

ENV 110**Introduction to Environmental Science****Spring 2008**Lecture and Laboratory Instructor: Dr. Ed Wells, 105 Warfield Hall; x. 3413; ewells@wilson.eduText: G. Tyler Miller, *Living in the Environment*. 15th edition. Wadsworth Publishing Company 2007

It is the policy of Wilson College not to discriminate against students with disabilities. Students needing accommodations for documented disabilities, medical conditions or learning differences should contact Vickie Locke in the Learning Resource Center (Edgar Hall, 1st floor) as soon as possible. Instructors should be notified of the possible need for accommodations within the first two weeks of classes.

Students who are having difficulty with writing assignments in this course are encouraged to make a Writing Lab appointment at the Learning Resource Center, Edgar Hall, 1st floor. This excludes help with take-home essay exams. Please contact Vickie Locke, LRC Writing Lab Coordinator, at x3349.

Many of the topics discussed in this course will be very familiar to you. Most have received national and sometimes international publicity.

LEARNING GOALS: The course is designed as an introduction to the wide range of environmental topics of concern today. It will help you examine the concepts, problems, and issues that are usually included in environmental studies, and help you develop skills in evaluation and decision making.

Goal 1: Develop abilities to understand the process of scientific inquiry.

Goal 2: Understand ecological, atmospheric, and geological processes and human and environmental impacts of natural and anthropogenic-induced changes to these processes.

Goal 3: Understand how ecological principles reveal how all of the world's life is interconnected in the biosphere.

Goal 4: Cultivate an awareness about how population, resources, and pollution are interrelated and determine environmental impact.

Goal 5: Critically think about environmental problems, proposed solutions to those problems, and the scientific, political, economic, and ethical dimensions of the solutions and problems.

CLASS FORMAT: During each class meeting we will spend time discussing an assigned environmental topic (lecture followed by class discussion), and exploring specific viewpoints that members of the class have. You will have homework assignments many weeks. Each of you will be making class presentations on your paper topic. Paper presentations will be made during lab on the last day of lab. Sometimes a film will be shown and discussed. You may be asked to answer a question or two after the films are shown. Films are chosen because they give a more vivid view of environmental topics than written words can express.

You are responsible for information and attitudes presented in FILMS, LECTURES, DISCUSSION, EACH OTHER'S PRESENTATIONS AND ANY OTHER CLASS MATERIAL. Test questions may be based on them.

COURSE REQUIREMENTS:

1. Reading assignments
2. Homework (homework turned in within one day after has one letter grade subtracted; I will subtract a letter grade for each day it is late)
ALL HOMEWORK MUST BE TYPED
3. Participation in class presentation (7-10 minutes) on the last lab day
4. Four 50-minute tests based on reading assignments, films and forum reports; one final comprehensive examination. Test questions will require both essay answers and multiple choice. Essays will be graded on understanding and organization of material and presentation skill. Correct grammar (with legible handwriting) is expected.
5. Class paper described below: includes presentation and paper (*due on the last day of class*)

GRADING BASE:

Tests- four grades averaged>	30%
Final Exam (partial comprehensive)	20%
Homework	10%
Report/Presentation (5% presentation/10% paper)	15%
Lab Grade	25%

Regular class participation can raise your grade (regular attendance required for this)

Paper Topics

This term paper should be approximately 5 pages in length. The paper can be supported by graphs, tables and photographs, if needed to describe your topic. Use citations where appropriate—*if the idea you write in your paper is NOT your own, it must be cited—whether it is a direct quote or not!!!*

You will be responsible for a ten minute presentation on your topic on the last day of lab.

- Climate Change #1: Speculate on the economic impact to your community should an enhanced greenhouse effect cause a trend toward warmer and drier summers. Consider both the benefits and drawbacks.
- Climate Change #2: How is climate change negotiated at the United Nations? What are the ethical dimensions of climate change and what should be the role of the United States in addressing the problem?
- Where Have All the Froggies Gone?: Update the most recent findings on the disappearance of frogs across the world. What are the suspected reasons for their disappearance and which cause(s) make the most sense to you?
- Endangered Polar Bears? Assess the current controversy about listing polar bears on the endangered species list even though their numbers are still plentiful. Do you believe the polar bear should be listed? Why or why not?
- Weather Measurements: How is weather gathered in this area? Locate the station records and analyze it for trends. How does our local temperature and precipitation trend compare in direction and magnitude to the northern hemisphere temperature and precipitation record?
- Sustainability of Human Systems: Use the principles of sustainability to evaluate sustainability in one of the following parts of the human system: Transportation, cities, agriculture, manufacturing, waste disposal, and your own lifestyle.
- New Housing: Study a new subdivision being built in your community (either in Franklin County or your home). What is the environmental impact of this effort? What are the positive and negative environmental aspects of the project? Is it an example of good ecological land use or smart growth?
- The Population Czar: Congratulations! You are in charge of reducing the world's population by 50% in the next twenty years. Outline your major initiatives and provide justification for your actions. Predict the barriers you will encounter and your proposals to overcome them.
- Walk, Ride or Drive: Monitor the miles you drive in a week and make note of the reasons for each trip. How can you reduce your automobile use by 25% without impacting your lifestyle? How can what you learn in this exercise be applied to your community to reduce automobile use by >25%? Detail your recommendations to significantly reduce automobile use in your community.
- Local Land Use: Consult local officials to determine how land use in Franklin County is decided. What roles do citizens groups and the media play?
- Chesapeake Bay Update: Report on the current status of environmental protection of the Chesapeake Bay. Focus on one specific aspect of improving the health of the bay. Discuss how this aspect impacts the bay and the resources derived from it.
- Cropland Loss: How much cropland has been lost to development in Franklin County since 1960? What kind of development has taken place? Where has development been the greatest? What policies are in place to protect farmland?
- Pesticides around us: Catalog the uses of pesticides in your home. List their generic and chemical name, category, and application type. After researching them, are you fearful of using any of them? Describe.
- Soil Conservation: Report on the status of soil conservation efforts in Franklin County. What programs are available to farmers and landowners? What has been the historical success/failure of this program in the last 50 years? How does this compare to another location in the US, elsewhere (one location) in the world?

- Our Electric Bill: How is the electricity in your community generated? How has the cost of that electricity changed since 1970 compared to general inflation? What alternative methods are being considered by the local utilities? Do different segments of the community (industrial, public, residential) have different sources of electricity?
- TMI in the Neighborhood: Review the accident at TMI. What is the legal status of the event that occurred in 1979. Summarize. What is the future of TMI. When will it be decommissioned and how will this be done. Do you feel “safe” continuing to live your life in proximity to TMI as a conclusion to your investigation?
- Upstream/Downstream: Everyone lives downstream of someone. Using a regional map and driving along a stream or river in the area, identify all the land use activities within 10 miles of your house or dormitory. What pollutants are associated with those activities? Does EPA/DEP have data on pollution in your area? What recommendations would you make to improve water quality? Does the waterway meet its standard set by DEP?
- The Saga of the Returnable Bottle: Provide a brief history of the returnable bottle in the last 50 years. Discuss the decline of its practice. Critically assess the benefits and drawbacks of our current practices. Is it any better for the environment?
- Recycling Education: Investigate the recycling program at a local elementary school, at Wilson and at a place of business. Describe each program and compare each. How effective is each program. Are these programs carried over to the individual’s homes? Are we effectively teaching the next generation about recycling and solid waste, based on your investigation?
- Eco-terrorism: In a recent article, eco-terrorists blew up SUV’s and trucks to protest the destructive car culture. Discuss the effectiveness of this mode for change, its political, economic and social impact. Should these groups be categorized with other forms of terrorism?
- The Local Environmental Hot Potato: Define a major environmental issue in your local community that either strong economic or political ramifications. Examples: Corporate farms/Factory Farms, controlling sprawl, etc.. Describe the opposing positions on both sides of the issue, including interviews with active participants. State your position on the issue with supporting evidence in favor of your stance.
- Local Environmental Activism: List the local environmental groups in this area. Describe their mission and their local causes. Determine their local membership and measure their effectiveness in bringing about change in the local community. An alternative approach is to focus on one group.
- Biosolids – Please review the current fight locally to halt the spread biosolids on farm fields. Project the issue to the state level and compare current policies in this state with those in Maryland.
- Endangered Species – review the current status of the Indiana Bat (or another endangered species) in PA. Review the current situation of a bat colony found in a southern PA church that is potentially halting a major road construction project. Why are caves a vitally important habitat to protect?
- Solid Waste – You have been appointed the Solid Waste Czar of the United States. Choose the top three target products/industries to reduce municipal solid waste by 20% in five years. Show how this might be accomplished, the results expected and challenges to be faced.
- Pennsylvania Renewable Energy Portfolio: What is it? Give details of the plan and discuss how effective it will be in reducing greenhouse gas emissions and providing more environmentally benign sources of energy
- What can One Man/Woman Do? - Assess how you or your family can reduce energy consumption in your life. Come up with a detailed list of energy saving purchases, products, lifestyle changes, etc. showing the net cost benefit of each. Project this cost to the state level, to the national level and globally.

Plagiarism

Plagiarism is easy to do without your notice. The most noticeable, blatant, and knowingly wrong type of plagiarism occurs when you intentionally use the work of others, but present it as your own. However, also be careful of making broad generalizations of fact, or assumptions of common knowledge.

Plagiarism is one type of academic dishonesty, and is subject to penalty by this (and any) college. You can, for example, be failed on any paper containing plagiarism, or ultimately be expelled from the college. See **Paper Guidelines** for more information

THE WILSON HONOR CODE (on-line at www.wilson.edu)

Wilson College is a strong, healthy, caring community. In order to promote community values, this Code and the Honor Principle set expectations for members of the community. Individuals must respect others and behave with the interest of the whole community in mind. It is assumed and understood that joining is evidence of a subscription to ideals consistent with our shared mission. As a member of this community each individual is obligated to

DEMONSTRATE PERSONAL INTEGRITY.

A commitment to this ideal is consistent with honesty in academic situations and in interactions with others.

DEMONSTRATE CONCERN FOR OTHERS, THEIR FEELINGS AND THEIR NEEDS FOR CONDITIONS WHICH SUPPORT THEIR WORK AND DEVELOPMENT.

A commitment to this ideal is a pledge to be compassionate and considerate, to avoid behaviors which are insensitive, inhospitable, or insightful, or which unjustly or arbitrarily inhibit another's ability to feel safe or welcome in pursuit of appropriate social or academic goals.

Paper Guidelines

The topic of your paper should be one that interests you. It cannot duplicate or significantly overlap an essay we read during the semester, although some overlap can be expected. You should do original research of an original technology or a topic in technology for your paper (and forum presentation). It should be something that has interested you or piques your interest during the semester's readings.

Your paper should be five pages double spaced and you should use a reasonable font and point size. Your margins should also be similar to my margins (1" side space and 1" top and bottom). Cite all of your sources and use a bibliography. The cover page should list the title, your name, and the current semester (see MLA Format sheets).

You will be graded on content, insights, as well as mechanics discussed above and grammar.

Like the forum, your paper should not be merely a literature review. Rather, it should be a digestion of the literature and then be a reflection on how you feel about the issue. Read all you can on the issue. Get at minimum five sources; try to get more. It is very likely that you had an opinion, however strong, on the issue before your research. After you read the literature and take notes, think about how you feel about the issue. Has your opinion changed? Digest the literature, think about what we have talked about this semester, and write your paper of five pages. **DO NOT** write more than six pages.

Professor Ian Worley (University of Vermont), suggests the following sources for research:

[a] Libraries: Read broadly in the scholarly literature, drawing from books, anthologies, reviews, and peer-reviewed journals. Add to these sources information from popular press, newsletters, information releases, and other pertinent written materials. Various reference works may prove quite useful.

[b] The Internet: The Internet is an amazing source of information if used properly. Note what kind of information is available on your topic. Visit sites, discussion groups, and bulletin boards. Converse with organizations and persons by e-mail. Do remember to record source data for any information you use.

[c] Gatherings: If possible, attending one or more conferences, hearings, committee meetings, symposia, seminars, rallies, speak-outs, annual meetings, field-trips, workshops, or any other activities where groups of people are engaged in the real events of the field you are researching.

[d] Interviews: Find knowledgeable persons in various aspects of the field to visit with, speak with by telephone or e-mail, or to otherwise contact. Try to visit and talk with a variety of both practitioners and scholars.

Drawing upon these sources, organize your findings in a descriptive and documentary paper complete with title, table of contents, body (with sections), citations, and appendix. Only the body of the paper counts for the number of pages.

Errors in grammar, spelling, punctuation, format, and style can lead to a grade reduction for any assignment. Consistency in style is expected. Use the *MLA Handbook* for your paper. Because this is not a writing intensive class, early drafts are not required. However, if you would like me to review an ungraded early draft of your paper, I am agreeable to this (as long as you do not give me the paper one week before the paper is due).

MLA, an acronym for Modern Languages Association, is a certain format that is used for documenting research papers. Do not confuse this with a "style" of writing. A word about plagiarism. Many erroneously believe that if they rewrite information in their own words, then it does not require documentation. Plagiarism constitutes using someone else's words, ideas, or line of thought without proper documentation. Plagiarism is a serious offense and can result in failing a paper or even being forced to leave school. Often, however, plagiarism is simply the case of not documenting a source properly, e.g., omitting quote marks around a direct quote or failing to cite the page from which the quote or paraphrase was used. If you get an idea from another source, you must cite that source. It is often most convenient to cite the source at the end of the paragraph (Prescott, 2002).

"Common knowledge does not have to be cited. For instance, it is common knowledge that Americans declared independence on the 4th of July. This does not need to be documented. What is not common knowledge are particulars about the signers and details about the circumstances surrounding the writing of the Declaration of Independence. . . . When in doubt, the rule is to cite the source" (Prescott, 2002)!

MLA Check Sheet

MLA, an acronym for Modern Languages Association, is a certain format that is used for **documenting** research papers. Do not confuse this with a "style" of writing. Most English departments use MLA. Other often-used styles are APA (American Psychological Association), Chicago style, and Kate Turabian style. It depends upon the discipline for which you are writing, and sometimes it depends on what your professor prefers. However, the social sciences, such as sociology and psychology, always use APA, while English uses MLA, Chicago, or Kate Turabian. Papers usually use MLA, and books follow Chicago. (Wilson College uses MLA in their English 108 and 180 classes. Thus, to be consistent, we will use it in this class. The full handbook is available in the bookstore, however, guidelines are summarized here as well as one the internet.)

First, a word about **plagiarism**. Many students erroneously believe that if they rewrite information in their own words, then it does not require documentation. **Plagiarism constitutes using someone else's words, ideas, or line of thought without proper documentation.** Plagiarism is a serious offense, and depending on the professor's or the school's policy, a student may fail the paper, the class, or be asked to withdraw from school. Most students plagiarize in error. Often, it is simply the case of not documenting a source properly, e.g., omitting quote marks around a direct quote, or failing to cite the page from which the quote or paraphrase was used.

Sometimes students become confused as to what constitutes **common knowledge**. Common knowledge is information most people know, and this kind of information does not need to be documented. For instance, it is common knowledge that Americans declared their independence on the 4th of July. This does not need to be documented. What is not common knowledge are particulars about the signers and details about the circumstances surrounding the writing of the Declaration of Independence. When in doubt, the rule is to cite the source!

How to introduce a direct quote:

It is best to introduce the quote. This way it won't become an "orphan quote," a quote in which the reader asks, "who said this?" or "what is this person's claim to expertise?" Here is an example:

Robert Jay Lifton, a psychiatrist who has conducted extensive studies about the survivors of the bombing Hiroshima, states, "Over time I have developed several strong convictions about this general psychological area: direct, intense psychological trauma--perhaps even adult trauma in general--is a kind of stepchild in psychiatry" (59).

The reader has been introduced to Lifton earlier and now knows who he is. Throughout the rest of the paper, the student may now simply write:

Lifton feels that "the survivor is one who has come into contact with death in some bodily or psychic fashion and has remained alive " (65).

However, if you change sources, then you must indicate who the new source is by introducing the writer, the same way you did before. If you then decide to quote from your first source again without the awkwardness of reintroducing the author, you must indicate that by using the author's name and page number. Note how the writer has indicated the change from Lifton, to Baritz, and back to Lifton. Note also that when the writer is "in the text," the present tense is used.

Robert Jay Lifton, a psychiatrist who has conducted extensive studies about the survivors of the bombing of Hiroshima, states, "Over time I have developed several strong convictions about this general psychological area: direct, intense psychological trauma--perhaps even adult trauma in general--is a kind of stepchild in psychiatry" (59). In another similar kind of war survivor problem, Vietnam War scholar Loren Baritz writes about returning Vietnam veterans who have become "aliens for a great variety of reasons, some because they had grown up while their former buddies who had not gone to Nam seemed as if they had been frozen in time; they were still late adolescents whose lives revolved around six-packs, cars, and chasing girls" (313). Each war survivor, however, whether civilian or soldier, carries the special burden of the war as "one who has come into contact with death in some bodily or psychic fashion and has remained alive" (Lifton 65).

Suppose you want to jump directly into a quote without introducing the author first. Do this only if it does not confuse the reader about the person's claim to expertise or the context in which you are using the quote. However, you should always explain why you are using the quote so it will not feel "dropped in." Here's an example: Usually, what is written in history books has been accepted by readers as fact without much question. However, a careful reader of history should always be aware of who is doing the writing and what his or her agenda is. But even the idea of perspective can lead to problems with interpretation of historical events. "If written accounts of war risk being flawed on the one hand by the difficulty that the participant experiences in both rising above the subjective level and meticulously recalling events, and on the other by the inability of those who were not present to comprehend fully what took place, how then is the historian to proceed?" (Holmes 10).

Paraphrasing:

Now, suppose you have read a paragraph that you think, rather than quoting it in its entirety, you could condense into a sentence or two in your own words. This is called paraphrasing, and paraphrasing needs to be cited. Even though you reworded it, it is still not your idea or line of thought, and you must give credit to the person who had that original idea.

Here is the original paragraph that you are thinking about paraphrasing. (When you quote directly and it is over four lines in length, it must be indented ten spaces):

The death imprint consists of the radical intrusion of an image--feeling of threat or end to life. That intrusion may be sudden, as in war experience and various forms of accidents, or it may take shape more gradually over time. Of great importance is the degree of unacceptability of death contained in the image--of prematurity, grotesqueness, and absurdity. To be experienced, the death imprint must call forth prior imagery either of actual death or of death equivalents. In that sense every death encounter is itself a reactivation of earlier "survivals." The degree of anxiety associated with the death imprint has to do with the impossibility of assimilating the death imprint--because of its suddenness, its extreme or protracted nature, or its association with the terror of premature, unacceptable dying. (Lifton 169)

Here is how **not** to do it: Why? The writer has merely omitted some phrases or substituted words. In other words, it is too close to the original author's text and is therefore not really the words or line of thought of the writer.

The death imprint consists of a feeling of threat. This feeling may be sudden, as in war or accidents, or gradually over time. The person may experience feelings of unacceptability of death contained in the picture, of suddenness, grossness, and absurdity. To experience the death imprint, a person must call forth an earlier image of death. Thus, every encounter is a reminder of an earlier survival. The degree of anxiety depends on the impossibility of assimilating the death imprint (Lifton 169).

This is the proper way to paraphrase from the original, lengthy quotation:

Lifton defines the "death imprint" as a traumatic event that causes a person to come face to face with the shock of his or her own vulnerability to death (169). He qualifies the "death imprint" further by stating that "every death encounter is itself a reactivation of earlier 'survivals'" (169).

Remember: direct quotes, lines of thought, or paraphrasing from an author's text should only be used to strengthen your own argument.

Direct quotes should not be "dropped in" merely to impress your professor. Your paper is a synthesis of several materials you have read, but these are only supporting materials for your own writing. The focus of the paper is your own idea, argument, and line of thought. After you have read several texts, you should formulate an opinion about the subject, supported by direct quotes, lines of thought, or paraphrases.

Format:

MLA formatting is covered in the *MLA Handbook*, but here are a few quick rules:

1. Everything is double-spaced. Do not triple space between the paper's title and text, between paragraphs, or your bibliographic entries on the "Works Cited" page.
2. Everything is in upper and lower case, unless, of course, you are quoting something directly, and that text happens to be in all caps.
3. Use a "left justified" margin. If you are tempted to use the "full" justification, your words will be spaced unevenly--it looks bad, it is extremely difficult to read, and your professor may mark your paper with "close space" symbols, considering the spaces as errors.
4. In the upper right corner, type your name (upper/lower case), skip one space and type the page number. Your computer software program, such as WordPerfect or Microsoft Word will have instructions on how to do this properly.)
5. Do not bold your title, italicize it, underline it, or put it in quote marks.
6. The due date of the paper is written as date first, month second (usually abbreviated, except for the shorter lettered months, and the year): 22 Feb. 1999, **not** February 22, 1999.
7. Book titles are either italicized or underlined. Whichever you use, stay consistent throughout your paper. Most writers prefer to italicize since computers give that option.
8. Article titles are enclosed in quote marks.
9. When you cite in your paper, do not type "p" or "Pg." After a citation, merely type the page number or the author's name, skip one space, and type the page number: (Author 88). Do not put a comma between the author's name and the page number, and make sure the period goes after the information.
10. For text that is over four lines in length, indent ten spaces. Do not set it off in quote marks. Because it is indented, the reader knows it is a direct quote. After the quote, end with a period, skip two spaces, and then type the citation information:

 ----- (88)

Your *MLA Handbook* has much more information. These are the basics that will start you toward successful formatting. Remember:

- You want your professor to concentrate on what you wrote and not get bogged down with formatting errors.
- The same goes for punctuation, spelling, and grammar. Take the time to look up rules and spelling you are not sure of. Spell check is a good thing, but only for typos! It will not correct usage mistakes such as "their/they're/there" or "it's/its."
- Study your grammar book. A rule a night will not make the task seem so overwhelming or confusing.
- Give yourself plenty of time to draft, revise, and re-vision your paper. A rush job reads like a rush job.
- Read your paper aloud to yourself. That is a good way to check for errors your eye automatically corrects.

This kind of attention to detail moves your paper from an average paper to an excellent paper.

Here is a sample first page and introductory paragraph. The introductory paragraph should be several sentences long, and it should move from the general to the specific, culminating with the thesis statement--a statement of fact plus the why or because. The thesis statement's job is to move the paper forward, to point toward the rest of the paper and say "this is what this paper will be about." It moves the paper from a mere retelling of the text to an analysis of what the reader believes discovering longitude has done for humanity. The writer can now write the rest of the paper.

A word about the Works Cited page. It is a separate page, the last one of your research paper. This page includes all works that you have used in your paper (in alphabetical order), i.e., anything you have quoted directly or indirectly (paraphrasing).

Dr. Renate Prescott, Associate Professor of English
Regional Campuses Writing Coordinator
Kent State University

Tentative Calendar --- Note: Make sure you read the chapter for the date we are discussing it; e.g., have chapter 1 read for January 25th. There may be pop-quizzes if it is evident that reading is not being done prior to class.

<u>DATE</u>	<u>TOPIC</u>
January 23	Introduction
January 25	Chapter 1, Environmental Problems, Their Causes and Sustainability
January 28	Chapter 2, Science, Systems, Matter, and Energy Review of Presentation/Paper Topics – Sign up Discussion: Sustainability: Can we achieve it as individuals, as a society? <u>Homework</u> (due 2/1): How many environmental articles were in a newspaper in the Sunday Edition? Select the New York Times, Washington Post, or another paper of national circulation. Pick one environmental article and write a 1 page report on the article. Research the topic on line and ask at least 3 others whether they read the article and/or have an opinion about it.
January 30	Chapter 3, Ecosystems: What Are They and How Do They Work? <u>Homework:</u> Visit a nearby ecosystem. Identify the major producers and consumers. Determine the flow of energy and possible food web. 1 page report. Due Feb. 6th
February 1	Chapter 4, Ecosystems: What are they and how do they work? Homework Due
February 4	Chapter 5, Climate and Terrestrial Biodiversity Last day to drop/add
February 6	Chapter 6: Aquatic Diversity class discussion on “Why Should We Care about Coral Reefs (p. 126) Homework due
February 8	Exam #1
February 11	Chapter 7, Community Ecology
February 13	Chapter 8, Population Ecology Discussion: Are local ecosystems fragile or resilient? How big is our ecological footprint?
February 15	<i>Film: Pennsylvania: Conserving Nature’s Diversity</i>
February 18	Chapter 9: Applying Population Ecology: The Human Population and its Impact Discussion: Why does every solution to any environmental issue include “slowing population growth”?
February 20	Chapter 10: Sustaining terrestrial Biodiversity: The Ecosystem Approach
February 22	Chapter 11, Sustaining Terrestrial Biodiversity: The Species Approach
February 25	Chapter 12, Sustaining Aquatic Biodiversity
February 27	Exam #2
February 29th	Chapter 13, Food, Soil Conservation and Pest Management

March 3	Chapter 14, Water <u>Homework</u> : What is the source of the water supply for Chambersburg? What sector is the biggest consumer of water (agriculture, residential, commercial, industrial). What is the price of water? Do you think it is too cheap or expensive? Based on your answer, how do you think this translates into how much people conserve/waste water? Due March 12
March 5	Chapter 15, Geology and Nonrenewable Mineral Resources Discussion: “The Nanotechnology Revolution” p. 335
March 7	Chapter 16, Nonrenewable Energy
March 10	Chapter 17, Energy Efficiency and Renewable Energy
March 12	Meet at the farm—solar energy at Wilson College
March 14	<i>Mid-term grades due</i> Exam #3
March 17-21	SPRING BREAK <u>Homework</u> : Determine five (5) ways to increase the efficiency of your residence (your home or dorm). List these items and their associated cost. List their estimated savings of energy by dollars or percentage. Prioritize the list and show which you can afford and will implement. Due March 31
March 24	Chapter 18, Environmental Hazards and Human Health
March 26	Chapter 19, Air Pollution
March 28	Chapter 20, Climate Change and Ozone Depletion
March 31	Climate Change Discussion of homework----- <i>Last Day to withdrawal</i>
April 2	Chapter 21, Water Pollution
April 4	Chapter 22, Solid and Hazardous Waste
April 7	Chapter 23, Sustainable Cities
April 9	Sustainable Land Use Planning
April 11	Exam #4
April 14	Chapter 24, Economics, Environment and Sustainability
April 16	<i>Film: Is Wal-Mart Good for America?</i>
April 18	Environmental Education: prepare for Earth Day
April 21	Chapter 25, Politics, Environment, and Sustainability
April 23	David Orr, The Problem of Education
April 25	Chapter 26, Environmental Worldviews, Ethics, and Sustainability
April 28	Aldo Leopold, A Land Ethic
April 30	TBA
May 2	<i>Film: TBA</i>

