The University of Toledo

New Graduate Course Proposal

Contact Person: Barbara Saltzman
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College: Medicine
Dept/Academic Unit: Public Health and Preventive Medicine

Alpha/Numeric Code (Subject area - number): PUBH 6560

Proposed title: Interdisciplinary Crisis Management for Medical and

Proposed Effective Term: 2016 (Spring)

Is the course cross-listed with another academic unit? No

Approval of other Academic unit (Signature and title)

Is the course offered at more than one level? Yes

If yes, an undergraduate course proposal form must also be submitted. If the undergraduate course is new, complete the New Undergraduate Course Proposal; if the undergraduate course is existing, submit an Undergraduate Course Modification Proposal.

Credit hours: Fixed: 3 or Variable: to

Delivery mode:

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Minimum Credit Hours

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Weekly Contact Hours

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Terms Offered

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Years offered: Every Year

May the courses be repeated for credit? No

Maximum hours: Normal Grading (A-F, S/U, WP/WF, PR, I)

Are students permitted to register for more than one section during a term? No

Prerequisites (must be taken before): e.g., C or higher in BIOE 4500 or BIOE 5500 and C or higher in MATH 4200, etc.
Permission from Instructor

Co-requisites (must be taken together):

Catalog Description (75 Words Maximum)

The purpose of this semester course is to introduce the interdisciplinary healthcare learner (including but not limited to MD, PA, MPH, MSN, OT and PT students) to specific principles of epidemiology and disaster medicine employing an all-hazards framework and to provide essential skills enabling proper functioning in the event a catastrophe arises in the near future. The course will include lectures, simulation exercises and independent web-assisted content.

Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click here for the template.

Course Approval

Department Curriculum Authority
Date

Department Chairperson
Date

College Curriculum Authority or Chair
Date

College Dean
Date

Graduate Council
Date

Dean of Graduate Studies
Date

Office of the Provost
Date

For Administrative Use Only

Effective Date

CIP Code

Subsidy Taxonomy

Program Code

Instruction Level
University of Toledo
PUBH 6560
Interdisciplinary Crisis Management for Medical and Public Health Professionals
Term Year

SYLLABUS

Instructor: Barbara Saltzman, Ph.D., M.P.H.
Faculty Office: 4212
Faculty/Department web site: http://www.utoledo.edu/med/pubhealth/
Office Hours: Too be determined
Phone: 419-383-5394
E-Mail: Barbara.saltzman@utoledo.edu
Class Meetings Location: To be determined

Associate Instructors:
Paul Rega, MD, FACEP
Assistant Professor of Public Health
Department of Public Health and Preventive Medicine and Department of Emergency Medicine
Room 4218 Collier
Phone: (419) 383-4817, E-mail: paul.rega@utoledo.edu

Brian Fink, PhD
Associate Professor of Public Health
Department of Public Health and Preventive Medicine
Room 4223 Collier
Phone: 419-383-4817, Brian.Fink2@utoledo.edu

*Course Description including course pre-requisites or co-requisites*

The purpose of this semester long course is to introduce the interdisciplinary healthcare learner (including but not limited to MD, MPH, PA, MSN, OT and PT students) to specific principles of epidemiology and disaster medicine employing an all-hazards framework and to provide essential skills enabling proper functioning in the event a catastrophe arises in the near future.

The course will be scenario-based, implementing lessons from recent real world disasters and epidemics with extensive use of simulation medicine, and an interdisciplinary team approach. Students will become knowledgeable and experienced in interdisciplinary crisis management. Disasters occur everywhere and this simulation-based and collaborative experience will provide students skills that many of their colleagues are unlikely to possess. Interdisciplinary teams allow them to properly understand everyone’s roles in a health crisis and work together in a seamless and fluid manner. Students will become knowledgeable and experienced with the ICS and gain experience in communicating with the media during various disaster scenarios. Becoming an effective communicator is not only important within the health care facility but among the citizens of a community as well. Medical students gain valuable epidemiologic knowledge.

*Texts (Required and Recommended, Reserve Materials, etc.)*
Reading material from the current peer-reviewed literature will be provided via Blackboard.

**Course Requirements: Expectations of students in course**

**Attendance:** Mandatory. If you must miss a class, please contact me by e-mail or phone and state why you cannot attend. This learning experience is largely simulation-based, so attendance is necessary to complete the course objectives.

**Grading policy or criteria**

**Grading:** 94-100%: A; 90-93%: A-; 88-89%: B+; 82-87%: B; 80-81%: B-; 78-79%: C+; 72-77%: C; 70-71%: C-; 69 and Below: D or F.

- Class Attendance (10%)
- Participation (30%)
- Periodic skills test (30%) (Six skills tests occurring at in person sessions.
- Final skills examination (30%)

**Assessment of Learning: Identification of methods used to assess student learning in the course**

- Group work: members will evaluate each other and themselves.
- Assignments will be score by completeness and content.
- Final skills examination: There will be an exam and interdisciplinary team competition, including vertical evacuations evaluated on time to completion as well as how the team works together to complete the evacuation safely and successfully.

**Classroom Procedures: Expectations of classroom behaviors including UT policies**

Possible suggestions for inclusion:

- **Cell phones/tablets/laptops:** Laptops and tablets may only be used for activities directly associated with course work while in attendance. Phones on vibrate/silence.
- **Attendance:** Mandatory. Excuses for valid reasons will be considered. (One point deduction from final grade for each one hour unexcused absence.)
- **Contact Hours:** This 3-credit combined lecture and simulation course requires 60 equivalent contact hours, which will be delivered via 15, 3-hour, in-person sessions (45 hours) and 15 hours of independent work/group preparation.
- **Policies on Late Work:** One point deduction from final grade for each one day that the assignment is late unless specifically excused by instructor.
- **Accessibility and Special needs:** As per UTMC policy
- **Drop / Withdrawal**
- **Academic Dishonesty: Ethical Behavior and Practice:** All students are expected to follow the requirements established for the course. In relation, students must read and understand the applicable expectations for ethical behavior and practice stated in the Student Handbook.
- **Outside Readings / Ancillary Materials:** Yes

**Tentative Class Schedule/Activities/List of Topics Covered**

**Week 1 – Course Introduction**

a. Didactics:
a. Introduction to disaster management and public health preparedness, as well as epidemiologic methods.
b. Practicum: Workshop on interdisciplinary, culturally competent disaster management teams. Interdisciplinary student teams will be assigned, that will serve as the working groups for the duration of the course.
c. Independent training:
   Introduction to Incident Command (3 hours due by beginning of week 3):
   http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-100.b

Week 2-4 - The Red Herring (Rabies case):
- The Case
  a. Epidemiology of rabies and epidemiologic investigation techniques,
  b. Lab
     - 3 simulations
     - Initial presentation
     - Return visit
     - ICU
- Independent: Readings and videos to be selected

- The Case Dies
  a. Skill: Introduction to ACLS (Advanced cardiac life support)
  b. Autopsy
  c. Results: Rabies
  d. Epidemiologic investigation simulation
     Testing for rabies virus: found in both the donor and recipient is of raccoon origin, meaning the virus can infect not only raccoons, but also other wild and domestic animals. In the United States, only one other person has ever died from this type of rabies virus. http://newsroom.doh.state.fl.us/2013/03/15/multi-state-epidemiological-investigation-on-rabies/ (story on rabies in an organ donor)
  e. Class discussion: Who gets rabies prophylaxis?
     - Family
     - Friends
     - Healthcare workers
     - Mexico alerted -
       http://www.cenavece.salud.gob.mx/interior/intr_english.html

f. News Conference – From the health care side, physician, hospital CEO, an epidemiologist – each must speak, it is taped, students serve as media members and ask questions to simulate a real news conference.

Week 5-6 – Epidemiologic and recent historical perspective on disaster management
- Epidemiology of disaster management reviewing recent and historic events.
- Guest Speaker
- Simulation: Disaster looms – Simulated preparation for impending tornando
- Independent: Watch recorded videos by Drs. Rega and Fink and YouTube videos on recent disasters and their management.
- Student groups present their disaster management Plans
- Skills test 1

**Week 7-8 – Disaster Strikes**
- Disaster strikes - A tornado strikes Toledo and a hospital. The students will learn the following necessary skills including triage, vertical evacuation of a patient, tourniquet application, basic airway management, intraosseous infusions,
- Independent – Groups will put together their action plan for the tornado strike.
- Groups will present their activation of their disaster plans.

**Week 9-10 – Alternative Care Site**

a. Didactics: Presentation of potential ACS scenarios that could be used in this type of disaster.

b. Practicum: Skills training for wound management, suturing, splinting, tonometry, backboard application, cervical collar application, needle thoracostomy.

c. Simulation: Managing the press and dissemination of information to the public via simulated news conference.

d. Independent – Watch recorded videos by Dr. Rega and Fink

e. Skills test 2

**Week 11-13 - Outbreak at ACS**

f. Didactics: Epidemiologic outbreak investigation techniques and techniques to contain an outbreak. Presentation of epidemiology of infectious diseases that might occur in an ACS or abroad.

g. Practicum: Techniques to quarantine patients and minimize transmission of infection as well as investigation of the outbreak.

a. The Index Case
   - Hospital worker recently back from Middle East
   - Patient at ACS with broken leg
     - Develops fever, chills, cough
     - Simulator
       - H&P
       - Sequential simulators
         - Initial
         - Worsening
         - Transfer
   - Epi alert

b. Multiple ACS evacuees fall ill
Graduate course syllabus template

Approved by Graduate Council, April 1, 2008

- Respiratory
- Epi alert: full activation
  c. News Conference
d. Skills test 3

Week 14 – Disaster Debriefing –

- Presentation of follow up from recent disasters
- Guest speaker

Week 15 – Final skills evaluation test