GEOGRAPHY 2800:
Our Global Environment

AU 2018 (Course #15959; 3 credits)

Lectures	M W 4:10-5:05 PM McPherson Lab 1015
Labs	M **OR** W 3:00-3:55 PM Derby Hall 1080

Instructor **Nora Sylvander**
Office: 1155 Derby Hall; Tel.: (614) 316-6627
E-mail: sylvander.1@osu.edu
Office hours: T 3:00-5:00 pm, or by appointment

Lab Instructor **Deondre Smiles**
Office: Derby Hall 1155
E-mail: smiles.2@osu.edu
Office hours: T 1:00-3:00 pm, or by appointment

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. You are also welcome to register with Student Life Disability Services to establish reasonable accommodations. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue

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, you 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 Environment & Society 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. You are required to attend all scheduled class periods. During exams, you will be responsible for all material presented in lecture, lab, and readings. Most material presented in class/lab is not found in the readings, so you must make arrangements to get notes from another student for material you may have missed.

Attendance will be taken. Approximately once a week, at the end of the lecture, you will be complete a short written assignment related to that week's lectures. These assignments will not be graded but completing them shows that you attended the lecture. Moreover, some of these assignments will be included as questions in the mid-term and final exams. These questions will not be posted on Canvas.

You 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 Canvas. Readings complement the lectures and labs, and you are responsible for all assigned readings. **You must do the reading 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 you to review, apply, and explore in detail the material presented in lecture. You may only attend the lab session in which you 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.
- You 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.

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

Opportunities for Extra Credit

OSU is a big university and there are typically many events over the semester that are related to course themes. If you attend one of these events and are willing to share your impressions with the class (~3 minutes; please emphasize one or two 'take home' insights from the experience), you can earn **up to an additional 3%**. Please confirm with the instructor or TA if you are not sure if an event qualifies.

Evaluation

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

** Note: 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 exams 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.**

Screens: 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/Canvas. Cell phones must be turned off. Students who are consistently distracted by their devices will be considered 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. 22	Wednesday	Introduction		No Lab
	Aug. 27	Monday	Why Geography		Environmental Issues and You
2	Aug. 29	Wednesday	Anthropocene	Stromberg et al. 2013	Environmental Issues and You
	Sept. 3	Monday	NO CLASS – Labor Day		No Lab
3	Sept. 5	Wednesday	Climate – Debating Climate	Klein 2014	No Lab
	Sept. 10	Monday	Climate – Certainties I	IPCC 2014	News Analysis Lab
4	Sept. 12	Wednesday	Climate – Certainties II	IPCC 2014 cont'd	News Analysis Lab
	Sept. 17	Monday	Climate – Uncertainties	Mikaloff-Fletcher 2015	Ice Albedo Lab
5	Sept. 19	Wednesday	Climate – Mitigation	The Economist 2017	Ice Albedo Lab
	Sept. 24	Monday	Climate – Adaptation	Taylor 2018	Mitigation/Adaptation Lab
6	Sept. 26	Wednesday	Climate – Indigenous geographies	TBA	Mitigation/Adaptation Lab
	Oct. 1	Monday	**Midterm I**		No Lab
7	Oct. 3	Wednesday	Energy I	Sovacool et al. 2016	Energy Debate – Preparation
	Oct. 8	Monday	Energy II		Energy Debate – Preparation
8	Oct. 10	Wednesday	Energy III	TBA	Energy Debate
	Oct. 15	Monday	Energy IV	Prepare for energy debate	Energy Debate
9	Oct. 17	Wednesday	Energy V – Indigenous geographies	Prepare for energy debate	Farm Lab
	Oct. 22	Monday	Agriculture I	Lappe & Collins 2015	Farm Lab
10	Oct. 24	Wednesday	Agriculture II	Buchanan 2015	Food Lab
	Oct. 29	Monday	Agriculture III	The Phat Beets Crew 2018	Food Lab
11	Oct. 31	Wednesday	Ecosystems I	Kolbert 2014	Water Lab: Questionnaire Design
12	Nov. 5	Monday	Ecosystems II - changing ecosystems	Hellman & Ackerly 2015	Water Lab: Questionnaire Design

	Nov. 7	Wednesday	**Mid-term II**		
	Nov. 12	Monday	NO CLASS – Veterans Day		Veterans Day – NO LAB
13	Nov. 14	Wednesday	Water I	Robbins et al. 2014	Water Lab: Survey
	Nov. 19	Monday	Water II	Parker 2016	Water Lab: Survey
14	Nov. 21	Wednesday	NO CLASS - Thanksgiving		Thanksgiving - NO LAB
	Nov. 28	Monday	Water III		NO LAB
15	Nov. 30	Wednesday	Sustainable cities I	Robbins & Sharp 2003	Decoding scientific writing lab
	Dec. 3	Monday	Sustainable cities II	Benfield 2013	Decoding scientific writing lab
16	Dec. 5	Wednesday	Review for final exam		NO LAB
	Dec. 13	Thursday	**Final exam 4:00 – 5:45 pm**		