

NRI 7340 Syllabus: Environmental Justice and Ecosystem Health

Instructor:
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Class Location: 129 St. Johns
Office Hours: Room 314 -- by appointment
Time: Tuesday, 1:30-4:30 p.m.
Term: Winter 2009

Introduction

This course explores health and justice issues in an environmental context to realize both the possibilities and barriers of sustainability. Arguably, sustainable development is, at its most fundamental level, about sharing the planet's resources with the future and in equitable ways and also about ecosystem health. Choosing between environment and inequality, rather than seeing these issues as integrated, separates environmental issues from lived realities. A rich multi-layered view of sustainability will result from reading work by people from diverse classes, races, genders and from both developed and developing countries. Environmental justice acknowledges differences in power across race, gender and class as environmental disparities reflect larger societal inequities, asking: "Who decides and who should decide developmental priorities?" and "Who pays for and who benefits from resource management and technological expansion?" These questions expose unfair and inequitable conditions and loss of community control that undermine sustainability. After all, the poor and marginalized of the world are the ones who bear the brunt of pollution, resource degradation and dislocation, whether as a result of a dam, toxic waste, lack of arable land, ozone depletion or global climate change, simply because they are more vulnerable and lack alternatives.

In looking through the eyes of the poor and marginalized we realize that humans cannot live apart from the rest of nature, which is our life-sustaining context. Food security, clean air, safe water, healthy neighbourhoods and adequate housing are seen as some of the building blocks of sustainability, health and environmental justice. Where these basic human rights are compromised people are at risk, as the Millennium Development Goals recognize. The following eight Millennium Development Goals (www.un.org/millenniumgoals/) set a global agenda to focus on poverty, health and environmental issues: 1) Eradicate extreme poverty and hunger; 2) Achieve universal primary education; 3) Promote gender equality and empower women; 4) Reduce child mortality; 5) Improve maternal health; 6) Combat HIV/AIDS, malaria and other diseases; 7) Ensure environmental sustainability; and, 8) Develop a global partnership for development.

Many social and ecological tragedies are a result of careless exploitation of the environment with human beings both being the perpetrators and victims. The ecosystem health approach recognizes the inextricable links between humans and their biophysical, social, and economic environments and that these links are reflected in a population's state of health. Although mainstream medical establishments have, until recently, disregarded the environmental/health link the World Health Organization (WHO) recognizes that 80 percent of cancers are triggered by environmental factors, including diet, lifestyle, occupation and residence. WHO considers the quality of life in its definition of health: "State of complete physical, mental and social well-being, and not merely the absence of disease or infirmity".

Objectives

1. To provide new perspectives on resource management and sustainability by looking at equity and health goals.
2. To determine the building blocks of sustainability, justice and health.
3. To critique sustainable development and current resource management methods.
4. To gain a deeper understanding of key concepts related to the linkages between health and the environment including causation, sources, pathways (air, water, soil and food), risk assessment, health impacts, policy analysis, primary prevention, the precautionary principles, social power relationships in society, gender and cultural issues, safe production, consumer education.

Course Format

A variety of teaching methods will be used to achieve course objectives including: lectures, class discussions, presentations, readings and group work. Classes will involve short lectures, guest speakers and group work. This course is an opportunity to explore and critique development and resource management, as well as build research and analytical skills. Participation in class will be required. WebCT will provide a discussion forum and allow people to view articles without cutting down trees. Also note that almost all articles are either available on the internet (web addresses attached) or the University of Manitoba library.

Course Text

Articles and chapters of books are available in the photocopy room and either by e-mail or through WebCT (whichever class prefers). The articles for reading each week are listed in the course outline.

Plagiarism

Students are directed to the University of Manitoba policies on plagiarism as presented in the General Calendar.

Grading

Grade	Marks	GPA
A+	≥ 90	4 (4.5)
A	85-89	4.0
B+	80-84	3.5
B	75-79	3.0
C+	70-74	2.5
C	65-69	2.0
D	60-64	1.0
F	>60	0.0

Evaluation

Four evaluation methods will constitute 100 percent of the course mark, as listed below:

Assignment 1) Organizing a presentation/activity with a group.

Group presentation (minimum 20 minutes) on environmental justice or environmental health issue and lead a discussion on the readings or organize a speaker or class activity around the topic area (30 percent) (choice of weeks).

. The student has the option of preparing a presentation, organizing a trip or arranging an event. Whatever the activity the organizer must prepare a few learning objectives and questions for the group regarding the presented material or an article provided in advance. If more than one hour is needed or a trip away from the school location is planned please discuss with the professor ASAP. As part of this exercise you are required to provide the class with at least one article (one to three articles) at least one week in advance. This could also be an opportunity to organize a public panel or workshop on environmental health or justice issue (e.g., fogging of mosquitoes) in or outside of class time.

Assignment 2) Participation grade (20 percent).

- **Debate on environmental health/environmental justice issue (10 percent)**
- **Journal writing (10 percent)**

Objective: to reflect upon, critique and integrate the materials presented in each thematic area. Expression in pictures, poetry, critiques of articles, related news items clippings are welcome. In each class, where field trips do not occur, we will do a go round and give people an opportunity to read from their journals usually at the beginning of class. To be handed in at the last week of every month for review.

Assignment 3) Video, art piece, electronic media or essay on environmental justice or environmental health topic (50 percent) (Due December 20th,).

The essay should be approximately 3000-4,000 words or around 10 -15 double spaced pages. Please use a simple font in a legible size (e.g., 12 point Times New Roman). Essays should have some logical and orderly manner, such as having a thesis statement and arguments to support it. Students should review an academic writing manual such as the MLA Handbook for Writers (Gibaldi and Achtert, 1999) for bibliographic references and set-up. The paper's bibliography will be reviewed for completeness (i.e., are all references there) and comprehensiveness (i.e., the student has used an appropriate range and number of references). Students must conform to the University's "General Academic Regulations and Policy".

Content (30%) – Have you used current and diverse references to provide substantive material?

Logic (30%) – Do you have a thesis statement 10% and good arguments to support your thesis statement 20%?

Analysis (20%) -- Are the important questions being asked? Do you frame local issues in terms of the larger issues (e.g., food security)? Do you have a good critical analysis that looks at both/multiple sides of issue?

Style (20%) – Are references complete? Is writing style readable?

NOTE: If an art piece rather than an essay is chosen a minimum of a two page explanation of the art's meaning must accompany the art piece that includes referencing.

Environmental Justice and Health

Instructor: Dr. Shirley Thompson
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Class Location: NRI Seminar Room
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Course Outline

Sept. 13th - Week 1: Introduction - Environmental Justice and Ecosystem Health in Resource Management

This is a key class to determine which issues are a priority for the class members, to set operating principles and to choose the class activities.

Historical context and evolution of environmental justice, concepts and definitions, philosophy and ethics, theories, links between environmental justice, health and resource management. Discussion of what are the basic building blocks for health, environmental justice and sustainability.

http://www.hesperian.org/publications_download_ghw.php

http://www.hesperian.org/publications_download_EHB.php

Sept. 20th - Week 2: Environmental Justice Debate

Environmental justice **integrates** environmental concerns into a broader agenda that emphasizes social, health and economic justice.

versus

Environmental justice **does not** integrate environmental concerns but provides a narrow and divisive area of interest within environmental field.

For debate: People will divide into two groups to take a position for or against environmental justice/ecosystem health argument using material from articles. Each person will speak, one from one team than one from the other team, with two minutes to raise a point and two minutes to refute any earlier comments. After everyone has spoken a broader discussion will be pursued to see if consensus can be reached. Please note that the goal is not to win or lose a formal debate but to explore the various issues related to environmental justice.

Agyeman, Julian. "Where justice and sustainability meet: Alternatives for Community and Environment." *Environment*. July-August 2005 v47 i6 p10(14).

Kuehn, R. "A Taxonomy of Environmental Justice". *Environmental Law Reporter* Vol.30, p. 10681, 2000. <http://ssrn.com/abstract>

Universal Declaration of Human Rights, G.A. res. 217A (III), *U.N. Doc A/810* at 71 (1948). <http://www1.umn.edu/humanrts/instree/bludhr.htm>

Bullard, R. Environmental Justice in the 21ST Century. Principles of Environmental Justice <http://www.ejrc.cau.edu/princej.html>

Sept 27th – Week 3: Health promotion/ecosystem health/community development

Speaker: Vince Sansregret, Community Facilitator ACCESS River East Winnipeg Regional Health Authority

WHO. “The global distribution of risk factors by poverty levels”. *Bulletin of the World Health Organization*, February 2005, 83 (2). <http://www.who.int/bulletin/volumes/en/>

Lebel, Jean. 2003. Ecosystem Health: An Ecosystem Approach. International Development Research Centre 2003. http://www.idrc.ca/en/ev-29393-201-1-DO_TOPIC.html

October 4th - Week 4: Community and Environmental Justice

Walking tour of West Broadway neighbourhood with Member of Legislative Assembly, Rob Altemyer, with itinerary that includes: ArtCity, Crossways in Common, West Broadway Neighbourhood Centre, Housing and Community Gardens, Nine Circles Health, etc.

Please refer to: http://www.winnipeg.ca/ppd/planning_nhbd.stm

<http://www.cbc.ca/manitoba/features/urbanmyths/westbroadway.html>

The Belfast Declaration was adopted on 22 October 2003 at the International Healthy Cities Conference. http://www.who.dk/healthy-cities/CitiesAndNetworks/20040227_3

Dr Pilar Garcia and Dr Mark McCarthy. “Measuring Health: A Step in the Development of City Health Profiles. *WHO*, Pg. 36 – 52 for environment and health topics.

<http://www.who.dk/document/WA95096GA.pdf>

October 11th - Week 5: Food Security

A Workbook on Food Security & Influencing Policy. Draft Edition. Halifax: Nova Scotia Nutrition Council and the Atlantic Health Promotion Research Centre.

<http://www.foodthoughtful.ca/> Activity 1.1, 1.2, 2.1

Urban Agriculture Magazine "Food Policies are essential for Healthy Cities", special edition for the *World Food Summit, 2001*.

http://www.ruaf.org/uam_specials/uam_rome_2002.pdf

October 18th - Week 6: Hazardous/Toxicity/Risk/Risk Assessment/Precautionary Principle

*TBA

October 25th – Week 7: Conflict Resolution

Facilitator: Dr. Tim Osachuk, University of Manitoba

McIntosh, Peggy. 1989. “White Privilege: Unpacking the Invisible Knapsack” *Peace and Freedom*, July/August 1989.

November 1st -- Week 8: Health Impact Assessment for development/industry

Speaker: Rick Grabowecky, Regional Environmental Assessment Co-ordinator, Health Canada (204) 984-8318

R. Kwiatkowski and M. Ooi. 2003. “Integrated environmental impact assessment: a Canadian example”. *Bulletin of the World Health Organization* 2003, 81 (6).

<http://www.who.int/bulletin/volumes/en/>

Jobin, W. 2003. “Health and equity impacts of a large oil project in Africa.” *Bulletin of the World Health Organization* 2003, 81 (6). <http://www.who.int/bulletin/volumes/en/>

Note: Four Canadian Handbooks on Health Impacts are available at Health Canada website – CD will be provided by Mr. Grabowecky.

http://www.hc-sc.gc.ca/ewh-semt/pubs/eval/handbook-guide/vol_1/index_e.html

November 8th – Week 9: First Nations Health, Environment and Community

Speaker: First Nations

First Nations and Inuit Affairs, Health Canada or Environmental Health Officer

Mr. Ed Mandamin, Council, Economic Development, IIFN, Shoal Lake First Nation

* Articles TBA.

November 15th – Week 10: Clean Drinking water/wastewater

Bartram, J, K. Lewis, R. Lenton and A. Wright. “Focusing on improved water and sanitation for health.” *The Lancet*. www.thelancet.com vol 365, February 26, 2005, 810-812

Hrudey, S.E., P.M. Huck, P. Payment, R.W. Gillham, and E.J. Hrudey. Walkerton: Lessons learned in comparison with waterborne outbreaks in the developed world . *J. Environ. Eng. Sci. 1*: 397–407 (2002) <http://www.environmental-center.com/magazine/nrc/jees/s02-031.pdf>

<http://www.environmental-center.com/magazine/nrc/jees/s02-031.pdf>

Allan H. Smith, Elena O. Lingas, & Mahfuzar Rahman. “Contamination of drinking-water by arsenic in Bangladesh: a public health emergency”. *Bulletin of the World Health Organization*, 2000, 78 (9).

[http://whqlibdoc.who.int/bulletin/2000/Number%209/78\(9\)1093-1103.pdf](http://whqlibdoc.who.int/bulletin/2000/Number%209/78(9)1093-1103.pdf)

November 22nd - Week 11: International Development (millennium development goals)

Millennium Development Goals

Speaker at 3:30: Don Weins, Food Grains Bank

*Class presentation

***Articles TBA

November 29th – Week 12: Gender and Sustainable Livelihoods

UNEP. 2005. Geo Yearbook. http://www.grida.no/geo/pdfs/geo_yearbook_2004_eng.pdf, chapter 2 (page 55-70).

*Class presentation

***Articles TBA

December 6th – Week 13th: Trip/Celebration

Overview of Environmental Justice Course

Date	Course Focus
January 6	Introduction – Environmental justice
January 13	Debate
January 20	Health Promotion/Ecosystem Health/Community Development
January 27	Community Development: West Broadway tour Rob Altemeyer
February 3	Food Security Speaker: Dan Weins and Food Charter (speaker)
February 10	Hazard/toxicity/risk assessment: Precautionary Principle
February 24	First Nations Health, Environment and Community
March 3	Health Impact assessment for development/industry Speaker: Rick Grabowecky, Health Canada, Regional Environmental Assessment Co-ordinator
March 10	Conflict Resolution: Tim Osachuk Exercises
March 17	Clean Drinking Waster/Wastewater
March 24	Millennium Development Goals
March 31	Gender and Sustainable Livelihoods
April 7	Field trip