

ENVR 110 – Introduction to Environmental Studies
~ Fall Semester, 2007 ~

adapted from Course Syllabus for the Fall 2006 ENVR 110, taught by Professor Diane Husic

Instructor: Kerri Mullen **E-mail address:** kmullen@moravian.edu
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Office hours: Friday @ 10:00–11:00 AM, [Tues & Thurs. 4:00-5:00 PM by *advanced appointment only*]

Class meeting times: Tuesdays & Thursdays @ 12:50 – 2:00 p.m. in Comenius Hall 309

Course online sites: **Blackboard:** **Course ID:** ENVR110.FA07
Access Code: GREEN

Web Browsers for Blackboard (*keep as updated as possible*):

- **PC Users:** use Explorer or Firefox
- **Mac Users:** use Firefox or Safari

Blogger: <http://introtoenvironmentalstudies.blogspot.com/>
You will be “invited” to join this blog, so please be sure to provide the instructor with your email address immediately so you can join online class discussions as soon as possible.

**Course text/
required books:** Withgott & Brennan, Environment: The Science Behind the Stories, 2nd ed.
Pearson Education, Inc. (San Francisco, CA)

Note: You will also have a number of other readings that will be handed out in class, made available as PDF, placed on reserve, or that you will find from print media and internet sources throughout the semester.

Introductory comments:

I realize that those of you who are enrolled in this class have a variety of interests and that different students signed up for this course for different reasons. The main focus of this course is to introduce you to the broad topic of environmental studies. Environmental issues are quite complex, and typically, environmental problems are best studied and addressed through multi-disciplinary approaches. Environmental issues are also often controversial -- usually because of conflicting values of those involved in the decision making processes that will solve problems or lead to policy related to the environment. My job will be to provide you with some scientific framework related to environmental topics and help you to explore the various perspectives involved in addressing environmental problems. In other words, besides analyzing the scientific aspects of contemporary environmental issues, we will also consider risk, the concept of an environmental ethic, the role of the media in influencing public opinion, economic and social issues, politics, and public policy related to science and the environment.

We will take a multidisciplinary approach to examine the various components of the world in which we live, discussing human impacts on the environment and vice-versa. More than any other living organism, humans have the ability to impact the environment and disrupt natural cycles through population growth, industry, policy decisions, and applications of technology which can sometimes have unforeseen consequences. Thus, we will also discuss key environmental issues of concern. Individuals can profoundly affect change through public sentiment and voting, and, in turn, impact public funding and policy decisions.

You have the power to affect the direction of science research, the applications and regulation of technology, and the status of our environment. Because of this, I strongly believe that every individual should be a responsible, informed, and active participant in the governing processes.

I will try to provide lecture outlines with expected outcomes for each class to help keep us all organized. These outlines will be posted on the Blackboard site for the course and will highlight key topics covered in lecture and our discussions. I will also provide a class schedule with a list of the assigned readings and projects, including suggested study problems. I expect each of you to complete assigned readings and assignments, and be ready and willing to participate in class discussions. You should get in the habit of checking this site regularly as I will routinely post announcements, reminders, schedule changes, etc.

Course objectives: By the end of the semester, students should:

- Have an understanding the fundamental scientific concepts that underlie key environmental topics and of the environmental challenges facing us today;
- Have an appreciation for the complexity and value of ecosystems, biodiversity and the relationship between humans and their environment;
- Realize the wide range of values, risk assessment, and social, economic, historical, and political factors that influence the development of public policy – especially as it pertains to environmental regulations, conservation, and stewardship;
- Understand the global nature of many environmental issues and appreciate the wide range of world views on the value and priority of the environment;
- Be able to assess scientific and other forms of data, along with other information found in the literature for validity and relevance to environmental issues being considered; and
- Gain further experience in critical thinking, oral and written communication skills, and using technology to access important information.

Course policies, procedures, and expectations:

Academic integrity: Academic integrity is of utmost importance, and cheating or plagiarism will not be tolerated. Please read the **Academic Honesty Policy** that is included in the student handbook ***and*** the policy that I will distribute in class. I have attached a cover sheet to my policy that each of you will sign indicating that you have read and understand the policy and implications of violating it. If you have any questions about plagiarism or other forms of academic dishonesty, please ask. Several assignments in this class will involve the use of internet resources, and it is my experience that students often do not realize that copyright violations and plagiarism policies still apply.

Attendance policy: As noted in the student handbook, students are expected to attend classes regularly. Due to emphasis on discussions in this course, regular attendance from each of you is essential. Frequent unexcused absences will have a negative impact on your grade for the course. I will recognize legitimate excused absences such as when students are representing the university in an official capacity (e.g. for intercollegiate athletic competition, but not practice, off-campus music performances, etc.). Such activities are scheduled ahead of time; thus, I expect you to make arrangements with me ahead of time as well. In the event of an extended absence due to illness or other legitimate reasons, please notify me and a representative in the Learning Services Center as soon as possible. In the case of severe illness, accidents, etc., we will work out arrangements (e.g. for making up work, obtaining an incomplete or withdrawing from the course) on a case-by-case basis.

Please note that during the class periods, I will intersperse lectures, whole class and small group discussions and assignments, hands-on activities, and problem solving. The topics discussed in class cannot

be learned simply by reading the text without coming to class and being an active participant. I am fond of spontaneous in-class assignments that are turned in before the end of the class period, and these cannot be made up if you are absent. In other words, if you miss class, you miss out. Students who arrive late to class disrupt the flow of the session and distract their peers. Please be prompt! And please be sure to **TURN CELL PHONES OFF** during class time. If multiple interruptions are noted, you may be asked to leave the class.

*If class is canceled due to a campus emergency, inclement weather, or by the instructor, notification of the cancellation will be posted on the Moravian College web site and/or the ENVR 110 Blackboard site as early as possible. Please be prepared to discuss the missed material, in the next class.

Assignments: I utilize a variety of types of assignments including group projects (in and out of class), short writing assignments, internet-based assignments, etc. Timely completion of the work is expected; late submissions will be docked 10% of the evaluated grade per day. I expect all PRINTED assignments to be handed to me IN PERSON. Unless it is an emergency (accompanied by official document, such as a doctor's note), I will not accept electronic documents via email. This policy is in place because (1) I do not have a printer at home, and (2) it avoids issues that result from Mac / PC and software version differences. All printed documents should be done in Times New Roman 11 point font and double-spaced. Please include a heading that contains not only your name, but the date, the class, and the assignment title.

Blogging: Throughout the course, it is a good idea to be aware of stories in the media that relate to scientific and environmental topics. The internet can be a valuable resource as well, but you have to critically evaluate the content and source of the information that you find there. Often, timely stories break in the news that warrant out consideration in class, and your familiarity with media coverage of science and environmental issues can (and will) provide the basis for class discussions. I expect you to be current on environmental stories in both the printed and web-based media. Be prepared to share your findings both in class and on our class blog: ***I would like each of you to participate in a class BLOG throughout the semester.*** Active participation in class and web discussions will be noted and will have a positive effect on your final grade for the course.

Please date your blog entries and include the source of your information (e.g. which newspaper and what date, what magazine, edition and page number, the URL of a website, etc.). Recording and commenting on stories that catch your attention or that relate to topics we are discussing in class, will allow you to reflect on what you are learning and how it applies to the "real world", and will allow you to follow trends throughout the semester. I expect that you should have at least 2 entries (news items) per week, plus some of your own comments, summaries or reactions to the news and topics from class members. ***Each Thursday, we will begin class with a discussion of timely news stories related to the environment and other topics being discussed in class*** At the end of the semester, I will ask you to summarize what you have learned from the class blog and what trends or major issues you noticed.

While I want all of your entries to be thoughtful and critical, please restrict your critiques to the issues themselves and not direct them toward fellow classmates. I expect all bloggers to be polite and consider all viewpoints on a matter. All blog entries must be appropriate and related to the class. If you post anything that is rude, offensive, or unrelated to the class, the instructor as moderator will terminate your access to the site, and this will have a definite negative impact on your grade.

Exams: Exams will cover material from lectures, class discussions, and the assigned readings and sample problems from the text or other assignments. Please refer to lecture outlines for review material. Exam questions may be taken directly from the text, so please review the questions and problems at the end of each chapter. If you do not understand any of the questions or problems, it is your responsibility to ask me about them in class, during office hours, or via email. Exam questions will also be based on class discussion, so you must be present for ALL classes if you expect to be fully prepared for formal evaluation of your performance. You should expect at least a portion of each exam to be essay format. **No make-up**

exams will be administered without an official medical or university excuse.

<u>Grading:</u>	<u>% of Total Grade</u>
Participation in class and group discussions and activities, including blog	20
Assignments and projects, both group and individual	35
Exam #1 (Tuesday, September 25th)	15
Exam #2 (Thursday, November 1st)	15
Final Exam (to be scheduled during the exam Period, Dec. 13 th to 19 th)	15

I do look at trends in grades over the semester; improvement in test grades over the duration of the course will be favorably noticed! Participation in class & blog discussions, review periods, etc. is expected and will be a factor in the determination of final grades. Please note that it is within the instructor's purview to apply qualitative judgment in determining grades for an assignment or for a course.

**** EXTRA CREDIT:** *You will have the opportunity to increase your final grade by up to 3 points by attending the Pennsylvania Renewable Energy and Sustainable Living Festival, September 22-23. You should plan on attending for one day, and to receive credit, you must hand in your entrance ticket stub or a receipt, as well as your notes and summary of each exhibit and or seminar you attended. You will need to arrange your own transportation, and no reimbursement will be made for the entry fee. More information on the even can be found at <http://www.paenergyfest.com/general.shtml>.*

If you cannot attend this event, you may arrange another independent field trip with me. Examples include visiting a local sewage treatment plant, the Lehigh Gap Nature Center (www.lgnc.org), a local solid waste management or recycling facility, etc. Although the trip may be done later in the semester, you must arrange details with me BEFORE FALL RECESS. After this, you will have forfeited your opportunity for extra credit.

The 1-3 points earned will be at the discretion of the instructor, and will be applied to your final grade. For example, if you receive 2 extra credit points, and you finish with an 82% (B-), your grade will be an 84, and a B will be your grade with the registrar.

If you have concerns about your grade, please come talk with me about it early in the semester, and we can work together to improve your comprehension, study habits, test skills, etc. If you wait until the final weeks of the semester to express concern over a low grade, it will be too late.

Family Educational Rights and Privacy Act (FERPA) If you are over the age of 18, please be aware of your right to privacy. Student records are confidential and may not be released (even to your parents) without your written consent. Visit <http://www.ed.gov/print/policy/gen/guid/fpco/ferpa/index.html> for complete policy details.

Academic Integrity: Absolute academic integrity and honesty is expected in all of my courses. Copying, plagiarism, data fabrication, or other types of cheating will not be tolerated and students caught violating the attached policy provisions will be dealt with severely. Penalties may include failure of a test or assignment or a failing grade for the entire course. I have the right to report any and all violations of academic integrity to the appropriate campus administrators.

Each student enrolled in my classes is required to read and sign off on the attached Academic Honesty Policy, as well as that which is contained in your student handbook: <http://www.moravian.edu/studentLife/handbook/academic2.htm>. Please read the policy and return the signed form (below) before the end of the week. I will keep these signed forms on file in my office.

I have read the “Moravian College Academic Honesty Policy” for Kerri Mullen’s Introduction to Environmental Studies course (Fall semester, 2007) and the Moravian College Student Handbook section on Academic Honesty. I understand the policy and the consequences of engaging in academic dishonesty.

Name: _____

Date: _____

(Actual policy distributed in class on 8/28/07)

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CLASS SCHEDULE* & TOPICS COVERED

**this schedule is subject to change at the discretion of the instructor*

Tuesday, August 28th - FIRST DAY OF CLASS

- Introduction: Instructor, Students, Syllabus & Academic Integrity Policy (due 8/30 in class)
- Group Activity: Environmental impacts of everyday items (multidisciplinary), ½-1 page reaction / summary due Thurs. 8/30 in class (individual)
- Assignments: Read ACADEMIC HONESTY POLICY, Chapter 1; Environmental Awareness Internet Research, due Tues. 9/4 in class (individual)
- Check the following: Blog web site access, Blackboard, & Course Compass

Thursday, August 30th - An Introduction to Environmental Science

- ACADEMIC HONESTY POLICY - signature of Academic Integrity due in class
- Due in Class: Environmental Impacts Activity Reaction / Summary (individual)
- Group Activity: Come up with a definition for "Environment", due at the end of class (group)
- Assignments: Read Chapters 2 & 3, Apple 1996 (on reserve), Hurricane Briefing, check out <http://www.onlineethics.org/cms/9147.aspx>
- Scan current media (including <http://unfccc.int/2860.php>) & Blog

Tuesday, September 4th - Environmental Ethics & Economics: Values & Choices;

Environmental Policy: Decision Making & Problem-Solving

- Due in Class: Environmental Awareness Internet Research (individual)
- Group Activity: Read Steingraber excerpt (pp 105-108) & Answer the questions the author poses: How will it ever change? Brainstorm: How would you make the numbers meaningful? Use art to express your ideas.
- Assignments: Read Pew Initiative on Food & Biotechnology: When Media, Science & Public Policy Collide (found at <http://pewagbiotech.org/events/1121/> and on reserve); Gregory & Miller 1998, Chapter 6: Case Studies in Public Science, pp. 154-165 (on reserve); 2 **media articles TBD**
- Scan current media & Blog

Thursday, September 6th -Science, the Media, the Public, and Environmental Policy

- Group Activity: Discuss assigned media articles and answer questions, due at the end of class (as a group)
- Individual Project: Science and the Media (Wagner & Sanford, Ch. 2), typed report due in class Thurs. 9/13 (no verbal summary due)
- Assignments: Read Chapters 4 & 11

- Scan current media & Blog

**Tuesday, September 11th - From Chemistry to Energy to Life;
Biodiversity & Conservation Biology**

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- Assignments: Read Chapter 5; View Costa Rica Case Study - Nightline Video Clip
- Scan current media & Blog

Thursday, September 13th - Evolution, Biodiversity, and Population Ecology

Ramadan, Rosh Hashanah (classes held)

- Due in Class: Science & the Media Report (individual)
- Guest Speaker: Sean Mullen, Assistant Professor of Evolutionary Genetics, Lehigh University
- Assignments: Read Chapter 6
- Scan current media & Blog

Tuesday, September 18th - Species Interactions & Community Ecology

- Group Work: Discussion Questions
- Assignments: Read Chapter 7
- Scan current media & Blog
- MARK HARRIS - 7 PM, DANA LECTURE HALL (take notes for assignment)

Thursday, September 20th - Environmental Systems & Ecosystem Ecology

- Due in Class: Reaction Piece to Mark Harris Lecture (1-2 pages) (individual)
- Scan current media & Blog
- STUDY for EXAM!!!

EXTRA CREDIT: Saturday & Sunday, September 22nd & 23rd - Pennsylvania Renewable Energy and Sustainable Living Festival (see syllabus for details)

Tuesday, September 25th - EXAM #1

- Assignments: Read Chapter 8 & Hardin 1965; see also <http://www.ecofoot.org>
- Scan current media & Blog

Thursday, September 27th - Human Population

- Individual Problem Set: Ecological Footprint & Sustainability (Wagner & Sanford, pp. 175-179), typed answers due Thurs. 10/4 in class
- Assignments: Read Cohen 1995 & Hertsgaard 1999: How Population Matters / The Hurricane of Hell in (on reserve)
- Scan current media & Blog

Tuesday, October 2nd - The Relationship Between Population and the Environment;

Sukkot (classes held)

- Group Work: Discussion Questions
- Assignments: Read Chapter 9
- Scan current media & Blog

Thursday, October 4th - Soil & Agriculture

- Due in Class: Ecological Footprint & Sustainability (individual)
- Group Work: Discussion Questions
- Assignments: Read Chapter 10
- Scan current media & Blog

Tuesday, October 9th - FALL RECESS - NO CLASS

Thursday, October 11th - Agriculture, Biotechnology & the Future of Food

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- Group Work: Discussion Questions
- Assignments: Read Chapter 12
- Scan current media & Blog

Tuesday, October 16th - Resource Management, Forestry, Land Use & Protected Areas

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- Group Work: Discussion Questions
- Assignments: Read Chapter 13
- Scan current media & Blog

Thursday, October 18th - Urbanization & Creating Livable Cities

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- Group Work: Discussion Questions
- Assignments: Read Chapter 14
- Scan current media & Blog

Tuesday, October 23rd - Environmental Health & Toxicology

- Group Project: Water Quality, Chemicals, & Consumer Choice (Wagner & Sanford, pp. 185-188), GROUP typed report due in class Tues. 10/30
- Group Work:
- Assignments: Read Chapter 15 & Steingraber excerpt pp 100-101
- Scan current media & Blog

Thursday, October 25th - Freshwater Resources: Natural Systems, Human Impact

& Conservation

- Group Work: Discussion Questions
- Assignments: Read Chapter 16; <http://www.epa.gov/>
- Scan current media & Blog

Tuesday, October 30th - The Oceans: Natural Systems, Human Use, & Marine

Conservation

- Due in Class: Water Quality Report (group)
- Group Work: Discussion Questions
- Assignments: Read Chapter 17
- Scan current media & Blog

Thursday, November 1st - EXAM #2

- Scan current media & Blog

Tuesday, November 6th - Atmospheric Science & Air Pollution

- Group Project: Air Quality & Automobiles (Wagner & Sanford, Ch. 17), GROUP reports due Thurs. 11/15 in class (see pp. 4-6 for guidelines)
- Group Work: Discussion Questions
- Assignments: Read Chapter 18
- Scan current media & Blog

Thursday, November 8th - Global Climate Change

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- Group Work: Choose an environmental issue that concerns you, then research the problem and compose a letter to your local, state or national representative(s) addressing your concerns, 1-2 pages, copy due in class Tues. 11/27
- Assignments: Watch "An Inconvenient Truth," available on reserve in Library; write a 1-2 page reaction piece, due Tues. 11/13 in class
- Scan current media & Blog

Tuesday, November 13th - Global Climate Change

- Due in Class: "An Inconvenient Truth" Reaction (individual)
- Group Problem Set: Global Warming, CO₂, & You (Wagner & Sanford, pp. 165-170), typed answers due Tues. 11/20
- Group Work: Discussion Questions
- Assignments: Read Chapter 19
- Scan current media & Blog

Thursday, November 15th - Fossil Fuels: Energy & Impacts

- Due in Class: Air Quality & Automobile Report (group)
- "An Inconvenient Truth" Reaction Piece due in class
- Group Work: Discussion Questions

- Assignments: Read Chapter 20
- Scan current media & Blog

Tuesday, November 20th - Conventional Energy Alternatives

- Due in Class: Global Warming Problem Set (group)
- Group Work: Discussion Questions
- Assignments: Read Chapter 21
- Scan current media & Blog

Thursday, November 22nd- THANKSGIVING - NO CLASS

Tuesday, November 27th - New Renewable Energy Alternatives

- Due in Class: Copy of your Letter to Representative
- Group Project: Pollution Prevention: Solid Waste (Wagner & Sanford, Ch. 21), GROUP typed answers due in class Thurs. 11/29
- Group Work: Discussion Questions
- Assignments: Read Chapter 22
- Scan current media & Blog

Thursday, November 29th - Waste Management

- Due in Class: Pollution Prevention problem set
- Group Work: Discussion Questions
- Assignments: Read Chapter 23
- Scan current media & Blog

Tuesday, December 4th - Sustainable Solutions

- In-Class Partner Activity: Local Environmental Risk (Wagner & Sanford. pp 189-190), followed by class discussion.
- Scan current media & Blog

Thursday, December 6th - Careers / Profiles in Environmental Science

- Classroom Discussion: Review & Reflection, summary due at the end of class (1/2-1 page)
- Instructor Evaluations
- Begin studying for Final Exam

STUDY WEEK / READING DAYS: December 11-16

FINAL EXAM: