PHS / IES 740: HEALTH IMPACT ASSESSMENT OF GLOBAL ENVIRONMENTAL CHANGE
SPRING 2017, 3 CREDITS

BASIC INFORMATION
Tuesday / Thursday, 2:30-3:45 - Room 1106 Mechanical Engineering

Instructor:
Professor Jonathan Patz, MD, MPH
Offices: 258 Enzyme Institute Bldg, 1710 University Ave.
1050 Medical Sciences Center, 1300 University Ave. (across from W.I.D.)
Office hours: Tues. 3:45 – 4:45pm, Thurs. 1:30-2:30pm, and by appointment
(email Monet Haskins mchaskins@wisc.edu to schedule a time).

Contact information: patz@wisc.edu, 608-263-2188

Teaching Assistant: Melissa Hatch
Office:
Office Hours: By appointment
Contact Information:

COURSE OBJECTIVES
The course will provide students with tools to identify and address real-world global environmental and urban health issues. In addition to reading and discussing subject content to assist in understanding of the issues, students will learn skills to optimize the likelihood of affecting policy change through: 1) the Health Impact Assessment framework; 2) an introduction to environmental health modeling and spatial analysis; and 3) science communication skills.

By the end of the course, students should be able to:

1. Recognize unique elements of environmental public health and environmental epidemiology.
2. Know the steps both for Risk Assessment and for Health Impact Assessment, and understand when to apply one approach versus the other; recognize their strengths and weaknesses.
3. Recognize the linkages between physical and ecological conditions with human health and well-being, as well as exposure pathways through which impacts occur.
4. Gain facility in some tools available to study environmental and urban design influences on health, e.g., spatial analysis with GIS and environmental health modeling.
5. Through interdisciplinary team projects, recognize the value of problem-solving by applying multiple disciplined perspectives.
6. Develop effective risk communication strategies related to environmental health.

REQUIRED STUDENT RESOURCES
Textbooks:
Climate Change and Public Health
Levy and Patz. 2015, Oxford University Press.

Learn@UW Material (Articles, Videos, Etc.):
Along with textbook readings, most class sessions include additional required and suggested readings to be read prior to each class. You can find these posted by session on Learn@UW under the “Content” tab. Web links, lecture videos, lecture slides, and other resources will also be posted. Access to Learn@UW is necessary for the class. Additionally, most assignments will be submitted online using dropbox on Learn@UW and updates to this syllabus and additional information throughout the course will also be posted online.

Optional Related Texts:
Environmental Health: From Global to Local (Third Edition, 2016)
Health Impact Assessment in the United States

Dannenberg, Frumkin, Jackson. 2011, Island Press.

The Routledge Handbook of Planning for Health and Well-Being: Shaping a sustainable and healthy future

COURSE SCHEDULE/ CALENDAR
Please see attached sheet for a tentative course schedule. Dates are subject to change.

EVALUATION PROCEDURES AND GRADING CRITERIA
Students will be graded on a variety of individual and group work, including active participation in class discussions. Graduate students will also be required to write an Op-Ed on their HIA projects, a Reference Table, and Critique of one scientific study. Descriptions of these assignments are outlined in more detail below.

Grading Scale:
93-100% constitutes an A
88-92% constitutes an AB
82-87% constitutes a B
77-81% constitutes a BC
71-76% constitutes a C
67-70% constitutes a CD
60-66% constitutes a D
<60% constitutes an F

INDIVIDUAL IS GRADED ON:
Attendance and Participation 10 points
HIA Case Study 5 points
Message Box 10 points
Midterm Exam 25 points

GROUP IS GRADED ON:
Scoping Map 10 points
Final Project - Group HIA Paper 25 points
Final Project - Group HIA Presentation 15 points
100 points total

GRADUATE STUDENTS ONLY (INDIVIDUAL)
Op-Ed 10 points
Reference Table (minimum 10 papers) 5 points
Critique of Scientific Study 5 points
120 points total

ATTENDANCE STATEMENT
Course attendance is required. If you miss more than three classes, your final course grade could be lowered at the instructor’s discretion. In the event of unavoidable conflicts, please communicate ahead of time if possible.
**FLIPPED CLASSROOM MODEL:**
To utilize our class time and access to technology in the most effective way, we will “flip” approximately 15-20% of our class periods, meaning that **students will view lecture material online before coming to class.** This will prepare them for active participation in discussions and activities during classtime.

**AMERICAN DISABILITIES ACT FOR STUDENTS WITH SPECIAL NEEDS STATEMENT**
We wish to fully include persons with disabilities in this course. Please let Dr. Patz know if you have a McBurney Visa listing any accommodations, and we will do our best to meet those needs.

**ACADEMIC HONESTY**
Our course is an academic community that is bound together by the traditions and practice of scholarship. Honest intellectual work – on examinations and written assignments – is essential to the success of our own community of scholars. Using classmates’ responses to answer exam questions or disguising words written by others as your own assignments undermines the trust and respect on which our course depends and will not be tolerated. Academic dishonesty could result in course failure. If you have questions, see the UW Academic Integrity Page: [http://students.wisc.edu/doso/acadintegrity.html](http://students.wisc.edu/doso/acadintegrity.html)

**Assignment Descriptions**

1. **Class Attendance and Participation (10 points total)**
Active participation and class attendance are required for all students. Additionally, participation outside of class is necessary and will include brief online quizzes (after viewing assigned online lectures or other videos). Material on Learn@UW, such as videos, will prompt student driven discussion in class.

2. **HIA case study write-up (5 points) – due 02/14/17**
Students should pick a Health Impact Assessment (HIA) that has been conducted and should describe each component of a typical HIA, as related to that HIA found in the literature, including the policy or decision in question for which the HIA was conducted.

3. **Scoping Map (10 points) – due 03/02/2017**
Student groups will complete a scoping map of their HIA project including all aspects of HIA—such as risks and benefits, equity, etc. This exercise will be further explained in class.

4. **Final Project Outline (Not graded) – due 03/09/2017**
Student groups will outline their project report and strategy to complete a full health impact assessment of a chosen topic (2 pages maximum).

5. **Midterm Exam (25 points) – due 03/16/2017**
Multiple choice format exam to be completed in class. Questions will be based-on learning objectives that accompany each lecture as well as outside reading material.

6. **Message Box – by every student- (10 points) for “Elevator” interviews (ungraded) – due 04/25/2017**
Students will be interviewed individually by the instructor and asked to respond to various questions focusing on the subject of the group HIA topic. From an in-class lecture, students will learn about constructing a “Message Box” to organize the most important points to convey to the press and policy makers, and they will then make an individual message box in preparation for this interview (even though the HIA is a team effort).

7. **Health Impact Assessment Report (25 points) – due 05/02/2017**
Student groups will complete a formal HIA Report (20-30 pages). Guiding questions to conduct an HIA will be posted on Learn@UW. For this 2017 class, we are part of the “UniverCity Year” -- visit: [http://univercity.wisc.edu/univercity-year/](http://univercity.wisc.edu/univercity-year/), whereby our student team HIA is addressing health-related policies for the town of Monona. The HIA report should address the specific policy question of our Monona partners/clients, and clearly state the policy and its implications. There must be an executive summary with key conclusions and recommendations identified. Structure must follow HIA basic components and show context beyond purely health sector issues. More information and rubric will be provided.
8. HIA project Presentation (15 points) – presentations scheduled 04/27/17 and 05/02/17
Group oral presentations will be assessed based on: content, organization, style of presentation, use of time, A/V quality, and how questions are handled. Weight is given to the first two criteria (content and organization). Presentations must be only 15 minutes in length. Each group should email their presentation to Professor Patz and the TA the night before and bring a copy on a memory stick to load onto computer.

Extra Assignments for Graduate Students

9. Op-Ed (Graduate Students Only) (10 points) – due 05/09/2016
Each graduate student will be required to produce a polished 1-2 page op-ed (750-word max) based on his/her final group project. The op-ed should be directed toward a specific newspaper or online news source. Scoring for this project will be based on: Clarity in writing to: a) concisely express key arguments; b) limit scope and focus of messaging; and c) be readable to the general public (targeting 7-8th grade reading level). Beyond being a concise summary, the Op Ed will need to either: a) be tied to a recently published news article or opinion piece; or b) be relevant to a well-recognized and current issue in the public discourse.

10 (a). Reference Table (Graduate Students Only) (5 points)
Each graduate student will be required to build a reference table including a minimum of 10 papers (preferably from primary research studies) that will be useful in the research of the Final HIA Paper. This reference table should include the following: paper title, author, study site and study population, method of analysis, and a brief synopsis on the main points from the paper (just 1 or 2 sentences). An example reference table will be provided.

Scoring for this project will be based on:
Completeness of information gathered for the table; proportion of papers from primary research vs. review papers (if <50% primary research papers, 2 pts. will automatically be deducted).

10 (b). Critique of Scientific Paper (Graduate Students Only) (5 points)
Each graduate student will be required to write a 1-page critique of 1 primary research study (from one of the 10 papers listed in the reference table assignment above.

Scoring for this project will be based on epidemiologic principles learned in the course, including: sample selection, controlling for bias or confounding, and whether or not the analysis supports conclusions of the paper.