University of Wisconsin-Madison Living in the Global Environment: Introduction to People-Environment Geography GEOG/IES 139 Spring Semester 2019

Mondays and Wednesdays 2:25 to 3:15 PM 180 Science Hall

Instructor:

W. Nathan Green (wgreen@wisc.edu)

Office Hours: Mon, 3:30 – 4:30 PM; Wed, 12:30 – 1:30 PM

Office: 440 Science Hall

Teaching Assistants:

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301 (M 3:30 – 4:20 PM) 302 (M 4:35 – 5:25 PM) 307 (W 12:05 – 12:55 PM) 308 (W 1:20 – 2:10 PM) 309 (W 1:20 – 2:10 PM) 300 (W 1:20 – 11:50 AM)

Course Description and Learning Objectives

This course provides a broad introduction to nature and society relationships. The first part of this course explores the development of the modern world system and provides a brief history of its human environmental impacts that culminated with American environmental governance. We will then examine the global ecological consequences of the modern world system, with an emphasis on the interactions between population, natural resources, agriculture, and technology. The third part of this course details the mechanics of global climate change and its environmental impacts. We will end the course with a brief exploration of emerging technologies for a sustainable future and promising efforts to address the unequal distribution of environmental benefits and burdens today.

By the end of this course, students will be able to:

- Describe the configuration of the modern world system and its social and ecological consequences.
- Explain the social and environmental issues related to population growth, food production, energy production, and climate change.
- Analyze the difficulties associated with implementing policies that address social and environmental problems.
- Critically assess competing explanations for a variety of nature-society relationships.

- Nurture various ways of knowing the human and non-human world.
- Promote the integration of knowledge across disciplines and cultures to address social and environmental problems.

General Information

This course is three credits. It meets for two 50-minute class lectures and one 50-minute discussion section each week over the semester. Students are expected to work on course learning activities (reading, writing, assignments, studying, etc.) for a minimum of two hours per class period per week. I.e., you should plan on six hours per week of outside work over the course of the semester. This syllabus includes additional information about meeting times and expectations for student work.

This course meets the Social Science Breadth requirement and its level is elementary. There are no requisites for this course. It is open to first-year students.

Canvas Website

The course will use a Canvas website, which you can access through https://canvas.wisc.edu.

Textbook and Course Materials

There is no textbook for this class. *All required readings* are posted on Canvas. You should plan for weekly assignments and readings throughout the semester.

Contacting Me

I would love to hear from you. Please consider the following:

- For general questions about course content, please ask your question during class time. Many students may be wondering the same thing and would benefit from hearing my response. If you need a more personal answer, approach me after class or come see me during office hours.
- For questions about homework assignments and discussion section, please contact your TA.
- For technology related issues: If you notice a broken or missing link on Canvas, send me an email. For any other problems with the Canvas website or other university technologies, please contact the DoIT help desk: https://kb.wisc.edu/helpdesk/.
- All other matters: Please come talk to me after class if you have question that can be answered quickly. If you want to have a more in-depth conversation, please come see me during office hours or set up an appointment for another time. In-person interaction is almost always the best way for me to give you the attention you deserve.

Course Policies

Attendance

Attendance is of the utmost importance for you to understand the course material. If you miss a class, it is your responsibility to get notes from one of your classmates. If you have questions about the material covered that day, I encourage you to come visit me in office hours *after* you have talked to your TA or reviewed the assigned readings and your classmate's notes. Students coming late or leaving early are disruptive to the entire class. Unless you have advanced permission, please make sure you arrive to class on time and refrain from packing up and leaving before the end of the session.

Note Taking

Our class will combine a mixture of lectures, discussions, and other activities. In addition to the assigned readings, any and all of this material will be fair game to show up on the exams.

I will post lecture slides on Canvas after each class. However, for full understanding of lecture material, it will be necessary to take notes during class. Lecture slides are designed to complement my lecture material and therefore will not be sufficient for studying for the exams. Learning to take notes on information you receive through listening is an important skill. Note taking allows you to process and retain information more thoroughly.

Using Technology During Lecture

While laptops, tablets, and smartphones can help in learning, they are also easy sources of distraction for you and other students sitting nearby. You are welcome to use these devices to take notes, access digital class documents, or otherwise participate in activities related to our class. However, you need to be engaged with what is going on in the classroom, not in the digital space. This means you may not use your device for anything unrelated to class. If your device becomes a distraction either to you or others, we will ask you to put it away.

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action.

A first offense will result in a report submitted to the Dean of Students and a failing grade on the assignment. Multiple offenses may result in failure of the course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review.

For more information about UW Academic Integrity policies, visit the following link: http://students.wisc.edu/doso/acadintegrity.html.

Please see the UW Writing Center's guide for avoiding plagiarism, which also details the many substantial penalties for acts of intellectual theft at http://writing.wisc.edu/Handbook/QuotingSources.html

Accommodation for People with Disabilities

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life.

If there are circumstances that may affect your performance, it is your responsibility to let your TA know by the end of the third week of class, or as soon as possible after a disability has been incurred or recognized. You can inform your TA via email (to best protect your privacy) or you can talk to them in person. We will work in coordination with the McBurney Center to identify and develop reasonable accommodations for adapting assignments to meet both your needs and the requirements of the course. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.

The McBurney Disability Resources center provides resources for students with disabilities. You will need to show them documentation of your disability in order to receive official university services and accommodations. You can find more information by calling them at 608-263-2741 or through their website: http://www.mcburney.wisc.edu.

Diversity and Inclusion

Diversity is a source of strength, creativity, and innovation for UW-Madison. More information about the university's diversity mission is available at: https://diversity.wisc.edu. The identities, cultures, backgrounds, experiences, statuses, abilities, and opinions of each student will greatly enrich the conversations we have in this class. I look forward to hearing and learning from everyone.

Course Content and Grading

Participation

You will not be assessed on lecture participation. However, to get the most out of lectures, it will be necessary to come prepared having completed the assigned readings for that week as marked on the course schedule below. Lectures will periodically include small discussion activities that ask you to reflect upon course material.

Discussion section participation is mandatory and is worth 20% of your total grade. Most discussion section activities will require an hour or two of preparation each week. Your TA will provide you with more details about discussion section policies, expectations, and assessment.

Readings

There are two sets of readings each week. Lecture readings should ideally be completed before lectures of that week in order to help you follow lecture material and to avoid having to cram for the exams. Discussion readings *must* be completed before discussion section that week in order to complete the assignment and participate in discussion section.

Assignments

There are 10 assignments, which are worth 35% of your total grade for this course. The instructions for each assignment will be uploaded to Canvas and can be found in each week's module. You will submit your assignment online as a word doc or PDF through Canvas. No hard copies will be accepted.

Each assignment is due before lecture on Monday of the week listed in the course schedule below. Your TA will provide more details for each of the assignments the week before they are due. TAs will also provide you with details about assignment assessment.

No late assignments will be accepted unless you have an excused absence or made prior arrangements with your TA. We well understand the difficulties of balancing school, work, and family concerns. Please talk to us *ahead of time* if you have work or family obligations that necessitate flexibility.

Exams

There will be three exams that cover concepts and topics from lecture, discussion and the weekly readings. Each exam is worth 15% of your overall grade. Each test will be cumulative, but will focus primarily upon the materials covered since the previous exam. More information about the exams will be provided closer to the exam dates. There will be no makeup exams, except in the event of extreme emergency or to accommodate university policies.

Course Grading

We are open to discussing your grade and correcting errors in grading, but please bring any issues to your TA's attention immediately. Do not wait until the end of the semester to ask questions about grades, as it is very difficult to make corrections then.

Grading Distribution

- Participation 20%
- Assignments 35%
- Exams -45%

Grading Scale

(A) 93-100% (BC) 79-82% (F) 59% (AB) 89-92% (C) 70-78% (D) 60-69%

Course Schedule (May be amended by the instructor at any time.)

Week 1 (Jan. 23)

Topic:

• Course Introduction

Lecture Readings:

- Castree, Noel. 2016. "Welcome to the Anthropocene."
- Kolbert, Elizabeth. 2013. "The Lost World."
- Lewis, Simon and Mark Maslin. 2015. "Defining the Anthropocene."

Discussion Readings:

• None

Assignment:

• None

Week 2 (Jan. 28 - 30)

Topic:

History and Environment of the Modern World System

Lecture Readings:

- Brayshay, Mark. 2009. "Capitalism and Division of Labor."
- Halsall, Paul. 1997. "Wallerstein on World System Theory."
- Mann, Charles C. 2002. "1491."
- Mann, Charles C. 2007. "Jamestown."

Discussion Readings:

• None

Assignment:

• None

Week. 3 (Feb. 4 - 6)

Topics:

- History and Environment of the Modern World System
- Conservation and Preservation

Lecture Readings:

- Barrett, Kelli. 2012. "Muir-Pinchot Debate Lives On."
- CRF. 2013. "Conservation, Preservation, and the National Parks."
- Leopold, Aldo. 1968. "The Land Ethic."

Discussion Readings:

- Cronon, William. 2003. "The Riddle of Apostle Islands."
- Keller, Robert H. and Michael F. Turek. 1998. "American Indians and National Parks."

Assignment:

• Apostle Islands

Week 4 (Feb. 11 – 13)

Topic:

- Conservation and Preservation
- Environmental Governance and Ecosystem Services

Lecture Readings:

- Costanza et al. 2014. "Changes in the Global Value of Ecosystem Services."
- Earth Economics. 2015. "Can We Put an Economic Value on Nature?"
- Zimmer, Carl. 2014. "Putting a Price Tag on Nature's Defenses."

Discussion Readings:

- Hayward, Steven. 2010. "Two Cheers for the Clean Air Act."
- US Environmental Legislative Information and Federal Register

Assignment:

• Environmental Policy

Week 5 (Feb. 18 – 20)

Topic:

• Environmental Governance and Ecosystem Services

Lecture Readings:

None

Discussion Readings:

- Masood, Ehsan. 2018. "Battle Over Biodiversity."
- Nature Editorial. 2018. "Biodiversity Needs More Voices."

Assignment:

• Valuing Earth's Ecosystems

EXAM I (Feb. 20)

Week 6 (Feb. 25 – 27)

Topic:

Population

Lecture Readings:

- Friedman, Michael. 2018. "Carrying Capacity, Technology, and Ecomodernist Confusion."
- Kunzig, Robert. 2011. "Population 7 Billion."
- Nordhaus, Ted. 2018. "The Earth's Carrying Capacity for Human Life is Not Fixed." Discussion Readings:

- Story, Holly. 2014. "Malthus vs Boserup."
- UNEP. 2011. "Keeping Track of our Changing Environment." pp. 2 17.

Assignment:

Gapminder

Week 7 (March 4-6)

Topic:

• Resource Management

Lecture Readings:

- Ames, Michael. 2013. "The West Coast Oyster War."
- Mwangi, Esther and Elinor Ostrom. 2009. "Top-Down Solutions: Looking Up from East Africa's Rangelands."

Discussion Readings:

• Same as Lecture Readings

Assignment:

• Commons Resource Management

Week 8 (March 11 – 13)

Topic:

• Labor-intensive Agriculture

Lecture Readings:

- De Schutter, Olivier. 2013. "Agroecology."
- Koohafkan, Parviz and Miguel A. Altieri. 2011. "Globally Important Agricultural Heritage Systems."

Discussion Readings:

• Altieri, Miguel A. and C.I. Nicholls. 2012. "Agroecology Scaling Up for Food Sovereignty and Resiliency."

Assignment:

Agroecology

SPRING RECESS (March 16 – 24)

Week 9 (March 25 - 27)

Topic:

Capital-intensive Agriculture

Lecture Readings:

- BBC. 2015. "Aral Sea."
- Hylton, Wyl S. 2012. "Broken Heartland."
- National Geographic. 2014. "The Future of Food."

Discussion Readings:

- Borlaug, Norman. 2012. "We Can Feed the World."
- Connor, D.J. 2007. "Organic Agriculture Cannot Feed the World."
- Seufert et al. 2008. "Comparing the Yields of Organic and Conventional Agriculture."

Assignment:

• Feeding the World

Week 10 (April 1-3)

Topic:

- Capital-intensive Agriculture
- Food Ethics

Lecture Readings:

None

Discussion Readings:

- La Duke, Winona. 2005. "Food as Medicine."
- Pollan, Michael. 2001. "Behind the Organic-Industrial Complex."

Assignment:

• None

EXAM II (April 3)

Week 11 (April 8 – 10)

Topic:

• Energy and Environmental Justice

Lecture Readings:

- Reece, Erik. 2008. "Death of a Mountain."
- Pierre-Louis, Kendra. 2018. "A Leader in the War on Poverty Opens a New Front: Pollution."
- UNEP. 2011. "Keeping Track of our Changing Environment." pp. 74-88.

Discussion Readings:

- Bullard, Robert D. 2005. "Environmental Justice in the Twenty-First Century."
- Lerner, Sharon. 2017. "The Plant Next Door."

Assignment:

• Environmental Justice

Week 12 (April 15 – 17)

Topic:

• Climate Change Science

Lecture Readings:

- Kolbert, Elizabeth. 2005. "Climate of Man."
- National Research Council. 2012. "Climate Change: Evidence, Impacts, and Choices."
- UNEP. 2011. "Keeping Track of our Changing Environment." pp. 21-35.

Discussion Readings:

- Adger et al. 2011. "Resilience Implications of Policy Responses to Climate Change."
- IPCC. 2014. "Fifth Assessment Report: Executive Summary."

Assignment:

• Climate Change and Resilience

Week 13 (April 22 – 24)

Topic:

• Climate Change Politics

Lecture Readings:

- U.S. Global Change Research Program. 2018. "Fourth National Climate Assessment."
- IPCC. 2018. "Global Warming 1.5 °C: Summary for Policymakers."

Discussion Readings:

- Chait, Jonathan. 2015. "Is Naomi Klein Right That We Must Choose Between Capitalism and the Climate?"
- Klein, Naomi. 2014. "This Changes Everything: Introduction."
- Klein, Naomi and Kolbert Elizabeth. 2015. "An Exchange."
- Kolbert, Elizabeth. 2014. "Can Climate Change Cure Capitalism?"

Assignment:

Climate Change and Capitalism

Week 14 (April 29 – May 1)

Topic:

• Technological or Political Solutions?

Lecture Readings:

• To be announced.

Discussion Readings:

• To be announced.

Assignment:

None

EXAM III (May 8, 10:05 AM)