The purposes of this course are to explore the relationship between globalization and health and provide students with an understanding of: (a) major indicators and determinants of health and health disparities across populations, from less to more developed countries; (b) the role of epidemiology in evaluating population health, and developing interventions to improve global health and reduce health disparities; and (c) some of the methodological and ethical considerations in international health research. The course is also designed to expose students to health research and clinical work of current University of Wisconsin faculty members working in a range of disciplines relevant to global health, and to help students identify ways in which they might contribute in the future to improvements in global health.

<table>
<thead>
<tr>
<th>Week, DATE</th>
<th>TOPICS</th>
<th>SPEAKERS</th>
<th>ASSIGNMENTS (details provided on pages 3-6 below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wed 10/29</td>
<td>4:30-5:35 Introduction: course goals, scope &amp; requirements; brief overview of global health &amp; epidemiology. 5:45-7:00 Global health effects of mercury.</td>
<td>Durkin  Kanarek</td>
<td>Readings assigned for week 1, (to be read in advance of class) Post on Learn@UW Forum, 500 to 750-word Essay #1 if choosing this option. Due Monday 11/10.</td>
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<tr>
<td>2. Wed 11/05</td>
<td>4:30-5:45 Global influenza crises. 6:00-7:00 Disaster management.</td>
<td>Ip  Birnbaum</td>
<td>Readings assigned for week 2; Exercise #1. Due Monday 11/17, Post on Learn@UW Forum.</td>
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<tr>
<td>3. Wed 11/12</td>
<td>4:30-5:25 Globalization &amp; health; epidemiologic transitions. 5:30-7:00 Epidemiology of HIV/AIDS</td>
<td>Durkin  Sosman</td>
<td>Readings assigned for week 3.</td>
</tr>
<tr>
<td>4. Wed 11/19</td>
<td>4:30-5:45 Epidemiology of neglected and vector-borne disease and the emergence of chikungunya in the Americas. 6:00-7:00 Global health indicators, using epidemiology to identify global health disparities and priorities.</td>
<td>Aliota  Durkin</td>
<td>Readings assigned for week 4; Post on Learn@UW Forum, 500 to 750-word Essay #2 if choosing this option. Due Monday 12/1.</td>
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<tr>
<td>5. Wed 11/26</td>
<td>No Class, Happy Thanksgiving.</td>
<td></td>
<td>Post on Learn@UW Forum, 500 to 750-word Essay #3 if choosing this option. Due Monday 12/8.</td>
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<tr>
<td>6. Wed 12/3</td>
<td>4:30-5:45 Health effects of the built environment. 6:00-7:00 Global mental health, Epidemiology of neurodevelopmental disabilities in low and middle income countries.</td>
<td>Sledge  Durkin</td>
<td>Readings assigned for week 6; Exercise #2 Due 12/3 (paper copy).</td>
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<tr>
<td>7. Wed 12/10</td>
<td>4:30-5:30 Using of epidemiology to investigate disease causation. 5:35-7:00 Course wrap-up</td>
<td>Durkin</td>
<td>Readings assigned for week 7.</td>
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</tbody>
</table>

Online exam will be due before 12/15/2014, (Learn@UW quiz)
Format: lectures featuring U.W. faculty with expertise in topics related to international health; weekly readings; brief written assignments and discussions on assigned and student-selected topics.

Grading:

- **Class Attendance and Participation, 56%**. In addition to attendance and participation in class discussions, this includes completion of one of the three assigned Learn@UW 500 to 750-word essays (postings). Note that students can earn up to 8 points for attendance and participation for each of the six in-class sessions (48 points), and up to 8 points for one essay. In addition, it is possible to miss one attendance (if the instructor and TA are notified in advance) and make up points toward this missed attendance by posting a second essay. Therefore, it is possible to miss one attendance and still achieve 56%.

- **Exercise #1, Evaluation of Airport Screening for Ebola Virus Disease (EVD), 10%**.

- **Exercise #2, Global Health Indicator Assignment, 20%**.

- **Final Exam, 14%**. This will be a take-home, on-line, open-book, multiple choice quiz based on information in the lectures and assigned readings. Each student is to work independently to complete the exam, not in pairs or groups.

Attendance: Students are expected to attend all six weekly class sessions and sign the attendance sheet. In the event that a student has to be late or miss a class, he or she should let the instructor (mdurkin@wisc.edu) and the teaching assistant (allerton@wisc.edu) know in advance, if possible. Students have an opportunity to make-up for one missed weekly session by completing and posting a second essay (instead of the otherwise minimum requirement of posting one 500 to 750-word essay). Students are encouraged to read each other’s postings on the Learn@UW Forum.

Office Hours: Available on request with Dr. Durkin or Ms. Dubois. Please email.

<table>
<thead>
<tr>
<th>Lecturers:</th>
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<tr>
<td><strong>Matthew Aliota, PhD</strong>, Professor of Pathobiological Sciences School of Veterinary Medicine, UW-Madison</td>
</tr>
<tr>
<td><strong>Marvin Birnbaum, MD, PhD</strong>, Emeritus Prof. of Med. &amp; Physiology, Director of UW Emergency Med. Services; Past-President, World Assoc. for Disaster &amp; Emergency Medicine</td>
</tr>
<tr>
<td><strong>Maureen Durkin, PhD, DrPH</strong>, Professor, Departments of Population Health Sciences, and Pediatrics, and Waisman Center Investigator, UW-Madison</td>
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<tr>
<td><strong>Hon Ip, PhD</strong>, Director, Diagnostic Virology Laboratory, United States Geological Survey, National Wildlife Health Center, Madison, WI</td>
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<tr>
<td><strong>Marty Kanarek, PhD</strong>, Professor, Dept of Population Health Sciences, and Gaylord Nelson Institute for Environmental Studies, UW-Madison</td>
</tr>
<tr>
<td><strong>Jeffrey S. Sledge, PhD</strong>, Program Director, ELMS, Nelson Institute for Environmental Studies, UW-Madison</td>
</tr>
<tr>
<td><strong>James Sosman, MD</strong>, Associate Professor, Department of Medicine, UW-Madison</td>
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</table>
ASSIGNMENTS

A. Write and post on the appropriate Learn@UW Discussion Forum, one of the three Essay options described below for 500 to 750-word essays. A second essay can be submitted to help make up for one missed class attendance. There is no need to include a formal bibliography or list of references, but do refer to the assigned readings and lecture material. Note that there is no one right conclusion for any of the topics; the goal is to give you an opportunity to demonstrate that you have comprehended and reflected on the information in the readings and lectures. Each student is to write the essays independently based on his or her own synthesis and own work. Students can read other students essays once they’ve posted their own.

Essay #1  Consider the ideas and information included in the different readings and lectures from weeks 1 and 2, and summarize at least one conclusion you have drawn from them. Provide your reasoning, and specific examples of epidemiologic evidence described in the readings or in the lecture to support your conclusion(s). Do not try to cover everything but do be as specific as possible about the epidemiologic evidence that could support one conclusion or another. Due Monday 11/10/2014.

Essay #2  Consider the ideas and information included in the different readings and lectures from weeks 3 and 4, and summarize at least one conclusion you have drawn from them. Provide your reasoning, and specific examples of epidemiologic evidence described in the readings or in the lecture to support your conclusion(s). Do not try to cover everything but do be as specific as possible about the epidemiologic evidence that could support one conclusion or another. Due Monday 12/1/2014.

Essay #3  Consider the ideas and information included in the different readings and lectures from weeks 4 or 6, and summarize at least one conclusion you have drawn from them. Provide your reasoning, and specific examples of epidemiologic evidence described in the readings or in the lecture to support your conclusion(s). Do not try to cover everything but do be as specific as possible about the epidemiologic evidence that could support one conclusion or another. Due Monday 12/8/2014.

B. Exercises

Exercise #1: Evaluation of Airport Screening for Ebola Virus Disease (EVD), Due Monday, November 17, 2014 (Upload completed Word document or pdf onto Learn@UW, Discussion Forum for Exercise #1).

Exercise #2: Global Health Indicator Assignment, Due Wednesday 12/3/2014 (Upload completed Word document or pdf onto Learn@UW, Assignment Dropbox for Exercise #2).
READINGS (to be read in advance of each session)

Week 1, Wed 10/29/2014:
Course overview & background

Global health effects of mercury

Week 2, Wed 11/5/2014:
Global Influenza Crises
http://apps.who.int/iris/bitstream/10665/78414/1/9789241503051_eng.pdf

Disaster Management
Week 3, Wed 11/12/2014:
Globalization & health; Epidemiologic transitions

Epidemiology of HIV/AIDS

Week 4, Wed 11/19/2014:
Epidemiology and control of neglected and vector-borne disease

Global health indicators, using epidemiology to identify global health disparities, priorities and goals
Week 6, Wed 12/3/2014:
Health effects of the built environment

Global mental health, Epidemiology of neurodevelopmental disabilities in low and middle income countries

Week 7, Wed 12/10/2014
Course wrap-up