

Introduction to Environmental Health

ENVH 605 & PUBH 605 - Spring 2001

5:30 - 8:50, MW, BA 111

Objective: To provide a survey of the major environmental issues facing global society and their relationship to personal, public and ecological health. These environmental issues encompass the developing and developed worlds, current conditions and future trends, and all major settings where environmental degradation may be a problem.

Student Outcomes: Students completing this course should have an appreciation for the diversity of existing environmental conditions. Interrelationships between public health and ecological health should be clear. The sources and effects of environmental stressors should be well understood. Moreover, understandings should not be restricted to technical or scientific issues, but fully integrate consideration of how social factors affect environmental quality. Students should obtain a better grasp of the appropriate processes useful in obtaining information to answer key environmental health questions.

Faculty: This course is team taught. Gary Silverman is responsible for overall course coordination and should be contacted for any procedural or organizational questions. Questions regarding course content should be directed to the faculty responsible for a particular unit, and indicated on the course schedule (below). Faculty may be contacted at:

Dr. Michael Bisesi
383-4235 (office)
mbisesi@mco.edu

Dr. Hailu Kassa
372-9615 (office)
hkassa@bgnet.bgsu.edu

Dr. Gary Silverman
372-6062 (office)
823-5049 (home)
silverma@bgnet.bgsu.edu

Class Format and Student Responsibilities:

Assigned Reading

Each week you have assigned reading. The primary text is *Our Global Environment, A Health Perspective* by Anne Nadakavukaren (fifth edition). Assigned chapters are shown below. Your responsibility is to read the material before class and gain a clear understanding of the presented concepts. You are encouraged to collaborate with your classmates on attaining a good understanding of this material. Additional readings also may be assigned throughout the class.

Daily Structure

Dr. Bisesi will provide instruction for the class sessions on June 18 and June 20 (see schedule below.) You will be assigned two sets of applicable case studies at 10% each (total 20% Final Grade). The case studies will apply concepts from lecture in a problem-based format".

Dr. Kassa will provide instruction for the class sessions on May 23, May 30, June 1, June 4, June 6, and June 11. Additional readings will be assigned in addition to the chapters listed on the schedule.

Quizzes will be given on June 6 (based on material from Dr. Kassa's first two sessions) and on June 11 (based on material from Dr. Kassa's second three sessions). Each quiz will count toward 10% of the course grade.

A position paper dealing with some aspect of population will be due on June 11. These papers should be between four and six pages in length. Research materials should come from peer reviewed journals and **reliable** web based resources. Examples of reliable web resources are those from the United National Environmental Program (UNEP) and the World Health Organization (WHO). This paper will count toward 20% of your course grade.

Dr. Silverman will provide instruction for the class sessions on May 21, June 13, June 25 and June 27. These sessions will include lecture and class discussion of the assigned readings. Quizzes will be given on June 13, 25, and 27.

During his first class session, we will discuss and select position papers on a current controversial environmental health. We will divide papers so that we have opposing points of view. For example, a good (timely) paper could be on why the U.S. should sign the Kyoto agreement on controlling global climate change gas emissions. Another paper would argue why the U.S. should not be a party to that agreement. On June 27 we will discuss in class the various points of view.

Critical to the success of these papers will be developing arguments should centering around information that is obtained from current peer reviewed journals. For each paper, you must include reference to a minimum of three articles from peer reviewed journals published no earlier than 1996. Information off the Web also may be useful and can be used as **supplemental** material, but will not replace the requirement for peer reviewed journals. The desired length of these papers is 4-6 pages, double spaced. Grading will be based on the quality of the research, quality of the logic, creativity and critical thinking used in developing the positions, the quality of the written presentation (e.g. formatting, grammar, etc.), and the persuasiveness of the argument.

Discussion and Participation

Gaining an understanding of the issues in our text will provide a fundamental sound understanding of the basic key issues in environmental health. However, to develop more in-depth understanding of issues, critical thinking skills, and communication skills, **active** participation is needed from **all** students. Class sessions will be organized as a combination of lecture and discussion. Your success in learning will reflect the level of actively as an active participant.

Grading

| <u>Instructor</u> | <u>Responsibility</u> | <u>Percent of Course Grade</u> | <u>Total Percent of Course Grade by Instructor</u> |
|-------------------|---|--------------------------------|--|
| Bisesi | problem based projects (2 @ 10%) | 20% | 20% |
| Kassa | quizzes (2 @ 10%) position paper | 20% 20% | 40% |
| Silverman | class participation quizzes (3 @ 5%) position paper | 5% 15% 20% | 40% |

Instructor Availability

Dr Bisesi: If you have questions and/or comments, please contact me at the E-mail address or phone number shown at the top of the syllabus.

Dr. Kassa: If you have questions and/or comments, please contact me at the E-mail address or phone number shown at the top of the syllabus.

Dr. Silverman: Please don't hesitate to call me if you have questions, suggestions, concerns, or to arrange for meetings. The evening format of this course (and the schedule of the MPH program) make it difficult to schedule regular office hours that everyone can make. So just arrange a convenient time individually. Please do not hesitate to call me at home (before 10:00 P.M. please). My contact numbers are on the top of the syllabus.

| <u>Date</u> | <u>Schedule</u> <u>Topic</u> | <u>Chapter</u> |
|-------------|--|----------------|
| 05/21/00 | Introduction; Position Paper Selection (Silverman) | |
| 05/23/00 | Ecological Principles (Kassa) | 1 |
| 05/28/01 | Memorial Day Holiday - No Class | |
| 05/30/01 | Population Dynamics and Control (Kassa) | 2-3 |
| 06/04/01 | People & Food Predicament; Impacts of Growth on Ecosystems (Kassa) | 4-5 |
| 06/06/01 | Pests and Pesticides (Kassa) | 8 |
| 06/11/00 | Food Quality (Kassa) | 9 |
| 06/13/00 | The Atmosphere & Air Pollution (Silverman) | 11-12 |
| 06/18/00 | Environmental Disease & Toxic Substances (Bisesi) | 6-7 |
| 06/20/00 | Radiation & Noise Pollution (Bisesi) | 10, 13 |

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| 06/25/01 | Water Resources & Water Pollution (Silverman) | 14-15 |
| 06/27/01 | Solid and Hazardous Waste; Position Papers (Silverman) | 16 |