**PH443**

**Humanitarian disaster response and public health. – 1.0 Credit**

*Quarter Year* Winter Quarter 2013  
*Day and Time* Monday 6pm to 9 pm  
*Location* To be announced  
*Instructor’s name* Bronwyn Rae, MD  
*Instructor’s title* Adjunct Faculty, Department of Preventive Medicine, Northwestern University  
*Email* brae@northwestern.edu  
*Phone* 847 328-7833  
*Office hours* By appointment

*I. Course description* Humanitarian and disaster response and public health is a seminar series that focuses on the public health (rather than the clinical or medical) aspects of response to man-made and natural disasters, locally, nationally and internationally. We will look at the phases of a disaster (mitigation, preparedness, response and recovery), epidemiology, water and sanitation management, shelter, nutrition, communicable disease control, logistics, security, ethical and long term public health concerns. The course will be a mixture of visiting lecturers and, as much as possible, active discussion and exercises which use the information learned.

*II. Learning Objectives*

At the end of this course, participants should be able to

1. Identify and describe the governmental and non-governmental organizations involved in disaster relief.  
2. Demonstrate how political, economic and geographic factors influence disaster response.  
3. Describe the health problems related to different types of disasters.  
4. List the four phases of a disaster and describe the implications of each phase for public health.  
5. Describe the Incident Command System (ICS), the National Incident Management System (NIMS), the role of Federal Emergency Management Agency (FEMA) and the NMDS (National Medical Disaster System)  
6. Describe the chain of command in disasters and how departments of public health co-ordinate with other government and non-government agencies.  
7. List the special problems of disaster relief logistics.  
8. Critically evaluate the communication technology used in disasters.  
9. Critically evaluate methods of needs assessment used in disaster management.  
10. Describe the long term public health effects of disasters and how to mitigate them.

*III. Texts and reading*

There is no textbook for this course. Instead we will read parts of manuals and documents as well as shorter separate papers for each topic. Students are encouraged to explore the many websites devoted to this topic.

**Blackboard™**

The syllabus and selected readings will be posted on the course’s Blackboard site, available at [https://courses.northwestern.edu/webapps/login](https://courses.northwestern.edu/webapps/login) if you are registered for the course.

*IV. Class assignments, projects, quizzes, tests*
The students will be divided into group of 4 or 5 (depending on the size of the class) and will be given an emergency to which to respond. Each group will produce 2 reports based on the parameters of their emergency. Each written report should be between 5 and 10 pages.

Project reports will be evaluated on whether the recommendations meet the minimum standards of disaster response, the overall quality of the report and reference to course lectures and reading material. The two projects are described in more detail in the "Disaster Assignment" document available under Course Documents on the Blackboard site.

In the last class students will present at an Ignite session. Each student will choose a topic that interests them from a list of suggested topics or they may choose their own with the permission of the instructor. The student will then give a five minute presentation on the topic of choice, the function of which is to "ignite" someone else's interest in the topic and give the viewer the information that he or she may need to pursue the subject further.

*V. Student Evaluation*
Students will be evaluated based on…
- in-class participation (asking questions, discussing reading, contributing ideas) 25%
- the 2 projects (25%) each
- "Ignite" presentation (25%) How well the presentation fulfilled the objectives of an Ignite presentation - (did it stick to the time parameters, did it excite the viewer's interest in the subject, would the viewer later on be able to more easily explore the subject on his/her own, did the presentation present the essential information in a clear manner.)

*Course evaluation*
The MPH Program administers web-based course evaluations to students for each course near the end of the quarter. Your completion of both the unit (course) and faculty evaluation components is required; failure to complete either of the evaluations will result in an incomplete grade until the evaluations are submitted. You will be sent the web link and instructions via email later in the quarter. You will have about two weeks to complete the evaluations before grades are submitted.

*Academic Integrity*
Every Northwestern faculty member and student belongs to a community of scholars where academic integrity is a fundamental commitment. The Program in Public Health abides by the standards of academic conduct, procedures, and sanctions as set forth by The Graduate School at Northwestern University. Students and faculty are responsible for knowledge of the information provided by The Graduate School on their Web page at http://www.tgs.northwestern.edu/academics/academic-services/integrity/index.html

Academic misconduct includes, but is not limited to
1. Receiving or giving unauthorized aid on examinations or homework
2. Plagiarism
3. Fabrication
4. Falsification or manipulation of academic records
5. Aiding or abetting any of the above

The PPH follows The Graduate School’s procedure for evaluating alleged academic misconduct, as outlined on the TGS website. http://www.tgs.northwestern.edu/academics/academic-services/integrity/dishonesty/index.html
Faculty reserve the right to use the “Safe Assignment: Plagiarism Detection Tool” that is part of the Course Management System to evaluate student assignments. Information about this tool can be found at http://www.it.northwestern.edu/education/course-management/support/assessments/safeassignment.html

Additional resources (e.g., software, websites)

www.fema.gov. The website of the federal emergency management agency. A wealth of information covering disaster preparedness, mitigation, response and recovery. Also has some on-line courses that are worth doing.

http://www.emdat.be An Emergency Events Database EM-DAT. maintained by the WHO Collaborating Centre for Research on the epidemiology of Disaster (CRED). It contains essential core data on the occurrence and effects of over 18,000 mass disasters in the world from 1900 to present. The database is compiled from various sources, including UN agencies, non-governmental organizations, insurance companies, research institutes and press agencies. After spending some time on this site you will never feel safe again. A great resource nevertheless.

http://www.cred.be/ CRED, the Centre for Research on the Epidemiology of Disasters, undertakes research and provides an evidence base on the burden of disease and health issues arising from disasters and conflicts to improve needs-based preparedness and responses to humanitarian emergencies. It has a special focus on public health and epidemiology.

http://www.cidi.org/ The website of the Center for International Disaster Information (CIDI) guides and informs the public, religious and community groups, diaspora, embassies, non-profits, corporations, and governmental organizations about the most effective ways to support international disaster relief. Useful for its information about current complex emergencies with reports detailing the aid given and the population needs.

http://www.fema.gov/incident-command-system#item1 FEMA site which gives information about the incident command system with training exercises and self guided courses.

Optional/recommended reading

The background and ethics of humanitarian relief will not be covered in this course in any detail but these books are recommended for those who are interested in exploring the subject further.

"All the Missing Souls” David Scheffer

A personal history written by the US ambassador-at-large for war crimes that details the history of the thinking on justice for those committing crimes against humanity.
**An Imperfect Offering: Humanitarian Action for the 21st Century.** James Orbinski

Written by the man who was President of the International Council of Médecins Sans Frontières (MSF, aka Doctors Without Borders) at the time the organization received the 1999 Nobel Peace Prize. He was in Rwanda at the time of the genocide there and his account of those days makes riveting reading.


A series of essays which addresses the "evolution of humanitarian goals and the political transactions and potentially unsavory negotiations aid workers must undertake to proceed with their plans, a dirty reality often obscured by humanitarian literature's lofty rhetoric."

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**Week by Week**

**Week 1 1/7/13**

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<tr>
<th>1/7/13</th>
<th>Bronwyn Rae, MD</th>
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<td></td>
<td>Introduction</td>
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<td>History of disaster relief</td>
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<td>National Incident Management System</td>
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Colin Flood

Incident Command System

Reading:

1. The effects of disaster on health and an approach to relief.  
   *PAHO Study guide: Part I*

**1/14/13**

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<th>1/14/13</th>
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International Law and Humanitarian Relief

Chad Zawitz, MD

Katrina: What I learned from being there.

Reading:

1. ALMS dealers Can you provide humanitarian aid without facilitating conflicts? Gourevitch, P *New Yorker* October 11, 2010

**1/21/13**

<p>| 1/21/13 | Martin Luther King Day. Makeup class TBA |</p>
<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>1/28/13</td>
<td><strong>Disasters and Cholera</strong>&lt;br&gt;Anagha Loharika, MD&lt;br&gt;Steven Krug, MD&lt;br&gt;Children in Disasters;&lt;br&gt;Reading:</td>
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<td>2/11/13</td>
<td><strong>First project due</strong>&lt;br&gt;Carolyn Baer,&lt;br&gt;Reproductive Health in Disasters&lt;br&gt;Rahul Ganatra&lt;br&gt;The CDC and Its Role in Disasters&lt;br&gt;Reading:&lt;br&gt;1. Public Health equity in refugee situations. Leaning, J et al&lt;br&gt;2. Infectious diseases of severe weather-related and flood-related natural disasters. Ivers, L Ryan&lt;br&gt;<em>Current Opinion in Infectious Disease</em>, 2006;19:408-414</td>
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| 2/18/13  | David Rothstein MD  
Surgical needs in Disaster Relief: The work of MSF |
|          | Jeff Rice, PhD  
Genocide - its causes and prevention |
|          | **Readings:**  
1. Improving effective surgical delivery in humanitarian disaster Chu, K. PloSMed v8(4) April 2011  
4. AID All in Diary A Practical Tool for Field Based Humanitarian Workers |
| 2/25/13  | Luis de la Torre, PhD  
Logistics and co-ordination in disaster relief |
|          | Jennifer Chan, MD  
Means of communication |
|          | **Readings:**  
| 3/4/13   | **Second project due**  
The Public Health Aftermath of Disasters. |
|          | **Reading**  
| 3/11/13  | Ignite Session  
Group Project Presentations.  
Wrap up. |