Explanation of class expectations, term paper and student projects.
- Discussion: Public Health and Emergency Management, including definition of public health and necessary integration of public health and public safety.
- Power Point introduction: Bioterrorism Insights and Reassurance.
- Power Point: Bioterrorism and Health Emergency Preparedness Team (BHEP)
  
- Video: “Getting Ready for Terrorism: Preparing the Healthcare Community for Biological, Chemical and Radiological Weapons.” Public Health Preparedness

**WEEK 2: June 2**

- Bioterrorism Preparedness, Planning and Response: A Public Health perspective (Texas Department of Health, Region 2/3). Power Point presentation.
- Public Health considerations in natural and accidental emergencies: Case studies of floods, tornadoes, earthquakes, chemical spills, and other disaster events.
- Class exercise (Debate): Escalation of ideology: Coca-Cola overthrows Pepsi.
  
- Video: “ABC News Nightline: Biowar.” Public Health response in large scale intentional disaster
- Reading: Bunosky, “Public Health Management and Natural Disasters” (handout).

**WEEK 3: June 7**

- Power Point presentation: Incident Command System (ICS) for Public Health (Texas Engineering Extension Service (TEEX); National emergency Response and Rescue Training Center (NERRTC). Overview, command structure, stakeholders, staff, organizational considerations, unified command CBRNE weapons, and ICS in a Public Health Emergency.
  
- ICS Exercise; ICS construct / simulation (Power Point: “Need for VHF Plan”).

**WEEK 4: June 9**

- Video: “Outbreak”
- Class discussion detailing attributes and detriments of response.
- The National Pharmaceutical Stockpile: The Role of Public Health in mass prophylaxis and disaster response contingencies.
- Review for midterm / description of exam format.
  
- Reading: “Strategic National Stockpile.” <http://www.bt.cdc.gov/stockpile/national>

**WEEK 5: June 14**

- Midterm exam.
- Community Emergency Response Teams (CERTS)
- Category A, B and C biological agents (Fact sheets).
- Media question and answers: Preplanning and pre-scripting.
- Distribution and Review of Citizen Guides.

**WEEK 6: June 16**

- HAZWOPR (Hazardous Waste Site Personal Protection and Safety)
- Risk Communication: Power Point presentation (Vincent Corvello).
- Major Disaster Hospital Response Plan (Dallas-Fort Worth Hospital Council 2004).
  
- Video: “CDC Responds: Bioterrorism and the Healthcare Epidemiology/Infection Control Team.”

**WEEK 7: June 21**

- National Incident Management System (NIMS): An Introduction – Independent Study. Note: Student will be expected to hand in completed Post-Test on June 23.

**WEEK 8: June 23**

- Tabletop exercise: Coordinated response to a public health emergency.
- Term paper due.
  
- Reading: “WFP/UNHCR Guidelines for Estimating Food and Nutritional Needs in Emergencies.” <http://www.univ-lille1.fr/pfeda/Infos/1999/0327wfpE.htm>

**WEEK 9: June 28**

- The Sphere Factor: Basic refugee and indigenously displaced populations (IDP) requirements for post event public health considerations.
- Metropolitan Medical Response System (MMRS).
- Guest Speaker: Gregg Dawson, Regional NCTCOG.
- Preparation for Final Exam.

**WEEK 10: June 30**

- Final overview.  
FINAL EXAM

## Recommended Reading:

The following journal articles, books and other references are not required reading. Specific excerpts from the following may be distributed for use during the Public Health and Disasters class. This list represents readings that may be of interest and add to the student's knowledge of the subject matter discussed during class.

Frist, Bill MD. *When Every Moment Counts*. Rowman and Littlefield Publishers, Lanham, Maryland, 2002.

Couch, Dick. *The U. S. Armed Forces Nuclear, Biological and Chemical Survival Guide*. Perseus Book Group, New York, New York, 2003

Buck, George. *Preparing for Biological Terrorism: An Emergency Services Guide*. Delmar Publishing, Albany, New York, 2002.

Garrett, Laurie. *Betrayal of Trust: The Collapse of Global Public Health*. Hyperion, New York, New York, 2000.

Barker, Rodney. *And the Waters Turned to Blood*. Touchstone, Simon and Schuster Publishers, New York, New York, 1998.

Disasters." <http://www.sphereproject.org/handbook/index.htm>

Teutsch, S., Churchill, R.E. *Principles and Practice of Public Health Surveillance*. Oxford University Press, New York, New York, 2000.

Bunosky, Lisa. "Public Health Management and Natural Disasters." [www.cwru.edu/med](http://www.cwru.edu/med). April 2004.

Public Health Reports. Volume 116, Supplement 2, 2001. The Second symposium on Medical and Public Health Response to Bioterrorism, specific articles:

- Rodier, Guenael. "Confronting a World of Infectious Disease," pg. 2-4.
- Bracken, Paul. "Biological Weapons as a Strategic Threat," pg. 5-8.
- Koplan, Jeffrey. "CDC's Strategic Plan for Bioterrorism Preparedness and Response," pg. 9-16.
- Hugu-Jones, Martin. "Global Awareness of Disease Outbreaks: The Experience of ProMED-Mail," pg. 27-31.
- Schoch, Monica. "Hospital's Full-Up: The 1918 Influenza Pandemic," pg. 32-33.
- Bentley, James. "Hospital Preparedness for Bioterrorism," pg. 36-39.
- Bartlett, John G. "Mobilizing Professional Communities," pg. 40-44.
- Knouss, Robert F. "National Disaster Medical System," pg. 49-52.
- Hamburg, Margaret. "Challenges Confronting Public Health Agencies," pg.59-63.
- Inglesby, Thomas V. "Observations from the TOPOFF Exercise," pg. 64-68.
- Glass, Thomas. "Understanding Public Response to Disasters," pg. 69-73.
- Osterholm, Michael T. "How to Vaccinate 30,000 People in Three Days: Realities of Outbreak Management," pg. 74-78.
- Fidler, David. "Legal Issues Surrounding Public Health Emergencies," pg. 79-86.
- Garrett, Laurie. "Understanding Media's Response to Epidemics," pg. 87-91.
- O'Toole, Tara. "Epidemic Response Scenario: Decision Making in Time of Plague," pg. 92-103.
- O'Toole, Tara. "The Problem of Biological Weapons: Next Steps for the Nation," pg.108-111.

“Injuries and Illnesses Among New York City Fire Department Rescue Workers After Responding to the World Trade Center Attacks,” MMWR, September 11, 2002, volume 51, Special Issue.

MMWR. “Update: Multistate Outbreak of Monkeypox, 2003.” MMWR, June 20, 2003, Volume 52(24); 561-564”

MMWR. “Imported Plague – New York City, 2002.” Volume 52, number 31, August 8, 2003.

MMWR. “Public Health Consequences of a Flood Disaster-Iowa, 1993.” Volume 42, number 34, 663-667, September 3, 1993.

American Journal of Public Health “Hospital Preparedness for Victims of Chemical or Biological Terrorism.” Volume 91, number 5, 710-715, May 2001.

MMWR. “Tropical Storm Allison Rapid Needs Assessment-Houston, Texas, June 2001.” Volume 51, number 17, 365-369, May 3, 2001.

“Strategic National Stockpile.” <http://www.bt.cdc.gov/stockpile/national/>

“National Incident Management System (NIMS): An Introduction. Emergency Management Institute.” <http://training.fema.gov/EMIWeb/IS/is700.asp>

MMWR. “Updated Guidelines for Evaluating Public Health Surveillance Systems.” Volume 50, number RR-13, July 27, 2001.

Edwards, R., Goodman, R., Milligan, S. “Quarantine and Police Powers: The Role of Law Enforcement in a Biomedical Crisis.” Police Executive Research Forum, November 2003. <http://www.policeforum.org>

“WFP/UNHCR Guidelines for Estimating Food and Nutritional Needs in Emergencies.” <http://www.univ-lille1.fr/pfeda/Infos/1999/0327wfpE.htm>

CDC. “Disaster Epidemiology and Assessment / Environmental Health Studies.” <http://www.cdc.gov/nceh/hsb/disaster/mission.htm>

“The Sphere Project Handbook: Humanitarian Charter and Minimum Standards in

## UNIVERSITY AND DEPARTMENT POLICIES

### **Disability Accommodation**

The Emergency Administration and Planning Program, in cooperation with the Office of Disability Accommodations (ODA), complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request to the instructor within the first two weeks of the semester. Students registered with the ODA may present the Special Accommodation Request from that office in lieu of a written statement.

### **Cheating and Plagiarism**

#### *Definitions*

The UNT Code of Student Conduct and Discipline defines cheating and plagiarism “as the use of unauthorized books, notes, or otherwise securing help in a test; copying others’ tests, assignments, reports, or term papers; representing the work of another as one’s own; collaborating without authority with another student during an examination or in preparing academic work; or otherwise practicing scholastic dishonesty.”

#### *Penalties*

Normally, the minimum penalty for cheating or plagiarism is a grade of “F” in the course. In the case of graduate department exams, the minimum penalty shall be failure of all fields of the exam. Determination of cheating and plagiarism shall be made by the instructor in the course, or by the department faculty in the case of departmental exams.

Cases of cheating or plagiarism on graduate departmental exams, problem papers, theses, or dissertations shall automatically be referred to the departmental Curriculum and Degree Program(s) Committee. Cases of cheating or plagiarism in ordinary course work may, at the discretion of the instructor, be referred to the Curriculum and Degree Program(s) Committee in the case of either graduate or undergraduate students. This committee, acting as an agent of the Department, shall impose further penalties, or recommend further penalties to the Dean of Students, if they determine that the case warrants it. In all cases, the Dean of Students shall be informed in writing of the case.

#### *Appeals*

Students may appeal any decision under this policy by following the procedures laid down in the UNT Code of Student Conduct and Discipline.