

University of Wisconsin at Madison
Living in the Global Environment (Geography/IES 139)
Fall Semester 2017

Instructor: Bill Gartner

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Office Hours: Tu 2:30 - 3:30; W 1:00 - 2:00

Place: 180 Science Hall

Time: M & W 2:25 - 3:15 PM

Final: W, 20 Dec 2017, 5:05 - 7:05 PM

Credits: 3

Class Number: 45533 (Geog) or 51939 (Env St)

TA: Zhe Yu Lee

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TA: Kevin Inks

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Course Synopsis

This course provides a broad introduction to nature and society relationships. The first part of this course explores the evolution of the modern world system and provides a brief history of the 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 demography, consumption, natural resources, and technology. The third module in 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.

Text and Class Materials

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

Grading

Your final grade is determined by a computer algorithm, often termed "Jenks optimal breaks", that places students into groups based on the total number of points earned throughout the semester. You will earn points throughout the semester from exams and from discussion section activities. At the end of the semester, I will generate a histogram for the class based on the total number of points earned throughout the course. The Jenks optimal breaks algorithm analyzes the histogram and then places similar point scores into one of seven groups. (Technically, the method seeks to minimize point variation within groups and maximize the distance between groups on a number line). Each of these seven groups corresponds to one of the conventional UW-Madison letter grades. The group with the highest set of scores will have earned an "A", the group with next highest set of scores, will have earned an "AB", and so on. The net result is that your final grade is based on the total number of points earned throughout

the semester and your rank relative to the performance of everyone else in the class. In most cases, this systematic method generates the best possible grades for the most number of students.

I will periodically post grade progress reports on Canvas throughout the semester, typically after each exam. However, only the final histogram, the one based on the total number of points earned throughout the semester, will be used to assign your course grade.

Individual and writing assignments are typically graded on the following scale: (A) 93-100%, (AB) 90-93%, (B) 82-89%, (BC) 79-81%, (C) 70-78%, (D) 60-69%, and (F) 59%. This percentage scale approximates, and is derived from, typical grade breaks in previous classes. If the percentage-based scale generates the best possible grades for the most number of students at the end of the semester, than this method will supplant the “Jenks optimal breaks” method described above when calculating final grades.

We are happy to discuss your grade and correct errors in grading, but please bring any errors in grading to our 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.

Unfortunately, the UW-Madison reports student final grades as letters rather than as a percentage of points earned. A letter-based grading system requires class breaks, which in turn disenfranchises everyone near the upper boundary of their grade cohort. A letter-based grading system is inherently unfair. But, sadly, it is the system that is in place. UW System policies and procedures require all grading methods to be systematic. Giving a student a higher grade because they are only “a few points away” is not systematic. I will use the grading system that gives the most students the best possible grade. Since I am already giving you a break on grading, and since I am required to grade systematically, I will ignore student groveling, begging, and/or obsequious behavior for the purposes of receiving a higher final grade.

Discussion Section

Discussion section attendance is mandatory. Over half of the total number of points earned throughout this class comes from discussion section activities. *You will not pass this class unless you are fully engaged with your discussion section.* Discussion section activities will include writing assignments, exercises, debates, and presentations. Most discussion section activities will require an hour or two of homework each week. Your TA will provide you with details.

Exams

There will be three exams that cover concepts and topics from lecture and the readings. Each test will stress materials covered since the previous exam. All tests will have multiple choice, T/F, and matching questions. You will have to interpret maps, pictures, graphs, or diagrams for

some questions. A few questions on each exam will ask you to apply key concepts to new situations. Some evaluations may have short answer and/or essay questions that ask you to expound on a major theme in the course.

Points Summary

You will earn points throughout the semester as follows:

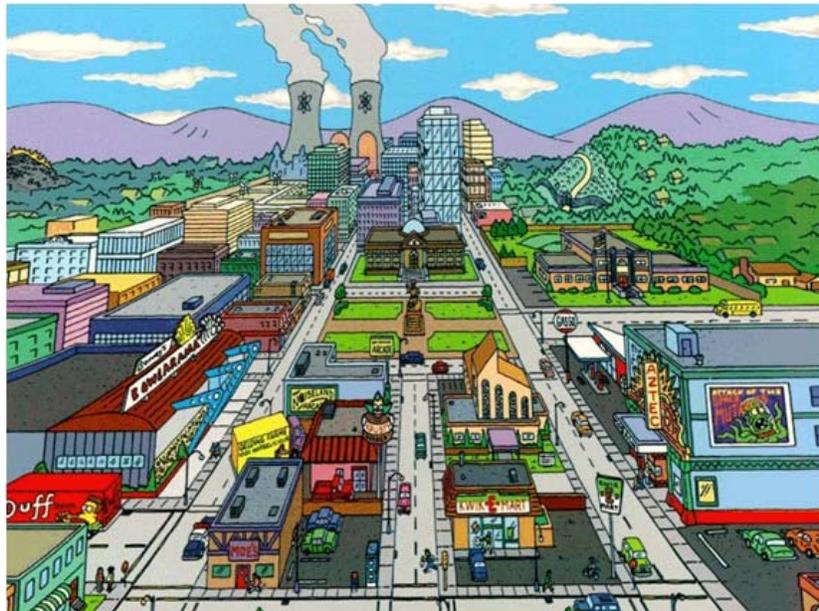
Exams (120 points or 48% of the final grade):

- Exam One - 40 points
- Exam Two - 40 points
- Exam Three (Final) - 40 points

Discussion Section (130 points or 52% of the final grade):

- Attendance, Preparation, and Participation - 10 points
- Weekly Activities - 120 points

Total - 250 points (100%)



An artist's conception of utopia, based on our current means of living in the global environment...

Class Policies

- Readings, the class schedule, and any other component of the course may be amended by the instructor at any time.
- Chronic absenteeism may result in a lower or failing grade for the course at the discretion of the instructor.
- Neither I nor the TA will accept late assignments unless you have an excused absence or made prior arrangements with one of us. 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.
- There is no extra-credit.
- Honest intellectual work – on examinations, and on written assignments – is essential to the success of this course and also to your education. Academic misconduct, such as cheating or plagiarism, may result in a lower or failing grade for the course. At a minimum, a failing grade will be given to any plagiarized assignment or for an evaluation when the person is caught cheating. It is your responsibility to become familiar with the rules of academic misconduct, and your rights to due process, according to UW Administrative Code 14. An overview of academic integrity, misconduct, and detailed information concerning UW Administrative Code, Chapter 14 are available at <http://www.students.wisc.edu/doso/academic-integrity/>
- Please see the UW Writing Center’s guide for avoiding plagiarism, which also details the many substantial penalties for any and all acts of intellectual theft at <http://writing.wisc.edu/Handbook/QuotingSources.html>
- If you need special accommodations or have a developmental disability, please contact me by phone, email, or come to my office. The McBurney Disability Resource Center provides resources for students with disabilities. Please see <http://www.mcburney.wisc.edu/> or call 263-2741.
- The University of Wisconsin-Madison and the Department of Geography are all dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all students to familiarize themselves with University policies concerning special accommodations, misconduct, discrimination, sexual harassment, and disruptive behavior. For details, please see Chapter 14 of the UW Administrative Code cited above and the resources posted at the Office for Equity and Diversity website at <http://www.oed.wisc.edu/>.

Lecture and Class Reading Schedule

Date	Lecture Topic	Readings
9/6 9/11	Course Introduction & Anthropocene	DeFries, <i>Planetary Opportunities</i> Kolbert, <i>The Lost World</i> Castree, <i>Welcome to the Anthropocene</i>
9/13 9/18 9/20	A Brief History of Capitalism: The Evolution of the Modern World System	Halsall, <i>Modern World System</i> Mann 1491 Mann, <i>Jamestown</i>
9/25 9/27 10/2	The Rise of Nature's Economy in the US and the Origins of Conservation and Preservation.	Fretag, <i>Conservation vs Preservation</i> Leopold, <i>Land Ethic</i> AEI, <i>Three Cheers for the Clean Air Act</i>
10/4 10/9	Natural Capitalism, Ecosystem Services, and Global Environmental Governance	Earth Economics, <i>Ecosystem Services</i> Costanza, <i>Ecosystem Services</i> Zimmer, <i>Pricetag</i>
10/11	** Exam I **	
10/16 10/18	Population, Resources, and Technology	<i>Keeping Track</i> , 2-20 National Geographic, <i>Population Story</i> , <i>Malthus vs Boserup</i>
10/23 10/25	Who Owns Nature? Common Pool Resources and Property Regimes	Ames, <i>West Coast Oyster War</i> Mwangi, <i>Africa Rangelands</i>
10/30 11/1 11/6	Labor-Intensive Agriculture	<i>Globally Important Agricultural Heritage Systems</i> Union of Concerned Scientists, <i>Agroecology</i>
11/8 11/13 11/15	Capital-Intensive Agriculture	<i>Keeping Track</i> , 37-48 and 61-73 National Geographic, <i>Future of Food</i> Hylton, <i>Ogallala</i> BBC, <i>Aral Sea</i>
11/20	** Exam II **	
11/22 11/27	Fossil Fuel Energy	<i>Keeping Track</i> , 74-88 Reece, <i>Death of a Mountain</i> CDM, <i>Rural Energy</i>
11/29 12/4 12/6	Global Climate Change	<i>Keeping Track</i> , 21-36; NRC Climate Change Kolbert, <i>Climate of Man</i> National Geographic, <i>Climate Change</i>
12/11 12/13	The Technological Promise	Roberts, <i>Solutions Project</i> Obama, <i>Clean Energy</i> Hawley, <i>Transforming Cities</i> Newitz, <i>10 Failed Utopian Cities</i>
12/20	**Final Exam **	

Discussion Section Schedule

Week and Dates	Topics	Readings and/or Website
1 (9/5 and 9/6)	No Discussion Sections	
2 (9/11 to 9/13)	Introduction	
3 (9/18 to 9/20)	The Problems of Park Management	<i>Cronon, Riddle of Apostle Islands</i> <i>Keller, Indians and Parks</i>
4 (9/25 to 9/27)	Environmental Policy	US Legislative Information & Federal Register
5 (10/2 to 10/4)	Ecosystem Services	TBA
6 (10/9 to 10/11)	Exam Review	
7 (10/16 to 10/18)	Population and Resources	Gapminder
8 (10/23 to 10/25)	Commons Resource Management	<i>Ames, West Coast Oyster War</i> <i>Mwangi, Africa Rangelands</i>
9 (10/30 to 11/1)	Feeding the World	TBA
10 (11/6 to 11/8)	Food Diary & Food Ethics	<i>La Duke, Food as Medicine</i> <i>Pollan, Organic Industrial Complex</i> <i>Pollan, Omnivore</i>
11 (11/13 to 11/15)	Food Security & Climate Change in Wi	<i>Adger, Resilience</i> Nelson CCR Visualizatons
12 (11/20 to 11/22)	Food Security & Dams in the Mekong	<i>Lewis, China's Dam Boom</i> <i>Zaffos, Life on the Mekong</i> <i>Baird, Mekong River</i>
13 (11/27 to 11/29)	Environmental Justice: The Burdens of Energy Production & Consumption	<i>La Duke, Akwesane</i> <i>Bullard, Environmental Justice</i> US EPA EJScreen
14 (12/4 to 12/6)	Climate Change and Capitalism	<i>Klein, Climate Change and Capitalism Excerpts</i> <i>Fine, Klein Book Review Symposium Excerpts</i> <i>Chait, Is Klein Right?</i> <i>Klein and Kolbert, Climate Change Exchange</i>
15 (12/11 to 12/13)	Renewable Energy	Solutions Project

All Discussion Section Readings Must Be Completed in Advance of the Topic!