I. Course Description

This course is an introduction to current environmental health issues and the methods used to address them. The course will assist the student in becoming aware of the scope of the field of environmental health and the ideas on which environmental health interventions are based. Students will review online course materials, press articles, and the scientific literature to learn about environmental health problems and their impact on human health.

The course is intended for students who are not environmental health majors and requires 120 hours of student effort for an average student to achieve an average grade. Student effort will be spent reading online content and completing online activities (30 hours), and reading the course textbook, reviewing online resources, and completing assignments (90 hours). Students who successfully complete the course will have met the MPH environmental health requirements for non-environmental health majors.

This course is taught entirely online via a password protected website. Students will be expected to complete all online modules with additional learning time spent reading the literature, participating in online discussions, and working on community assessments. The exact due dates for assignments will be marked on the online course calendar and it is the student’s responsibility to check the calendar and stay on schedule. No individual notices will be sent to students regarding assignments.

II. Course Prerequisites

None

III. Course Goals and Objectives

Upon completion of the course, the student will be able to:

1. Understand how environmental health problems affects individuals and communities
2. Identify major sources of environmental pollution and the ways humans are exposed to them
3. Examine community environmental health problems and the programs designed to address them
4. Suggest options and recommendations for addressing community environmental health problems that demonstrates an understanding of economic, societal and political issues that relate to a specific environmental health problem

5. Discuss local history, community demographics and cultural and political issues and their impact on environmental health problems and solutions

6. Identify the formal legislative/administrative system within which environmental health regulations are developed and enforced

7. Identify key persons, organizations, and agencies in their community that impact the implementation of environmental health interventions

8. Articulate basic concepts in environmental health and public health and convey an understanding of their value and importance to the public, policy makers, and other interested parties

IV. Methods of Instruction and Work Expectations

Much of the learning in this course will be student initiated. Students are required to make thoughtful and timely contributions to online discussions based on their knowledge of environmental health problems in their communities. In addition, students are expected to complete reading and writing assignments, and to ask questions and seek clarifications from the teaching staff when topics or concepts are unclear.

V. Course Text and Readings

The required text which is available for purchase at the University of Minnesota Coffman Bookstore is:

Nadakavukaren, A. Our Global Environment: A Health Perspective, Sixth Edition. Waveland Press, Inc. PO Box 400, Prospect Heights, Illinois 60070. 2000. ISBN 1-57766-402-7. Chapters 1,2,4,5, 7-9, 12, 15-16 are required; all other chapters are encouraged in order to understand the full scope of environmental health.

Supplemental Readings

In addition to the assigned text the following references are recommended for study and are major resources for class outlines and discussion.


All registered students will automatically receive access to the online course through their University Student Internet Account. Access notification will be made by email to students University of Minnesota X500 email address only. However, do not expect access the same day you register because it can take up to 48 hours for registration information to be updated on the WebCT server.

**Note:** All email correspondence between students and instructor must be through the X500 email system.

Students will be assigned to an online discussion groups and evaluations are based on student’s contribution to group discussions. Go to the home page and click on the “discussion group assignment” link to see which group you are in. If you can’t find you name in a group, contact the teaching assistants (TA) by sending an email to the course email box PubH6102@umn.edu.

VI. **Course Outline/Weekly Schedule**

Work on your own time 24-7. However, you **MUST** follow the weekly schedule laid out in course calendar so that all coursework is completed by the end of the semester. Check the online calendar for the due dates of writing projects, and online discussions. I will monitor your progress electronically and my teaching assistants (TAs) will participate in the online discussions during the week that the discussion is due. To be part of your group discussion and receive appropriate and timely feedback, you **MUST** contribute to the discussion **during the assigned week**. The TAs will document completion of online activities.

The approximate weekly course schedule is:

1. Complete pretest, read course information, syllabus, and post to class album
2. Complete introduction content module, readings and activities
3. Complete risk assessment module, readings and activities
4. Complete ethics module, readings and activities
5. Complete water content module, readings and activities
6. Complete air content module, readings and activities
7. Complete Land content module, readings and activities
8. Complete Assignment I (**Check calendar for due date**).
9. Complete Housing content module, readings and activities
10. Complete Pests content module, readings and activities
11. Complete Workplace content module, readings and activities
12. Complete Food content module, readings and activities
13. Start work on Assignment 2 (post outline, give feedback on group members outlines)
14. Complete and submit Assignment 2 (**I must receive a hard copy on the due date!**)
15. Complete post test

VII. **Evaluation and Grading**

- Pretest and Posttest (2 points each)
- Post self-introduction to class album (2 points)
- Assignment I (10 points)
- Online group discussion (18 points)
- Analytic responses to at least 5 discussion posts from your group members (5 points)
- Comments on assignment II outline posted by group member (3 points)
- Assignment II (60 points)
In order to receive a passing grade (A, B, C, or P), all assignments must be completed and turned in no later than the due date assigned. **You are responsible for checking the course calendar for exact due dates and times.** For Assignment 1, one point will be deducted each day the assignment is late, and for Assignment 2, 2 points will be deducted for each day past the due date **NO ASSIGNMENT WILL BE ACCEPTED AFTER THE LAST DAY OF THE SEMESTER EXCEPT IN EXTRAORDINARY SITUATIONS, AND WITH A WRITTEN AGREEMENT BETWEEN THE INSTRUCTOR AND THE STUDENT!** Academic dishonesty shall be grounds for receiving an N or F and a letter grade will be determined by total effort as follows:

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<th>Grade</th>
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<tr>
<td>A</td>
<td>95 -100</td>
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<td>A-</td>
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<td>B+</td>
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**S:** Achievement that is satisfactory will be expected to complete all assignments and receive a minimum of 70% to receive a passing score.

**F (or N):** Failure (or no credit) signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2), not completed and there was no agreement between the instructor and the student that the student would be awarded an “incomplete” grade.

**I - (Incomplete):** An incomplete grade is permitted only in **extraordinary circumstances and requires a specific written agreement between the instructor and the student** specifying the time and manner in which the student will complete the course requirements. Extensions for completion of the work will not exceed one year, after which time the “I” converts to an “F” or “N”. For more information consult the University of Minnesota uniform grading and transcript policy. A link to the policy can be found at onestop.umn.edu.

**Assignment 1**

In assignment 1 you will examine how information is presented by the mass media for a better understanding of the ways in which environmental health risk is presented in the media and the potential effect of the mass media on the consumers of public health information.

Each student must read an article from the mass media (the link to the New York Times is provided on the course site) regarding an **environmental health** problem and post a discussion/analysis under the “Assignment 1” topic in the online discussion room. First, give the title and source of the article, then answer the following 7 questions:

1. What health problem does the article discuss?
2. What in the community environment (i.e. polluted lake water) does the article say is related to this health problem?
3. What is the evidence provided on the source of the problem or deficiencies in the community (for instance was a study done, did people get ill and seek medical attention, or was the evidence just anecdotal meaning people ‘thought’ there was a problem but no factual evidence exists)?
4. To what extent is news coverage of the health effect the same as what can be found in the scientific literature? For instance if the news article states that mercury in the water accumulates in fatty fish that people can eat and then get neurological damage - does the scientific literature confirm this? Scientific literature is based on factual study, scientific literature can be found on government sites (.gov) and professional organizations (.org) but do not rely on commercial sites (.com) to give you scientific peer reviewed research.
5. What population or group of people (i.e. children or the elderly) is at greatest risk in this community?
6. To what extent does coverage of the health effect provide information that individuals need to know in order to understand or seek help about the problem?
7. How do the headlines reflect their content? Does the headline just create fear rather than fact? Is the headline factual or sensational?
Develop your opinions based on knowledge gained from your readings, use complete sentences and provide enough information to clearly communicate what the article is about. This assignment will help you to develop your thoughts in preparation for the more in depth analysis required in Assignment 2. Grammar and spelling count so proofread your work. Please remember that we are looking for a problem which is reportedly impacting human health or which has the potential to do so. When answering the questions keep in mind that you are required to analyze the situation laid out in the article and respond in your own words. Do NOT directly quote from the article! Once you have prepared your responses to the questions, post your answers in the Assignment 1 discussion room and while you are in the discussion room, read at least two of your peers’ postings and give them feedback.

**Assignment 2**

This assignment is to be completed after you have finished all readings, activities, and course modules. However you are encouraged to gather your thoughts in outline form as you progress through the course. Select a community (preferably your home community), and in hardcopy, written form *(12 point, Times Font, double spaced, 1 inch margins, no less than 15 pages no more than 20 content pages, in addition to references and appendixes)*, first include a 2-3 page chapter that describes the general characteristics of that community (i.e. demographics of the population, geographic location (with map), industry types, health statistics, vital statistic, etc.), and then write about two environmental issues of concern in your selected community. The assignment is not a “normal” observation report of environmental health issues; rather, it is an assessment and evaluation of the issues as well as the agencies and programs that are in place to address them. You are expected to analyze the environmental health issues and evaluate corresponding intervention strategies based on what you learned from this course. Therefore it is important to select issues that you community is actively trying to address through policies and programs.

To receive full credit for Assignment 2 answer all of the following 7 questions in details for each of the environmental issue you choose and use subheadings in your paper to indicate where you address each question under each issue you choose:

1. What features of the community (geography, population, land use, industries, etc.) are related to, or causing, each environmental health problem? Fully describe the source of the problems and the extent of their impact on the community.
2. What existing or potential health problems (human disease or injury) are, or could be, associated with the environmental health problems discussed in #1? Your discussion of health problems must cover exposure routes (e.g. inhalation, oral, dermal, etc.) and give a basic description of the disease/disability that result from the exposure.
3. What is the evidence for a relationship between each environmental health issue in #1, and the corresponding health problems discussed in #2? Acceptable evidence may be clinical, epidemiological, or anecdotal; however, you must list at least four articles from peer-reviewed scientific journals among your evidence.
4. What population groups are at increased risk for the health effects in #2? How they can be identified and is enough being done to protect them? Provide toxicological and/or epidemiological data to show why these groups are at an increased risk compared to the general population.
5. What intervention strategies (education, engineering, and/or enforcement) are being applied to the prevention and control of the environmental health problem? Are these strategies effective?
6. Are there major technical, administrative or socio-cultural impediments to controlling the environmental health problem? Discuss each impediment and suggest ways of removing them.
7. What community agencies (federal, state, or local) are available to deal with each environmental health issue and are they doing a good job?

References from peer reviewed scientific literature MUST be cited following the APA style manual. Web resources are encouraged, but complete URLs and documentation of primary sources of cited data are required. Presentation and review of other media (e.g. brochures, newspapers, and government documents) are encouraged to document local involvement and can be referenced in your text and placed in an Appendix in your paper. Examples of environmental health programs you can explore to identify potential issues in your community include:

a) Drinking water management - to assure potable water resources of high quality and quantity to protect health and the environment.
b) Waste water treatment - treatment of waste water (domestic, industrial, natural) in a manner calculated to protect health, preserve natural resources and prevent nuisance conditions.

c) Solid and hazardous waste management - to assure that waste products are managed so as to prevent health problems and minimize environmental effects.

d) Air pollution control - to control the presence in air of substances in amounts great enough to create adverse effects on man or animals, or which is damaging to property.

e) Food protection - to assure that all citizens are adequately protected from unhealthful or unsafe food and food products.

f) Housing conservation and rehabilitation - to assure safe and healthful housing.

g) Occupational health and safety - to assure a healthy and safe place of employment for all workers.

h) Pest control - to control rodents and insects that adversely affect human health or comfort.

i) Noise pollution control - to prevent unwanted sound in residential, recreational, and commercial areas that may produce adverse health effects.

j) Injury control - to reduce the possibility of unintentional or intentional injury through proper planning, design, and engineering.

k) Radiation control - to prevent unnecessary and unhealthful radiation exposure.

l) Consumer product safety - control of health and safety hazards associated with products used and consumed by people.

EVALUATION CRITERIA FOR WRITTEN ASSIGNMENTS

1. Assignments 1 & 2
   a. Content
      i. Does the paper have an introduction, a body, and a conclusion?
      ii. Does the paper respond to ALL questions in the assignment?
      iii. Does the author indicate any areas of further work or missing information?
      iv. Is the purpose, problem or question clearly stated in the introduction?
      v. Are statements in the paper adequately supported with data and citations?
      vi. Does the background information familiarize a reader without overwhelming them?
      vii. Is the body of the paper organized and easy to follow?
      viii. Are the findings summarized?
      ix. Do the conclusions directly relate to the purpose, question or problem stated in the introduction?

   b. Form
      i. Are spelling and grammar correct?
      ii. Is word usage appropriate for the subject?
      iii. Is the report or paper written in paragraphs, with ideas in a coherent order?
      iv. Are footnotes and references (if appropriate) present and correctly cited?
      v. Has the paper been proofread?

2. Online discussion
   All the discussion postings will be graded as "completed", "incomplete" or "no posting". Complete means that the posting is satisfactory. Incomplete means that you need to provide more information and "no posting" means that you have not posted by the due date on the course calendar. Look in the "My Grades" section of the course site for your grades. You will also get periodic feedback on the
discussion board regarding your postings. If you added or revised a post after an initial grade of “incomplete” or “no posting” the grade may not be changed until near the end of the semester.

VIII. Other Course Information and Policies

Grade Option Change
For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester) can be found at onestop.umn.edu.

Course Withdrawal
Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Student Services Center at sph-ssc@umn.edu for further information.

Student Conduct, Scholastic Dishonesty and Sexual Harassment Policies
Students are responsible for knowing the University of Minnesota, Board of Regents’ policy on Student Conduct and Sexual Harassment found at www.umn.edu/regents/polindex.html.

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized, and offenses will be reported to the Office of Student Academic Integrity (OSAI, www.osai.umn.edu).

The University’s Student Conduct Code defines scholastic dishonesty as “plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.”

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own. Serious, intentional plagiarism will result in a grade of "F" or "N" for the entire course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity: http://writing.umn.edu/tww/plagiarism/.

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to http://tutorial.lib.umn.edu/ and click on “Citing Sources”.

In addition, original work is expected in this course. It is unacceptable to hand in assignments for this course for which you receive credit in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project is acceptable. If you have any questions, consult the instructor.

Classroom Diversity. You are by definition a very diverse group of students, even if on the surface you all may seem more or less homogeneous. Diversity is a strength in our society at large and here at the University of Minnesota. Please maintain an open mind to the differences around you, place a positive value on those differences. Points-of-view may be actively argued but be respectful to all contributors. Check the Netiquette page within the online orientation for guidelines for a web based environment.

All of us learn in different ways and with varying degrees of success. If you know of any factors in your life which hinder your abilities to learn up to your potential in this course, please notify your academic advisor at once. Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and Disability Services at the beginning of the semester. All discussions will remain confidential. For further information contact the University of Minnesota Disability Services website at http://ds.umn.edu/ or call 612/626-1333 (V/TTY).
Disability Statement. It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have a documented disability (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Services to have a confidential discussion of their individual needs for accommodations. Disability Services is located in Suite180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling 612/626-1333 (voice or TTY).