# The University of Toledo

## New Graduate Course Proposal

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Phone (XXX-XXXX)</th>
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<tbody>
<tr>
<td>Paul Rega</td>
<td>419-383-6722</td>
</tr>
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<table>
<thead>
<tr>
<th>Email</th>
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<tbody>
<tr>
<td><a href="mailto:paul.rega@utoledo.edu">paul.rega@utoledo.edu</a></td>
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<table>
<thead>
<tr>
<th>College</th>
<th>Dept/Academic Unit</th>
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<tbody>
<tr>
<td>Medicine</td>
<td>Public Health and Preventive Medicine</td>
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<table>
<thead>
<tr>
<th>Alpha/Numeric Code (Subject area - number)</th>
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<tbody>
<tr>
<td>PUBH 8510</td>
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<table>
<thead>
<tr>
<th>Proposed title</th>
<th>Proposed Effective Term</th>
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<tbody>
<tr>
<td>Issues in Pandemic Preparedness and Response</td>
<td>2014 20 (Spring)</td>
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<table>
<thead>
<tr>
<th>Is the course cross-listed with another academic unit?</th>
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<tbody>
<tr>
<td>No</td>
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<table>
<thead>
<tr>
<th>Approval of other Academic unit (Signature and title)</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Is the course offered at more than one level?</th>
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<tbody>
<tr>
<td>Yes</td>
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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.

<table>
<thead>
<tr>
<th>Credit hours: Fixed:</th>
<th>or Variable:</th>
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<tbody>
<tr>
<td>3</td>
<td></td>
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<table>
<thead>
<tr>
<th>Delivery mode:</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
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<tbody>
<tr>
<td>Activity Type</td>
<td>Lecture</td>
<td>Regular Lab</td>
<td></td>
</tr>
<tr>
<td>Minimum Credit Hours</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Maximum Credit Hours</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Weekly Contact Hours</td>
<td>2</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Terms Offered</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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<tbody>
<tr>
<td>Yes</td>
<td></td>
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<table>
<thead>
<tr>
<th>Years offered</th>
<th>Every Year</th>
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<tbody>
<tr>
<td>Maximum hours</td>
<td>30</td>
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<tr>
<th>Grading system</th>
<th>Normal Grading (A-F, PS/NC, PR, I)</th>
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Prerequisites (must be taken before): e.g., C or higher in BIOE 4500 or BIOE 5500 and C or higher in MATH 4200, etc.

None

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<tr>
<th>Date Added:</th>
<th>Council Approved:</th>
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<tr>
<td>6-20-13</td>
<td>10-15-13</td>
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<th>To Provost:</th>
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<tr>
<td>10-29-13</td>
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By means of synchronous, asynchronous, classroom, audiovisual, and simulation platforms, the learner will develop an in-depth knowledge concerning how the healthcare infrastructure of a community must plan for, respond to, and recover from a pandemic. The course is divided into four topic areas: 1) introduction; 2) preparedness; 3) response; and 4) recovery.

Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click here for the template.
Northwest Ohio Consortium for Public Health
University of Toledo
Department of Public Health and Preventive Medicine
Spring xxxx

Course Title: Issues in Pandemic Preparedness and Response

Course Number: PUBH 6510/8510

Credit Hours: 3 semester credits

Course Coordinator: Paul Rega, MD

Course Instructors: Brian Fink, PhD, CHES
Associate Professor
Room 4223 Collier Building
(419) 383-4817
brian.fink2@utoledo.edu

Paul Rega, MD
Assistant Professor
Room 4218 Collier Building
(419) 383-6722
paul.rega@utoledo.edu

Course Location: Collier Building, Room xxxx

Course Description:
By means of synchronous, asynchronous, audiovisual, and simulation platforms, the learner will develop an in-depth knowledge concerning how the healthcare infrastructure of a community must plan for, respond to, and recover from a pandemic. The course is divided into four topic areas: 1) introduction; 2) preparedness; 3) response; and 4) recovery.

Course Learning Objectives: By the end of the course, the learner will:
1. Name all of the phases of a disaster cycle.
2. Discuss the importance of NIMS (National Incident Management System).
3. Identify the principal officers of NIMS.
4. Define simple, complex, and catastrophic disasters.
5. Discuss the essential of a pandemic that could qualify it as a catastrophic disaster.
6. Discuss the Transitional Management Model.
7. Define surge capacity.
8. Compare and contrast mobile and fixed PODs.
9. Discuss the importance of ACS.
10. Discuss the importance of a JIC (Joint Information Center).
11. Outline three management strategies for mass fatalities.
12. Discuss the importance of the SNS.
13. Discuss NDMS.
15. Name the major attributes of the SOFA score.
16. Discuss the importance of the SOFA score in pandemic planning.
17. Define the egalitarian and utilitarian points of view with regard to pandemic ethics.
18. Discuss the importance of faith-based organizations in pandemic plans.
19. Outline social distancing measures.
20. Discuss the pros and cons of school closures during a pandemic.
21. Itemize the attributes necessary for a sound ethical foundation in pandemic planning.
22. Apply verbal, written, and computer communication skills.
23. Follow ethical and professional guidelines and standards.

Selected Readings:
Course Policies:

1. **Attendance**: Mandatory, but excuses for valid reasons (e.g., bad weather, illness, work travel) will be considered. Five points will be deducted from final grade for each unexcused absence.

2. **Independent Thinking and Group Participation**: Strongly encouraged, recommended, and expected. This includes staying awake, paying attention, maintaining a positive attitude, and answering questions.

3. **Independent Assignments**: All assignments must be typed and submitted individually.

4. **Group Assignments**: Each group member is expected to fully participate in any group project.

5. **Citations**: All assignments must contain appropriate citations of references, as necessary. Acts of plagiarism and copying other work will not be tolerated.

6. **Ethical Behavior and Practice**: All students are expected to follow the requirements established for the course. Students must read and understand the applicable expectations for ethical behavior and practice stated in the NOCPH Student Handbook and the Student Handbook established by the UTHSC Graduate School.

7. **Equivalent Contact Hours**: All courses will satisfy requirements for an appropriate number of equivalent in-class contact hours (e.g., 15 hours/1 semester credit/semester). One academic hour equals 50 minutes. This will be accomplished, however, through a variety of possible modes, include in-class/lab activities, assignments, and outside projects beyond normal reading assignments.

8. **Assistance**: Contact the course coordinator or instructor of a specific lecture using the information provided on the first page of this syllabus.

9. **Grades**:
   - ICS 100/700 certificates of completion – 10%
   - N95 fit-testing certificate – 10%
   - Class participation – 40%
   - Special project – 40%
     - The project includes:
       - POD development
       - ACS development
       - Press conference organization
       - Pandemic triage presentation and paper

   - **Scale**
     - A  93 – 100%
     - A-  90 – 92%
     - B+  87 – 89%
     - B   83 – 86%
     - B-  80 – 82%
     - C+  77 – 79%
     - C   70 – 76%
     - F  <70%
Tentative Class Schedule:

1. Introduction
   a. Week One (pre-requisite – successful completion of FEMA’s online ICS-100 and ICS-100 courses)
      i. All-hazard disaster training
         1. Disaster categories – simple, complex, catastrophic
         2. Disaster cycle
      ii. Incident Command System
      iii. Transitional Management Model
         1. Simulation
            a. ICS
               i. TTX: retirement party
               ii. TTX: wedding

   b. Week Two
      i. History of infectious disease outbreaks and pandemics in US history
         1. Yellow fever outbreak, Philadelphia (18th century)
         2. Smallpox outbreak, Minnesota (19th century)
         3. Influenza pandemic, Philadelphia (1917)
         4. Plague outbreak, San Francisco (1906)
      ii. Role of public health in outbreaks and pandemics

   c. Week Three
      i. Current threats
         1. H5N1
         2. H1N1
         3. N7N9
         4. SARS
         5. Novel coronavirus
      ii. Current pandemic prognostications

   d. Week Four
      i. Jurisdictional response
         1. Local
         2. State
         3. Federal
            a. HHS/CDC
            b. SNS
            c. NDMS
e. Week Five
   i. Players
      1. Public health
      2. Healthcare facilities
      3. EMS
      4. EMA
      5. Traditional responders
      6. Physicians, NPs, PAs, EMTs, MRC
   ii. Non-traditional responders
      1. Fraternal, societal, faith-based

2. Preparedness
   a. Week Six
      i. Pandemic potential developing in Far East
         1. Tabletop exercise dissecting learner’s plans to mitigate
            pandemic potential as threat develops

   b. Week Seven
      i. Pandemic potential developing in major population areas of
         Europe, Africa, and South America as threat looms closer
         1. Tabletop exercise dissecting learner’s plans to mitigate
            pandemic potential

   c. Week Eight
      i. Pandemic potential developing in major population areas of North
         America as threat becomes an inevitable reality
         1. Tabletop exercise dissecting learner’s plans to mitigate
            pandemic potential

   d. Week Nine
      i. Pandemic appears in learner’s community
         1. Tabletop exercise dissecting learner’s plans to mitigate
            worse effects of pandemic potential

3. Pandemic Response
   a. Week Ten
      i. Weeks 1 and 2 of the pandemic
         1. Tabletop exercise dissecting learner’s plans to activate
            surge capacity, re-design healthcare delivery, and develop
            initial social distancing measures
b. Week Eleven
   i. Weeks 3 and 4 of the pandemic
      1. Tabletop exercise dissecting learner's plans to alter standards of care, to allocate scarce resources, and to heighten social distancing

c. Week Twelve
   i. Weeks 5 and 6 of the pandemic
      1. Tabletop exercise dissecting learner's plans to activate means to alter standards of care, to develop ethical foundations, to institute mass fatality plans

d. Week Thirteen
   i. Weeks 7 and 8 of the pandemic
      1. Tabletop exercise dissecting learner's plans to initiate withdrawal of care strategies

4. Pandemic Recovery (pandemic has been officially terminated by CDC and WHO)
   a. Week Fourteen
      i. Developing a new normalcy
         1. Tabletop exercise dissecting learner's plans to transition from pandemic medical care to a new normal healthcare infrastructure

   b. Week Fifteen
      i. Learner's debriefing
         1. Lessons learned
Students registered for PUBH 8510 must complete an additional project that consists of research and a 20-page paper. Examples of possible projects include:

1. Survey a random sample of hospital ethics committees across the US to evaluate the make-up and expertise of these committees.

2. Review the major historical epidemics and pandemics in North America along with the public health response (SARS, yellow fever).

3. Develop an educational program using simulation to teach healthcare students strategic and tactical concepts associated with hospital evacuation.

4. Develop community guidelines to assist in returning to a new normal after the termination of a pandemic.

5. Survey the willingness of healthcare practitioners to withdraw ventilator maintenance from non-improving ICU patients in order to provide ventilator care to other patients during a pandemic.

6. Develop a surge capacity course to provide just-in-time training to public health practitioners and students during a pandemic.