

GEOGRAPHY 2800:
Our Global Environment
AU 2015 (Course #34565; 3 credits)

Instructor **Dr. Kendra McSweeney**
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Office hours: Mondays 10-11:30, or by appointment

Lectures TTh 4:10-5:05 Page Hall 020
Labs T **OR** Th 5:15-6:10 Derby Hall 1080

Lab **Nora Sylvander**
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Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Course Description

Geography has a rich heritage of investigating the relationships between people and the natural environment, from the fundamental biophysical processes upon which human existence depends, to humanity's role in transforming nature. This course provides an introduction to current environmental issues from the uniquely integrative perspective of geography. Topics range from global-scale processes such as climate change, to the local-scale impacts of drinking water contamination. In each case, the nature and scope of the problem is reviewed, its underlying mechanisms outlined, and ongoing efforts to resolve the problem are explored. Particular attention is paid to how specific environmental issues are manifest in Ohio.

After taking this course, students should: better understand the basic processes underlying important types of environmental change at local, regional, and global scales; grasp how geographers approach environmental science, assessment, and problem-solving; be able to critically assess multi-media coverage of these issues; and better identify the links between everyday consumption choices and environmental outcomes.

This course serves as the first required core course in the People, Society & Environment track for a BA in Geography, and/or it serves as Natural Science elective for OSU's General Education Curriculum for non-Science majors.

Course Structure & Expectations

Lectures: There are two lectures and one lab per week. Students are required to attend all scheduled class periods. During exams, students will be responsible for all material presented in lecture and lab. There will be material presented in class/lab that is not found in the readings, so students must make arrangements to get notes from other students for material they may have missed.

Students are encouraged to take notes in class. Much of the material will not be on PowerPoint and thus not available except by attending class and taking notes.

Readings: There is no textbook for this course. All required readings (including book chapters, research articles, news items, web-based content, and more) are available on Carmen. Readings complement the lectures and labs, and students are responsible for all assigned readings. **You must do the readings if you expect to do well in this course.** Readings should be completed PRIOR to the class day on which they are listed.

Weekly Labs: Weekly labs allow students to review, apply, and explore in detail the material presented in lecture. Students may only attend the lab session in which they are registered.

- All labs must be completed and submitted *during the assigned lab period* (unless otherwise indicated by the lab instructor).
- Late work will not be accepted and there are no make-up opportunities.
- In some labs, teamwork is encouraged, but grading is based on the quality of individual work and participation.
- Students must come to lab with notebook, writing materials, readings from notes/lectures, and a calculator.
- Advance notice will be given for labs that require on-line research, travel on campus, or outdoor activities.
- The lowest lab score will not be used in calculating the final grade.

Carmen course website: On Carmen you will find course readings, announcements, discussion boards for asking/reviewing questions, some materials from lecture, and grades. The Carmen content is NO SUBSTITUTE for attending class.

Evaluation

1. Attendance & Participation	10%
2. Mid-term exam I (Oct. 1)	20
3. Mid-term exam II (Oct. 27)	20
4. Lab assignments (10 labs @ 3% each)	30*
5. Final in-class exam (Dec 8)	20

* There are 11 labs in all. Your lowest lab score is not considered in the final calculation of your grade.

Letter Grade Conversion

We will use OSU's Standard Grade Scheme:

93 - 100 (A); 90 - 92.9 (A-); 87 - 89.9 (B+); 83 - 86.9 (B); 80 - 82.9 (B-); 77 - 79.9 (C+); 73 - 76.9 (C); 70 - 72.9 (C-); 67 - 69.9 (D+); 60 - 66.9 (D); Below 60 (E).

Policies

Attendance: Please be present for all classes and labs. Attendance will be taken. In general, no material can be made up, and no late work is accepted. However, if you ABSOLUTELY must miss class or lab, you must notify the Instructor or Lab Instructor BEFOREhand. Pending our approval, we will discuss potential make-up options.

Exceptions will only be made for serious, unanticipated reasons (emergencies, illness), for which documentation will be required.

Screen Policy: The only reason to have a screen in front of you is if you are using it to take notes. In rare cases, the instructor may also ask you to use a smart device to access information or review material in Carmen. Cell phones must be turned off. Students who are consistently distracted by their devices will be marked absent, and this will be reflected in their attendance/participation grade.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

GE Statement

This course fulfills the requirements of a *Natural Science: Physical Science* GE course. The goal of the Natural Science GE is for students to understand the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential for science and technology to address problems of the contemporary world.

There are four central learning objectives:

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
3. Students describe the inter-dependence of scientific and technological developments.
4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

This course meets these objectives by: (a) emphasizing physical science insights into contemporary environmental challenges; (b) reviewing and applying different scientific methods; (c) outlining the evolution of geographical and ecological science over time; (d) critically discussing and writing about the role of technology in scientific discoveries, environmental management and adaptation; (e) critically evaluating our relationship to the natural world using case studies, in-class activities and discussion, and hands-on field- and lab-based work; (f) debating the costs and benefits of different forms of environmental adaptation, mitigation, and remediation.

SCHEDULE
Class Topics, Required Readings, and Labs
 (Subject to Change)

Week	Date	Day	Lecture	Readings	Lab
1	Aug. 25	Tuesday	Introduction		NO LAB
	Aug. 27	Thursday	Why Geography?	No reading.	NO LAB
2	Sept. 1	Tuesday	Learning in the Anthropocene	Marris et al. 2011; An Ecomodernist Manifesto	Environmental Issues and You
	Sept. 3	Thursday	Climate I	Klein 2014	Environmental Issues and You
3	Sept. 8	Tuesday	Climate II	McKibben 2010	Ice Albedo Feedback
	Sept. 10	Thursday	Climate III	McKibben 2010 (cont'd)	Ice Albedo Feedback
4	Sept. 15	Tuesday	Climate IV	Gillis 2015	Field Trip
	Sept. 17	Thursday	Climate V/Energy I		Field Trip
5	Sept. 22	Tuesday	Energy II	McGraw 2011	Energy Debate – Preparation
	Sept. 24	Thursday	Energy III	McGraw 2011 (cont'd)	Energy Debate – Preparation
6	Sept. 29	Tuesday	In-class Review		Energy Debate
	Oct. 1	Thursday	MIDTERM EXAM I		Energy Debate
7	Oct. 6	Tuesday	Ecosystems I	Robbins 2012; Bryson 2006	Trees of the Oval Walking Tour
	Oct. 8	Thursday	Ecosystems II	Warren 2007	Trees of the Oval Walking Tour
8	Oct. 13	Tuesday	Ecosystems III		Take-home lab; due Oct. 19 5 pm
	Oct. 15	Thursday	Autumn Break - NO CLASS		
9	Oct. 20	Tuesday	Water I	Black and King 2009	Water Lab
	Oct. 22	Thursday	Water II	TBA (see Carmen)	Water Lab
10	Oct. 27	Tuesday	Water III; Review		NO LAB
	Oct. 29	Thursday	MIDTERM EXAM II		NO LAB
11	Nov. 3	Tuesday	Food and Agriculture I	Pollan 2007	Farm Lab
	Nov. 5	Thursday	Food and Agriculture II	Buchanan et al. 2015	Farm Lab
12	Nov. 10	Tuesday	Food and Agriculture III	Moseley 2012	Food Lab

	Nov. 12	Thursday	Food and Agriculture IV	Robbins, P. 2007	Food Lab
13	Nov. 17	Tuesday	Cities and Environmental Health	TBA (see Carmen)	OSU as a System – Work on Presentations
	Nov. 19	Thursday	Urban Sustainability/Ways Forward I	TBA (see Carmen)	OSU as a System – Work on Presentations
14	Nov. 24	Tuesday	Ways Forward II	TBA (see Carmen)	NO LAB
	Nov. 26	Thursday	Thanksgiving - NO CLASS		NO LAB
15	Dec. 1	Tuesday	Ways Forward III	TBA (see Carmen)	OSU as a System – Presentations
	Dec. 3	Thursday	Final Review Session		OSU as a System – Presentations
16	Dec. 8	Tuesday	FINAL EXAM		NO LAB