# Geography 30 – Summer 2009: Geographic Perspectives on Sustainability and Human-Environment Systems

# "It's complicated."

Instructor: Seth Baum, sbaum@psu.edu Class Meeting: MTWRF 11:10 - 12:25, 369 Willard Office Hours: MTWRF 10:30 - 11:00, 201 Willard or by appointment

# **Required Readings**

There is no course textbook. Course readings are available on ANGEL (https://cms.psu.edu).

# **Course Description**

This course introduces the study of sustainability and human-environment interactions from a geographic perspective. We examine both the influence of humanity on the environment and the influence of the environment on humanity with attention to the sustainability of current human activities. We take a complex systems perspective on major environmental and societal challenges and examine linked human-environmental issues in a variety of geographic contexts. We emphasize the major individual and societal decisions which impact the environment and the ethical views implicit in the decisions. We explore key concepts such as environmental determinism, systems analysis, collective action, and ecological footprints, as well as various sectoral issues related to resource depletion, climate change, energy, urban design, and agriculture. Course discussions and activities highlight both major themes in human-environment geography and the experience of what it is like to perform human-environment geography.

#### **Course Objectives and Outcomes**

Course Objectives: The aims of this course are to

- Investigate the ways that humans in various geographic contexts think about, affect, and are affected by the natural environment
- Consider the interconnectedness of complex human-environment systems, including relationships at multiple spatial and temporal scales
- Examine the sustainability of current social and environmental practices and explore alternatives

Learning Outcomes: Upon completion of this course, students will be equipped to

- Critically analyze and develop informed positions on major societal and environmental challenges associated with sustainability
- Enact principles of sustainability in everyday life, both as individuals and as community members

#### **Course Format**

The class will meet daily in 369 Willard unless otherwise specified (i.e. field trips). The class will be conducted with lectures, in-class discussions, presentations, interactive activities, and field trips. Assigned reading is to be completed before class in sufficient detail for class discussions. Active class participation is mandatory. Meanwhile, many specifics of course content are flexible and will be customized to be of most relevance to the students.

### **Assignments and Grading: Overview**

The class is out of 1000 points, so a 50-point assignment is worth 5% of your total grade, a 200-point assignment is worth 20%, etc.

TOTAL	1000 points	100%
Course Project	200 points	20%
Writing Assignments	100 points	10%
Participation	250 points	25%
Final Exam	300 points	25%
Midterm Exam	200 points	20%

The minimum scores for course grades are as follows:

A	93.3% (933 pts)	С	73.3% (733 pts)
A-	90.0% (900 pts)	C-	70.0% (700 pts)
B+	86.7% (867 pts)	D+	66.7% (667 pts)
В	83.3% (833 pts)	D	63.3% (633 pts)
B-	80.0% (800 pts)	D-	60.0% (600 pts)
C+	76.7% (767 pts)	F	0-59.9% (0-599 pts)

### **Attendance Policy**

Attendance is essential for two reasons. First, attendance is required for to receive full credit for the participation portion of the grade. For every unexcused absence from class, 25 points will be deducted from the participation grade. Second, content crucial to exams and the project will be presented in class. Failure to attend class will generally preclude you from performing well in the course.

# **Late Exam & Assignment Policies**

Make-up exams will not be offered except in the case of University-excused absences. Late assignments (including project components) will be penalized at 10% per class day (MTWRF). Assignments more than ten days late automatically receive zero points.

## **Assignment Descriptions**

#### Exams

There are two exams: one midterm and one final exam. The exams are cumulative, with an emphasis on the more recent material. The exams consist of a mixture of multiple choice, short answer (one paragraph), and long answer (3-5 paragraphs).

#### **Participation**

Participation involves presenting critical analyses of course readings, concepts, and other content. Participation will be evaluated via a mix of announced and unannounced assessments. Attendance is required to receive full credit for participation. For every unexcused absence from class, 25 points will be deducted from the participation grade.

### **Writing Assignments**

Two writing assignments will be given during the course. Assignments will be evaluated based on both the quality of the ideas and the quality of the writing. To receive full credit, the writing must be free of spelling and grammar mistakes and must clearly communicate the underlying ideas.

# **Course Project**

The course project is an immersion in the practice of human-environment geography. The project is based on performing an activity with a positive environmental impact. The project ties together several themes from the course. A full description of the project is provided elsewhere.

# **Assignment and Exam Schedule**

Week	Day	Date	Assignment
ALL	ALL	ALL	Participation
1	F	May 22	Writing Assignment 1
2	W	May 27	Project Activity Proposal
3	M	June 1	Midterm
4	M	June 8	Project Initial Analysis
5	M	June 15	Writing Assignment 2
6	M	June 22	Final Presentations: Written
6	T	June 23	Final Presentations: In-Class
6	R	June 25	Final Exam

# **Course Schedule and Assigned Readings and Activities**

Please note that this schedule might be subject to change. It is your responsibility to keep up with any changes.

Week	Day	Date	Topic	Reading/Activity
1	M	May 18	Course Introduction	n/a
	T	May 19	Environmental Determinism	Intro Survey; Jared Diamond's World
	W	May 20	Global Environmental Change	The Anthropocene
	R	May 21	Systems Analysis	Systems Analysis Readings
	F	May 22	Environmental Ethics	Muir, Pinchot, & Singer
2	M	May 25	Sustainability	Ghost towns; Sustainability Readings
	T	May 26	Collective Action	Game 1; Ostrom & Nagendra
	W	May 27	Democracy's Challenges	O'Neil
	R	May 28	Population	Ehrlich; Simon
	F	May 29	Affluence & Technology	Schelling; Kurzweil
3	M	June 1	Midterm	n/a
	T	June 2	To Be Determined	To Be Determined
	W	June 3	To Be Determined	To Be Determined
	R	June 4	Ecological Footprints	Story of Stuff
	F	June 5	Environmental Hazards	Kasperson & Kasperson
4	M	June 8	Climate Change Science	To Be Determined
	T	June 9	Climate Change Impacts	CNA Report; IPCC Report
	W	June 10	Climate Change Policy	Climate Policy Proposals & Commentaries
	R	June 11	Energy	Smil: 21st Century Energy
	F	June 12	Power, Power, & Pirates	Somali Piracy Article
5	M	June 15	Buildings, Transport, & Cities	To Be Determined
	T	June 16	Envinity Tour	To Be Determined
	W	June 17	Freeze Thaw	To Be Determined
	R	June 18	Food Impacts	Smil; FAO
	F	June 19	Farmers Market	To Be Determined
6	M	June 22	Beyond Earth	Space Colonization; Fermi Paradox
	T	June 23	Present Projects	Course Projects
	W	June 24	Course Synthesis	n/a
	R	June 25	Final Exam	n/a
	F	June 26	Party	n/a

### **Grading Policy**

Some assignments/questions have clear-cut right or wrong answers (e.g., multiple-choice questions). These are graded right or wrong, with no partial credit.

Most other assignments/questions are graded in 10% increments. Criteria for grading include completeness, depth of analysis, active engagement, and quality of writing/presentation. Please note that average college work will earn a grade of 80% of the possible points on an assignment/question. The complete grading scale is as follows:

**100%** (exceptional): The grade of 100% is reserved for exceptional work. To meet the minimum standards to earn this grade, your work must meet all assignment/question criteria (and exceed many), be rich in explanation and analysis with connections to other course material or outside topics, show significant active and creative engagement with the material, and be very well-written and largely error-free.

**90% (very good):** The grade of 90% indicates a job very well done. To meet the minimum standards to earn this grade, your work must meet all assignment/question criteria (and exceed some), be moderately deep in explanation and analysis, show active engagement with the material, and be well-written with only minor errors.

**80%** (average/satisfactory): The grade of 80% indicates average work. Work that earns this grade is satisfactory and complete, but lacks the depth, engagement, and presentation quality required of higher scores. To meet the minimum standards to earn this grade, your work must meet all assignment/question criteria, be somewhat deep in explanation and analysis, show fairly active engagement with the material, and be adequately written with only minor errors.

**70%** (adequate): The grade of 70% indicates work that is mostly satisfactory and complete, but falls somewhat short. To meet the minimum standards to earn this grade, your work must meet most assignment/question criteria and contain no more than one of the following shortcomings: lack of depth in explanation and analysis, little or no active engagement with the material, poor quality of writing/presentation, or major errors.

**60% or less (unsatisfactory):** Grades of 60% or less indicate unsatisfactory work. Your work earns these grades if it fails to meet significant assignment/question criteria, and/or it contains two or more of the following shortcomings: lack of depth in explanation and analysis, little or no active engagement with the material, poor quality of writing/presentation, or major errors. Work that is incomplete or contains many of these shortcomings can earn grades all the way down to 0.

## **Penn State Academic Integrity**

"Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others." (Penn State Faculty Senate Policy 49-20).

**Dishonesty of any kind will not be tolerated in this course.** Dishonesty includes, but is not limited to, cheating, plagiarism, using source material without proper citations, fabricating information or citations, tampering with the academic work of other students, having unauthorized possession of examinations or other course material, submitting the work of another person, submitting work previously used (without permission from the instructor), seeking individual credit for work done collaboratively (without permission from the instructor), and facilitating acts of academic dishonesty by others.

Students who are found to be dishonest will receive a grade of 0 on the assignment in question and may face other consequences, including automatic failure of the course.

If you have any questions on what defines academic integrity or dishonesty, please consult the instructor or a teaching assistant, ideally **before** engaging in the action in question.

For more information, see Penn State's policies and rules for undergraduate students: http://www.psu.edu/ufs/policies

# **College of Earth and Mineral Sciences Academic Integrity Statement**

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity in the College. All students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the EMS community and compromise the worth of work completed by others.

To protect the rights and maintain the trust of honest students and support appropriate behavior, EMS faculty will regularly communicate high standards of integrity and reinforce them by taking reasonable steps to anticipate and prevent acts of dishonesty in all assignments. At the beginning of each course, the instructor will provide students with a statement clarifying the application of EMS academic integrity policies to that course.

Although it is the prerogative of the individual course instructor to pursue violations of academic integrity, the College strongly encourages all faculty to inform their students of the College policy on academic dishonesty and to include a definitive statement in their course syllabi describing unacceptable behavior and the sanctions to be applied should a violation occur. In the case of the latter, a sanction might indicate that a first cheating infraction would lead to a score of zero on the examination or assignment in which the violation occurred, and a second incident would result in an F grade (failure) in the course. A more extensive list of possible sanctions relevant to specific

violations may be found in the Precedent Guidelines for Academic Integrity Violations. Moreover, faculty statements also should include conditions or criteria that uniquely apply to the course. For example, large and crowded classrooms require the need for extra care and civility on the part of students to avoid irritation to their neighbors. It is of the utmost importance that students be reminded frequently and clearly about the importance of academic integrity to the educational and scientific enterprise and the consequences to those who chose to violate basic rules of honest behavior.

For more information, see the EMS Academic Integrity website: http://www.ems.psu.edu/students/integrity

#### **Accommodations in the Classroom**

If you anticipate needing any type of accommodation in this course or have questions about access, please see the instructor **within the first week of the course** so the instructor can work with you to develop appropriate accommodations.

For more information, see Penn State's Office for Disability Services: http://www.equity.psu.edu/ods/

#### **Student Expectations in the Classroom**

This class will touch on sensitive subjects, including gender, race, class, sexuality, politics, religion, lifestyle, international relations, and others. Every individual in the class has the right to speak freely and offer his/her questions and opinions. The rights of each individual to have a safe and comfortable space to discuss these issues must also be considered.

If you have suggestions or concerns about how we can improve the safety and comfort of the classroom environment, please feel free to speak with the instructor or a teaching assistant.