

SOC 309: Environmental Sociology, Spring 2009

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Class Hours:	3:30 – 4:45 Tues. Thurs.
Office Hours:	10:00-12:00 Tues. Thurs.
Blackboard:	(093) SOC 309-01 Selected Topics: Environmental Sociology

Course Description: The focus of the course is to use the concepts and theories of environmental sociology to help us understand the potential changes that could occur in the Great Plains as a result of climate change and peak oil. In order to construct our conversation about the causes and impacts of these potential changes, we will employ the scenario planning process.

Course Goals:

1. Define basic ecosystem concepts
2. Understand the interaction between the environment and human systems and how climate change is modifying that interaction
3. Explore the extent of environmental problems and how climate change may exacerbate them
4. Discuss causes and extent of climate change and explore actions to reduce it
5. Examine the relationship between population growth, the environment and food production and how climate change and peak oil may affect it
6. Discuss the relationship between energy and society and how climate change and peak oil is affecting it
7. Explore alternative environmental futures involving the intersection of climate change and peak oil through scenario planning
8. Use sociological theories to explain how society may change in response to climate change and peak oil
9. Discover how the environmental movement -- especially the climate change and peak oil movements -- are involved in efforts to reduce carbon emissions, to promote alternative energy sources, and to advocate for public policy
10. Understand how the global economy may be affected by climate change and peak oil, the role of international environmental treaties in reducing carbon emissions, and how global civil society and global environmental movements are promoting such treaties.
8. Discover ways of accessing information from various sources to accomplish group research.
9. Develop critical thinking skills.
10. Learn how to communicate effectively the results of your work through effective writing.

Course Philosophy: It is my hope that you will enhance your skills as a critical thinker, communicator, researcher and life-long learner as we progress together through this course. I believe that learning is more than memorizing information and answering questions on a test. It is using information to gain an understanding of how things work and then to make them better. I like the following definition of learning: *"Learning (is) a process that culminates in the ability: to ask the right questions and frame good problems, to acquire information and evaluate sources of information, to critically investigate and solve problems, to make choices among many alternatives, to explain concepts to others (both verbally and in writing) and to generalize to new situations."* Ganter SL & Kinder JS, editors. Targeting Institutional Change: Quality Undergraduate Science Education for All Students. Targeting Curricular Change: Reform in undergraduate education in science, math, engineering, and technology. A report of the 1998 AAHE Conference on Institutional Change. The American Association for Higher Education

Pre-requisites: Three credit hours in sociology, critical thinking skills, writing skills, group work skills.

Required Text:

Harper Charles L, 2007. Environment and Society: Human Perspectives on Environmental Issues

Optional Texts (On reserve at Chester Fritz Library)

Lyson, Thomas, Civic Agriculture: Reconnecting Farm, Food, and Community
Kunstler, James, 2005, The Long Emergency; New York; Grove Press

Videos to Be Shown in Class (also available on Blackboard Web Resources)

An Inconvenient Truth
A Crude Awakening: The Oil Crash
Six Degrees Could Change the World
We Were Warned

Disability Statement:

If you need accommodations in this course because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. If you plan to request disability accommodations, you are expected to register with the Disability Support services (DSS) office (Room 190 McCannell Hall, 777-3425).

Blackboard:

Please make use of the materials and facilities available on Blackboard for this course. After we establish project working groups, I'll establish a page for each group on Blackboard – Communications – Group Pages. You can deposit documents on your group pages so they can be shared by other group members, you can send an email to one or all group members, and you can use the discussion board to set up a threaded discussion for your group.

Learning Circles

To facilitate interaction among members of working groups, we will use what is called Learning Circles.

Introduction: A Learning Circle is a self managed learning group. Participants learn at their own pace, drawing on their own experiences and without a lecturer or 'expert' running the show. Learning occurs through shared dialogue and inquiry. In this process all are teachers and learners. The direction, pace, style and topics are directed by the group. This may incorporate a variety of resources. There are three roles for members within a learning circle, organizing, facilitating (shared by the group) and participating.

Process: A typical learning circle (more traditionally called a study circle) is a group of people who meet regularly to discuss, learn about and consider action on an issue of concern to them, their communities or the wider society. Discussions are facilitated by a group leader which in our case will be your instructor, at least initially until we become more comfortable with the process such that anyone may assume the role. Learning circle groups use common resource material, which in our case will be our textbook, videos, and identified websites. The material is a guide to assist learning.

Learning circles make issues and ideas accessible: Learning occurs through shared inquiry and dialogue. All teach and all learn. Class members will progress at their own pace, drawing on their own experience and understanding. Life experience provides us with a great deal of knowledge — usually more than we realize. Learning circles are a way of drawing this out — and increasing class members' self-confidence.

Learning without being taught: As we become more comfortable with this process, class members will decide what issues to explore and how much time to spend on particular topics. Initially sessions will be guided by me, but later any class member may assume the role of the facilitator or coordinator. Sometimes the role of facilitator is shared among the class members in order to give everyone the chance to develop their skills. The facilitator helps the group frame its discussion and engage in lively talk in which everyone has the opportunity to participate equally.

Learning with resource information: Our class discussion will be supported by resource information. This can include our text, graphics, pictures, video, or websites. Resource material is simply a guide to support and help frame discussions. Class members are welcome to find their own resources—whatever they think they need to support their own learning priorities.

Outcomes: Outcomes achieved earning circles are intended to lead to action and change — in the views or behavior of class members or in their situation. As a method of learning, it is democratic in spirit, reflecting a belief that an informed community is essential to genuine participation and that ordinary people have the right and the ability to contribute to social change. Educational research on learning circles shows that: 1) The most satisfying aspects of participation for class members are sharing experiences, considering other viewpoints and learning more in a stimulating and thought-provoking environment. 2) Actions and change do result — ranging from a desire to learn more and a commitment to educate and inform others, to changes in daily life. 3) Class members develop greater self-confidence and a more critical approach. 4) The experience of participating in a learning circle leads to interest in using the same approach to explore other important issues.

Procedure: We will sit in a learning group circle, and I will have prepared name plates for each of you to place on your desk so that we may be able to become better acquainted. You will bring your name plate with you to each class period. As learning groups are only effective when students are engaged & participating, attendance is a must! Obviously, before we can begin to reflect on the meaning and significance of the topic, we have to know something about it. Thus it is imperative that you come class prepared to discuss the content, and that can only be accomplished by reading it before class. If there are topics, words, or issues that you don't understand, we will stop the discussion at your request and try to address those concerns. Always bring your textbooks to class!

Group Presentations and Responses: I will divide the class into groups (or learning circles) of five members each for the duration of the semester. During the semester, each group will have responsibility for six presentations to the class and six responses to presentations. During their presentation, each presenting group might consider answers to the following questions.

1. How would you apply our resource materials to analyze the topic being discussed?
2. What is your opinion about the topic?
3. What are the implications of this topic for our lives?
4. What can we do about this issue?

Remember that the focus is using the concepts, topics and theories from the textbook to analyze the course resources. The purpose is not to regurgitate the material from the reading! Each presenting group will prepare a summary paper (two pages minimum) to distribute to the entire class via Blackboard two days before their presentation. Each group presentation should be no more than 12 minutes each.

The group responding to the presentation will offer its response to the presentation. Each response should be no longer than 12 minutes, and the responding group will prepare a written response (two pages minimum) to distribute to the entire class via Blackboard the day before presentation. The responding group will include the following in its response to the presentation:

1. Do you agree or disagree with the presenting group's incorporation of the concepts, topics and theories from the textbook to help explain the class resources?

2. Do you have any additional insights, opinions, or suggestions concerning how to use class resources to analyze the issue?

You must be present for your group's presentation and your group's response to get the credit for participation. I will also grade the presentation and responses on the criteria presented below.

Following the presentations and responses, we will open the floor for class discussion using the following questions, if necessary:

1. What is your response to the presenters and/or responders?
2. What are your responses to the presenters and the responders?
3. Did the presenters and/or the responders miss some obvious connections or implications?
4. Did the presenters and/or responders misinterpret or misunderstand the relationship of the resource materials to the topic?
5. Are there additional implications of the connections of the resource material to the topic that the presenters or responders overlooked?
6. Are there additional things that we can do about the topic under discussion?

It is during this general class discussion that I will be evaluating your contribution to class discussion. This evaluation is a cumulative one rather than one based on your contribution to each day. *Therefore, it is in your best interest to attend class, to come prepared to discuss, to participate often, and to offer something of substance during your participation.* Because it is important for me to be able to associate a name and a face, it is imperative that you *bring the nameplate with you to every class.*

Assessment of Presenters, Responding Groups, and Individuals During Class Discussion

A (90-100%) Thorough analysis of reading integrated throughout the following: 1) Relevant & regular discussion, 2) Excellent depth in considering underlying or related issues; 3) Consistently connects ideas in present discussions to previous reading/discussion; 4) Shows original and creative thinking. 5) Excellent listener building on comments by peers and listening attentively to (and even encouraging) ideas other than one's own. 6) Actively involved in a range of activities.

B (80-90%) Usually thorough analysis of reading integrated through the following: 1) Relevant discussion although occasionally irregular. 2) Generally shows good depth in considering underlying or related issues. 3) Often connects ideas in present discussions to previous reading/discussion. 4) Occasionally shows original and creative thinking as appropriate. 5) Good listener generally working to encourage others and to connect other's thoughts and ideas with one's own. 6) Actively involved in most activities.

C (70-79%) Occasionally integrates reading; misses major points evidenced as follows: 1) Sporadic but generally relevant discussion. 2) Occasionally shows depth. 3) Rarely connects ideas in present discussions to previous reading/discussion. 4) Rarely shows original thinking/sticks generally to comments of others or text. 5) Generally good listener but may at times dominate or withdraw from discussion. 6) Generally involved in activities, although sporadic.

D (60-69%) Rarely integrates reading; disconnected from content as follows: 1) Either shows no discussion or irrelevant discussion. 2) Omits depth. 3) Never connects ideas in present discussions to previous reading/discussion. 4) Shows no (or disconnected) original thinking. 5) Pays attention and listens some of the time. 6) Tends to dominate or withdraw from discussion. 7) Rarely involved in activities.

F (0-59%) Never integrates readings, evidenced as follows: 1) No discussion or discussion not relevant to topic at hand. 2) Shows no depth. 3) Shows no original thinking or comments are unrelated to class. 4) Shows a pattern of inattentiveness. 5) Little to no involvement in activities.

Group Project Work but Individual Essays:

Group members are encouraged to work together, to study together and to develop answers to individual assignments. However, these are NOT group projects; they are individual projects. While your group may develop answers to the assignments, each group member will submit their own essay. I will not accept individual essays which appear to be mere compilation of other group member's work. You are to write in your own words and in your own voice. To submit other group member's work as your own is plagiarism, as is using material from the internet as your own. We have ways of checking papers for plagiarism, so the best advice is: Don't do it.

Plagiarism:

If I find that you have submitted plagiarized material; I will return it to you with the plagiarized section(s) circled with a note that this is an unacceptable submission. If on the second and final submission I again find plagiarized material, I will give the project a zero score. If on subsequent submissions I find that you are continuing to submit plagiarized material, I will treat the incident as a disciplinary matter and will refer it to the Associate Dean of Students Life. Code of Student Life Section 3.3: *Plagiarism: means the appropriation, buying, receiving as a gift, or obtaining by any means another person's work and the unacknowledged submission or incorporation of it in one's own work. Discipline: Cases of dishonesty may be handled as a scholastic matter or as a disciplinary matter at the discretion of the instructor. Instructors choosing to treat the case as a scholastic matter have the authority to decide how the incident of dishonesty will affect the student's grade in the course. If the instructor has treated the case as a scholastic matter involving the grade in a course and the student has a grievance related to this action, that grievance would be processed as outlined in Section 3-2. Instructors choosing to treat the case as a disciplinary matter will refer the case to the Associate Dean of Student Life for possible resolution; if final resolution does not occur the Associate Dean of Student Life may refer the case to the Student Relations Committee which will handle the matter under Section 2.*

Submitting Individual Assignments:

All individual assignments will be in essay format. I expect that as college students who have all had English Composition or Business Writing courses, that you know how to write grammatically correct sentences, paragraphs, and essays. If you have difficulty in writing grammatically correct essays, I suggest that you visit the Writing Center in Merrifield Hall before you submit your assignment. I have also posted on Blackboard several websites which provide assistance in writing essays, paragraphs and sentences. References and formatting for your essays must follow the ASA (American Sociological Association) Style Guide. (See Writing Assistance on Web Resources on Blackboard)

All assignments will be submitted to me as electronic files in Word format via Blackboard. I will use the insert comment procedure in Word to write my comments on your electronic document. I will also use the highlight procedure in Word to indicate where I see that you have writing problems, but I will not be your editor or grammarian. If your essay has substantial grammatical and writing problems, I will return it as unacceptable and suggest that you visit the Writing Center for assistance.

University Attendance Policy and Procedure:

Attendance and participation in class activities are considered integral parts of a university education. It is the University policy that attendance in classes is expected of all students. If attendance and/or participation are required and will impact grading, it is the responsibility of the instructor to communicate clearly that policy to students during the first week of class. Even in situations where an instructor might excuse a class absence (for example, severe medical situations, family emergencies, or authorized University activities) it is the responsibility of the student, whenever possible, to inform the instructor ahead of time.

Attendance and participation in each class period are integral and essential to group work. Each class session is the equivalent of a laboratory setting where attendance is central to the learning objectives. As Woody Allen, a wise philosopher, once eloquently stated: “Showing up is 80 percent of success”.

Grading:

Three individual essays:	200 each	600 total
Eight presentations	20 each	160 total
Eight responses	10 each	80 total
Class Participation		100 total
Final Project Group Presentation	90 each	60 total
Total points		1000 total

Scenario Planning:

Scenarios are tools for ordering one's perceptions about alternative future environments in which today's decisions might be played out. In practice, scenarios resemble a set of stories, written or spoken, built around carefully constructed plots. Stories are an old way of organizing knowledge; when used as strategic tools, they confront denial by encouraging—in fact, requiring—the willing suspension of disbelief. Stories can express multiple perspectives on complex events; scenarios give meaning to these events. (Global Business Network).

The process of scenario planning is varied but contains similar steps. We will use these steps to organize the syllabus and our essays:

- 1) *Specify the major issue of decision you are facing.* For us the major issue is “How will climate change and oil consumption affect American society?” The issue provides the foundation for scenario development. These issues can be addressed as a question about the future that the scenarios might answer.
- 2) *Locate the driving forces that shape the major issue.* Driving forces are the major sources of change that impact the future. Our consideration will be how these driving forces affect climate change and oil consumption. They can include technological, political, societal, economic, environmental, demographic, geographic, educational, cultural, financial and global trade/world economic factors. Driving forces can be both predictable and unpredictable. Some of the predictable forces are demographic, land use, energy consumption, etc. Unpredictable forces might be macro forces such as world economy, future availability of resources, global environmental conditions, or technological innovation. We will choose those driving forces that we believe will have the greatest impact on climate change and peak oil consumption.
- 3) *Determine patterns of interaction among the driving forces.* We will consider how the driving forces combine to determine climate change and oil consumption. Some driving forces will have a greater impact on our issue than others. To determine the patterns of interaction between driving forces, a matrix could be developed. On a matrix these driving forces can be identified as either having a positive or negative outcome on climate change and oil consumption, and their relationship to potential future worlds can be further examined.
- 4) *Create scenarios.* Once we have an understanding of the issues and forces, we will develop several worst and best case scenarios in regard to climate change and oil consumption. We will create basic stories based upon the interaction of the driving forces. These stories will provide a story of the future which highlights the key driving forces for each scenario. We will give each scenario a pithy name because names help us to distinguish between scenarios, and names give us a common reference for discussion,.

- 5) *Analyze the implications of the scenarios.* Scenario planning is a technique for better decision making, especially about climate change and energy use. Scenarios allow decision makers to explore the implications for climate change and oil consumption. Visualizing the interaction among the driving forces in each scenario can provide decision makers with information on the consequences of potential actions on changing the undesirable outcomes in the scenarios.

Class Schedule: This schedule is tentative. If needed, we will modify the schedule. Changes will be posted on Blackboard.

Part I:

- 1) ***Specify the major issue of decision you are facing.*** For us the major issue is “How will climate change and peak oil consumption affect American society?” This question provides the foundation for later scenario development.

Climate Change

January 13	<i>Video:</i>	An Inconvenient Truth,
January 15	<i>Video:</i>	Six Degrees Could Change the World,
January 20	<i>Finish Videos</i>	
	<i>Class Discussion</i>	<i>Describe the scenarios for the future presented in each of these videos.</i>
January 22	<i>Textbook</i>	Harper Chap. 1: Introduction
	<i>Discussion</i>	Group 1 Presents; Group 4 Responds,
	<i>Website:</i>	IPCC Fourth Assessment Report on Wikipedia (See Web Resources, International Panel on Climate Change)
	<i>Discussion</i>	Group 2 Presents; Group 5 Responds,
	<i>Class Discussion</i>	<i>What are the social changes that might occur if these scenarios occur?</i>

Peak Oil

January 27	<i>Video:</i>	A Crude Awakening: The Oil Crash
January 29	<i>Video:</i>	We Were Warned: Tomorrow's Oil Crisis
February 3	<i>Finish Videos</i>	
	<i>Class Discussion</i>	<i>Describe the scenarios for the future presented in each of these videos</i>
February 5	<i>Textbook</i>	Kunstler Chap. 1: Sleepwalking into the Future
	<i>Discussion</i>	Group 3 Presents; Group 6 Responds,
	<i>Website:</i>	Peak Oil on Wikipedia (See Web Resources, Peak Oil)
	<i>Discussion</i>	Group 4 Presents; Group 7 Responds,
	<i>Class Discussion</i>	<i>What are the social changes that might occur if the scenarios occur?</i>

- 2) ***Locate and discuss the driving forces that shape the issue.*** *Driving forces are the major sources of change that impact the future. Our consideration will be how these driving forces affect climate change and oil consumption. They can include technological, political, societal, economic, environmental, demographic, geographic, educational, cultural, financial and global trade/world economic factors. Driving forces can be both predictable and unpredictable. Some of the predictable forces are demographic, land use, energy consumption, etc. Unpredictable forces might be macro forces such as world economy, future availability of resources, global environmental conditions, or technological innovation. We will investigate all driving forces and choose those that we believe will have the greatest impact on climate change and peak oil consumption.*

Environmental Driving Forces

February 10	<i>Textbook</i>	Harper Chap. 4. Global Climate Change, Scientific Uncertainty and Risk, Introduction through Turning Up the Heat
	<i>Discussion</i>	Group 7 Presents; Group 3 Responds
	<i>Textbook</i>	Harper Chap. 4. Global Climate Change, Scientific Uncertainty and Risk, Criteria for Policy and Costs of Action through Personal Connections.
	<i>Discussion</i>	Group 6 Presents; Group 2 Responds

	<i>Class Discussion</i>	<i>What are the environmental forces driving climate change? Given the uncertainties involved in predicting the future, do we know enough to act? Can we afford to wait?</i>
February 12	<i>Textbook</i>	Harper, Chap. 6 Energy and Society, Introduction through Energetics of Human Societies
	<i>Discussion</i>	Group 5 Presents, Group 1 Responds
	<i>Textbook</i>	Harper, Chap. 6 Energy and Society, The Present Energy System and Its Alternatives through Personal Connections
	<i>Discussion</i>	Group 1 Presents, Group 4 Responds
	<i>Textbook</i>	Kunstler, Chap. 5 Nature Bites Back
	<i>Discussion</i>	Group X Presents, Group X Responds
	<i>Class Discussion</i>	<i>How could the environmental trends identified in these readings be identified as driving forces for climate change and peak oil?</i>
<i>Social (Societal) Driving Forces</i>		
February 17	<i>Textbook</i>	Harper Chap. 2 Human Systems, Environment and Social Science Introduction through Explaining Socio-cultural Evolution
	<i>Discussion</i>	Group 2 Presents; Group 5 Responds,
	<i>Textbook</i>	Harper Chap. 2: Human Systems, Environment and Social Science Environmental Social Science through Personal Connections
	<i>Discussion</i>	Group 3 Presents; Group 6 Responds,
	<i>Textbook</i>	Harper Chap. 7: Alternative Futures Introduction through Affluence, Social Inequality and Environment
	<i>Discussion</i>	Group 4 Presents; Group 7 Responds
	<i>Class Discussion</i>	<i>How can the structure of society be a driving force in climate change & peak oil consumption?</i>
February 19	<i>Websites</i>	Peak Moment: The Social Effects of Peak Oil (See Climate change, peak oil and societal impacts)
	<i>Discussion</i>	Group 7 Presents Group 3 Responds
<i>Economic and Political Driving Forces</i>		
	<i>Textbook</i>	Harper Chap. 8: Transforming Structures: Markets, Politics and Policy Introduction through Markets
	<i>Discussion</i>	Group 6 Presents; Group 2 Responds
	<i>Textbook</i>	Harper Chap. 8: Transforming Structures: Markets, Politics and Policy Politics & Policy through Conclusions
	<i>Discussion</i>	Group 5 Presents; Group 1 Responds
	<i>Class Discussion</i>	<i>How can markets, politics and policy be a driving force in climate change and peak oil?</i>
February 24	<i>Website:</i>	The Economics of Global Warming from Wikipedia (See Climate Change and Economics)
	<i>Discussion</i>	Group 1 Presents Group 4 Responds
	<i>Website:</i>	The Politics of Global Warming on Wikipedia (See Climate Change, Peak Oil and Politics Website)
	<i>Discussion</i>	Group 2 Presents Group 5 Responds
	<i>Websites</i>	Climate Change, Human Vulnerability, and Social Risk Management. A. Risks and Impacts Associated with Climate Change; 2. Economic and Social Impacts of Climate Change (See Climate change, peak oil and societal impacts)
	<i>Discussion</i>	Group 3 Presents, Group 6 Responds
	<i>Class Discussion</i>	<i>What additional insights do the websites add to the economic and political driving forces of climate change and peak oil?</i>
February 26	<i>Textbook</i>	Kunstler Chap. 2: Modernity and the Fossil Fuels Dilemma
	<i>Discussion</i>	Group 4 Presents; Group 7 Responds

Textbook Kunstler, Chap. 6 Running on Fumes
Discussion Group 7 Presents Group 3 Responds
Class Discussion *How does the nature of an economy dependent on fossil fuels and whose consumption contributes to climate change make it doubly difficult to reduce CO2 emissions?*

Global Economy Driving Forces

March 3 *Textbook* Harper Chap. 10: Globalization, Trade, Environment and the Third Revolution, Introduction through Organization, Trade, Treaties and the Environment
Discussion Group 6 Presents, Group 2 Responds
Textbook Harper Chap. 10: Globalization, Trade, Environment and the Third Revolution, A Global Civic Society through Toward a “Greener” Global System
Discussion Group 5 Presents, Group 1 Responds
Websites International Trade and Climate Change: Economic, Legal and Institutional Perspectives -- Introduction and Overview, (See Climate Change and Global Trade)
Discussion Group 1 Presents; Group 4 Responds
Class Discussion *How do international trade, transnational corporations, and international trade bodies contribute to climate change? What concerns do environmentalists and those concerned about fair trade raise about trade?*

March 5 *Textbook* Kunstler Chap. 3: Geopolitics and the Global Oil Peak
Discussion Group 2 Presents; Group 5 Responds
Textbook Lyson, Chap. 4. The Global Supply Chain
Discussion Group 3 Presents, Group 6 Responds
Class Discussion *Kunstler and Lyson differ considerably in their analysis of the global situation with Kunstler focusing on geopolitical relations involving oil while Lyson focuses mainly on the global procurement of food. Are there similarities in their analyses?*

First Individual Assignment: Part I Essay Due March 12. Based on group presentations and responses, class discussions, readings, and websites, write an essay in which you address the following questions:

- 1) *Discuss climate change and peak oil as major issues.*
- 2) *Locate and discuss the cultural, social, economic, political, global, and environmental driving forces that shape climate change and peak oil.*
- 3) *Discuss which ones are primary and which ones are secondary driving forces.*

Part II

- 3) ***Determine patterns of interaction among the driving forces.*** *Your task will be to consider how the driving forces combine to determine climate change and oil consumption. You should consider which of the driving forces will have a greater impact on climate change and oil consumption than will others. You can develop a matrix to determine the patterns of interaction among the driving forces. On a matrix you can identify these driving forces as either having a positive or negative outcome on climate change and oil consumption. You can explore the relationship of driving forces to potential future worlds.*

Climate Change, agriculture, land and soil, water resources and biodiversity

March 10 *Textbook* Chap. 3: Resources of the Earth: Sources and Sinks – Introduction through Water Resources
Discussion Group 4 Presents, Groups 7 Responds
Textbook Chap. 3: Resources of the Earth: Sources and Sinks – Biodiversity through Nonfuel Minerals, Materials and Solid Wastes
Discussion Group 7 Presents, Group 3 Responds
Class Discussion *Climate change will have an impact on land and soil, water resources and biodiversity. What might some of those impacts be?*

March 12	<i>Websites</i>	The effects of climate change on agriculture, land resources, water resources, and biodiversity in the United States, Executive Summary from USDA (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 6 Presents, Group 2 Responds
	<i>Websites</i>	Climate Change: The Role of the U.S. Agriculture Sector (Summary) (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 5 Presents, Group 1 Responds
	<i>Class Discussion</i>	<i>How concerned should we be about the impacts of climate change on agriculture, land, water and biodiversity</i>

March 17, 19 Spring Break

Climate change, population, environment and food

March 24	<i>Textbook</i>	Chap. 5: Population, Environment and Food. Introduction through How Serious Is the Problem of World Population Growth?
	<i>Discussion</i>	Group 1 Presents, Group 4 Responds
	<i>Textbook</i>	Chap. 5: Population, Environment and Food. Making Sense Out of This Controversy through Personal Connections
	<i>Discussion</i>	Group 2 Presents, Group 5 Responds
	<i>Websites</i>	Global food security under climate change (Click on full text pdf) (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 3 Presents, Group 6 Responds
	<i>Class Discussion</i>	<i>Which of the arguments explaining the seriousness of world population growth makes more sense to you? How much more difficult will climate change and peak oil make it be to feed the nine billion people or will war, pestilence, disease and famine as a result of climate change and peak oil make the probability of the world's population reaching nine billion less likely?</i>

Climate change, agriculture and the Great Plains

March 26	<i>Websites</i>	Potential Impacts of Climate Change on Agriculture and Food Supply (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 4 Presents, Group 7 Responds
	<i>Websites</i>	Climate Change Impacts on the United States The Potential Consequences of Climate Variability and Change Overview: Great Plains (See Impact of Climate Change on the Great Plains)
	<i>Discussion</i>	Group 7 Presents, Group 3 Responds
	<i>Class Discussion</i>	<i>Climate change may impose a variety of agronomic, economic, environmental and social consequences on the Northern Great Plains. Which of the projected impacts will pose the most difficult challenge?</i>
March 31	<i>Websites</i>	US National Assessment of the Potential Consequences of Climate Variability and Change Educational Resources Regional Paper: Great Plains (See Impact of Climate Change on the Great Plains)
	<i>Discussion</i>	Group 6 Presents, Group 2 Responds
	<i>Websites</i>	Economic Impacts of Climate Change on North Dakota (pages 5 – 12) See Impact of Climate Change on the Great Plains)
	<i>Discussion</i>	Group 5 Presents, Group 1 Responds
	<i>Class Discussion</i>	<i>Climate change may impose a variety of agronomic, economic, environmental and social consequences on the Northern Great Plains. Which of the projected impacts will pose the most difficult challenge?</i>

- 4) **Create scenarios:** Now that you have an understanding of the issues and forces, you will create basic stories based upon the interaction fast/slow climate change and fast/slow peak oil consumption. You will give each scenario a name, and you will describe the nature of society, economy, culture, politics, trade and environment within a scenario you believe will be most likely to occur on the Northern Great Plain

Alternative Future Scenarios – Harper, Kunstler, Scenario Planning

April 2	<i>Textbook</i>	Harper Chapter 7: Alternative Futures: Sustainability, Inequality, and Social Change, Social and Environmental Futures – Two Views through What Would A Sustainable Future Look Like?
	<i>Discussion</i>	Group 1 Presents, Group 4 Responds
	<i>Textbook</i>	Harper Chapter 7: Alternative Futures: Sustainability, Inequality, and Social Change – Transformation and Sustainability – Social change through Personal Connections
	<i>Discussion</i>	Group 2 Presents; Group 5 Responds
	<i>Class Discussion</i>	<i>Which of the two futures presented here seems more likely to occur? Which theory (interpretative, functionalist, conflict, multiple) best explains how climate change and peak oil consumption occurred and what the future may be under conditions of peak oil consumption and climate change?</i>
April 7	<i>Textbook</i>	Kunstler Chap. 4: Beyond Oil
	<i>Discussion</i>	Group 3 Presents; Group 6 Responds
	<i>Textbook</i>	Kunstler Chap. 7: Living in the Long Emergency
	<i>Discussion</i>	Group 4 Presents; Group 7 Responds
	<i>Class Discussion</i>	<i>What is the basis of Kunstler’s argument that alternative fuels won’t save us?(Chap. 4) How will society have to be reorganized if it is to survive in the post peak oil period? (Chap. 10)</i>
April 9	<i>Websites</i>	Scenario Planning from Wikipedia (See Scenario Planning)
	<i>Discussion</i>	Group 7 Presents; Group 3 Responds
	<i>Websites</i>	Climate Change Scenarios and Peak Oil Scenario Planning (See Scenario Planning for Peak Oil and Climate Change)
	<i>Discussion</i>	Group 6 Presents; Group 2 Responds
	<i>Class Discussion</i>	<i>Based upon the textbook readings and websites, how would you describe the four scenarios based upon the intersection of fast/slow climate change and fast/slow peak oil consumption in regards to agriculture and the Northern Great Plains?</i>

Second Individual Assignment: Part II Essay Due April 14. Using a two axis format, develop four scenarios for the future. The horizontal axis will represent fast/slow peak oil consumption and the vertical axis will represent fast/slow climate change; this will give you four scenarios. Each of the four quadrants will be a scenario.

1. Give a label to the scenarios and briefly describe each.
2. Choose the scenario you believe will most likely to occur and discuss your reasons for choosing it as the most likely scenario.
3. Describe the nature of the society, economy, culture, government, politics, trade and environment within the scenario you believe will be most likely to occur.

Part III

5) *Analyze the implications of the scenarios:*. In the section you will consider how the adoption of innovations in technologies, formulation of new policies, or promoting changes in behaviors may mitigate climate change; the role of social groups or organizations as representatives of social movements in mitigating climate change.

The Role of Social Movements in Mitigating the Effects of Climate Change and Peak Oil

April 14	<i>Textbook</i>	Harper Chap. 9 Environmentalism: Ideology and Collective Action Introduction through American Environmentalism
	<i>Discussion</i>	Group 5 Presents, Group 1 Responds
	<i>Textbook</i>	Harper Chap. 9 Environmentalism: Ideology and Collective Action Environmentalism and Change through Personal Connections
	<i>Discussion</i>	Group 1 Presents, Group 4 Responds
	<i>Websites</i>	Using “About Us” (or something similar) try to learn something about the mission or purpose, activities, members, and funding about the two organizations working to raise concern about climate change on the Great Plains (See Impact of Climate Change on the Northern Great Plains – Prairie Climate Stewardship Network, Great Plains Institute,)
April 16	<i>Discussion</i>	Group 2 Presents, Group 5 Responds
	<i>Websites</i>	Using “About Us” (or something similar) try to learn something about the mission or purpose, activities, members, and funding about the two organizations working to reduce carbon emissions or to be advocates for alternative energy on the Northern Great Plains (See Climate Change and Agriculture & Food Security – North Dakota Farmers Union Climate Credit Program, North Dakota Alliance for Renewable Energy)
	<i>Discussion</i>	Group 3 Presents, Group 6 Responds
	<i>Websites</i>	Using “About Us” (or something similar) try to learn something about the mission or purpose, activities, members, and funding about the two organizations working to promote sustainable agriculture on the Northern Plains (See Climate Change and Agriculture & Food Security – Northern Plains Sustainable Agriculture Society, Foundation for Agriculture and Rural Research, Management and Sustainability.)
	<i>Discussion</i>	Group 4 Presents; Group 7 Responds
	<i>Sustainable and Local Agriculture As A Response to Climate Change and Peak Oil</i>	
	<i>Websites</i>	Organic Agriculture and Localized Food & Energy Systems for Mitigating Climate Change; How the world can be food and energy secure without fossil fuels. (See Climate Change, Agriculture and Food Security) The Climate Crisis at the End of Your Fork (See Climate Change, Agriculture and Food Security)
April 21	<i>Discussion</i>	Group 7 Presents; Group 3 Responds
	<i>Textbook</i>	Lyson, Chap. 1 Introduction: Community Agriculture and Local Food Systems
	<i>Discussion</i>	Group 6 Presents; Group 2 Responds
	<i>Textbook</i>	Lyson, Chap. 5. Toward a Civic Agriculture
	<i>Discussion</i>	Group 5 Presents; Group 1 Responds
	<i>Class Discussion</i>	
April 23	<i>Textbook</i>	Lyson, Chap. 6 Civic Agriculture and Community
	<i>Discussion</i>	Group 1 Presents; Group 4 Responds
	<i>Textbook</i>	Lyson, Chap. 7 From Commodity Agriculture to Civic Agriculture
	<i>Discussion</i>	Group 2 Presents; Group 5 Responds
	<i>Class Discussion</i>	
April 28	<i>Websites</i>	Farmer in Chief (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 3 Presents, Group 6 Responds

	<i>Websites</i>	Taking A Bite Out of Climate Change (See Climate Change, Agriculture and Food Security)
	<i>Discussion</i>	Group 4 Presents, Group 7 Responds
	<i>Class Discussion</i>	
April 30	<i>Textbook</i>	Kunstler, Afterwards
	<i>Discussion</i>	Group 7 Presents, Group 3 Responds
	<i>Textbook</i>	Lyson, Chap. 7 From Commodity Agriculture to Civic Agriculture
	<i>Discussion</i>	Group 6 Presents, Group 2 Responds
	<i>Textbook</i>	Harper, Chap. 10 Progress and Problems through Personal Connections
	<i>Discussion</i>	Group 5 Presents, Group 1 Responds
	<i>Class Discussion</i>	<i>In the last three readings we are presented with challenges and opportunities for taking action to deal with climate change and peak oil. Having now spent a semester discussing the how climate change and peak oil might affect the Northern Great Plains, what are your thoughts about your ability, your opportunities, and your necessity to engage in meaningful social change?</i>

May 5 & 7 Group Presentations

Third Individual Assignment: Part III. Due May 11.

Develop a plan to promote the use of locally raised foods at UND dining centers which involves outside resources (see websites by groups promoting the school food movement)), administrators, students, and local producers. (See Civic Agriculture, Local Food Systems, and University of North Dakota Dining Centers)