# Global Environmental Issues (GEOG 181)

University of Nebraska-Lincoln College of Arts and Sciences School of Global Integrative Studies Fall 2021

# Class meetings

Room: 15 Richards Hall Lecture: MWF 10:30-11:20

#### Instructor

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Email: patrick.bitterman@unl.edu

Office Hours: M 12:30-2pm, or by appointment

# **Teaching Assistant**

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# **Department Chair**

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# Course description

Pressures on the earth's resources, carrying capacity, and natural coping ability are approaching points of criticality, resulting in a wide array of environmental impacts at various scales. This introductory course explores leading global environmental issues of our time, particularly those associated with land use, population change, pollution, energy, and climate change. Though focused on the geographic implications of those issues, this course adopts an interdisciplinary perspective that emphasizes the causes, consequences, and solutions of/to these issues.

The major goals of this course are to: 1) explore urgent global environmental issues and their relationships with physical, social, biological, and economic processes; 2) investigate potential linkages between those issues; and 3) introduce students to basic geographic concepts and methods in the context of current environmental problems.

# Learning objectives

By the end of the term, students will be able to successfully:

- Describe the primary causes and consequences of contemporary environmental problems, as well as potential solutions
- Comprehend linkages between human and environmental processes, and among environmental issues
- Understand environmental influences on human wellbeing, as well as environmental impacts of human behavior
- Evaluate viewpoints regarding social-environmental issues, develop their own positions, and support their ideas with evidence and reason

# **UNL ACE** objectives

This course is certified to meet ACE 6 & ACE 9 requirements.

ACE 6: Use knowledge, theories, and research methods appropriate to the social sciences to understand and evaluate social systems or human behaviors. This course will provide students opportunities to achieve ACE 6 objectives by:

- Taking active, positive roles to understand and address contemporary environmental challenges to society
- Learning about the deep interconnections among energy, climate, human wellbeing, and other issues that affect them
- Evaluating how vital systems are complex d and how changes to one component affects others, which is vital to understanding successful adaptive management

Assessment of ACE 6 objectives will occur via reflection papers that explicitly connect course topics and modules, and via case study assignments that ask students to investigate particular issues more deeply.

ACE 9: Exhibit global awareness or knowledge of human diversity through analysis of an issue. This course will provide students opportunities to achieve ACE 9 objectives by:

- Exploring basic ecological principles that govern the natural world
- Considering the many ways in which humans affect the environment, and are affected by environmental change
- Careful study of the effects of human activity, including population, production and consumption, and the depletion of natural resources
- Learning about connections between environmental quality and human wellbeing Assessment of ACE 9 objectives will occur via: 1) the calculation of student's ecological footprint, 2) exams, and 3) case study assignments.

#### **Prerequisites**

None

# Required materials

Cunningham and Cunningham. *Principles of Environmental Science (9<sup>th</sup> Edition)*. McGraw Hill. ISBN: 978-1-260-21971-5. Available at UNL Bookstore (and other internet vendors).

All other materials will be provided via Canvas.

# Course policies

Class format

Primary instruction will take place in a lecture format.

Late work

Unless otherwise noted:

- all assignments are due on the specified due date in Canvas.
- late items will be accepted, but will be penalized 20% of the potential points for each calendar day that they are late.

#### Changes to the syllabus

Any changes to the syllabus will be communicated via email and posted to Canvas.

#### Collaboration

In this class, students are not allowed to collaborate with others on any exam. Do not share your work with others or ask others to see their work. While you may choose to interact with other students on homework assignments, all submitted work is expected to be your own, individual thoughts.

Students who do not follow these policies will be reported to the College for academic dishonesty. If you have questions regarding this policy, it is your responsibility to ask them.

### Your Responsibilities

You have a responsibility to help create a classroom environment where all may learn. At the most basic level, this means you will respect the other members of the class and the instructor and you will treat them with the courtesy you expect to receive in return. This policy applies to all forms of communication in this course. Any email correspondence **MUST** be conducted via your UNL email address.

# Miscellany

Be honest and have integrity in your work. For example, do not increase the perceived length of your writing by increasing the size of punctuation or manipulating spacing. Be kind and be polite. Finally, you will get out of this class what you put into it – be prepared, participate, and be attentive, and you will be successful.

# Preparing for lecture

- Read relevant materials before the lecture.
- If there are topics you would like to hear more about, please share your ideas to make the class more relatable and interesting
- Take advantage of office hours
- Do not leave assignments until the last minute

# Assessment

#### Quizzes

There will be an online, **open book** quiz at the end of each new topic, based on lecture and reading assignments, and consisting primarily of multiple-choice questions. You will have one chance and 30 minutes for each quiz. To account for any issues with last minute distractions or disruption in internet accessibility, I suggest you complete the quiz far in advance of the deadline.

#### Reflection essay

You are required to write a reflection essay over the assigned readings. You may choose any of the issues presented in the assignment description as the focus of your paper (see assignment description on Canvas), drawing on assigned readings, media, class discussion, or your own research. The essay **must** include your interpretation of the problem, your opinions about various aspects of the issue (e.g., causes, solutions), and what you feel are the key linkages between the issues we have either discussed in class or are of interest to you. The paper must be

3-5 pages in length using double spacing, 1" margins, and 12-point font. Submit reflection papers to the corresponding assignment on Canvas.

## Peer review of reflection essay

You are required to complete peer review of your classmates' reflection essays. This will require you to read and evaluate their work, and to provide *at least 2 comments or questions* on the reflection paper. This activity will take the place of graded in-class participation. Evaluation rubrics will be provided.

## Other topical assignments

Other assignments will be due over the course of the semester. For example, these assignments may include short activities, case study reviews and write-ups, or Canvas discussions. Consult Canvas for details.

# All completed assignments must be submitted to the course Canvas site. No other submissions will be accepted. Do NOT email me your completed homework.

#### Exams

Three exams will be given during the semester. Exams will take place at the UNL Digital Learning Center.

- The Digital Learning Center only accepts valid N-Cards as a form of identification. Your N-Card is required for all testing
- You are responsible for making sure you know the hours of the DLC AND for taking your exams. If you forget or get the time or day wrong, it may be very difficult or impossible for you to find another opening to take the exam
- MANY students use the DLC, and at any given time reservations may be more difficult to get than at other times.
- You, and ONLY you, are responsible for successfully taking your exam at the DLC.

**Make-up exams will consist of ALL ESSAY QUESTIONS**. All reasons for requesting a make-up exam must be documented approved with the University.

# All assignments should be submitted to the corresponding Canvas assignment before the due date.

#### Evaluation scale

Grade	Minimum % of Points						
A+	99	B+	87	C+	77	D+	67
A	93	В	83	С	73	D	63
A-	90	B-	80	C-	70	D-	60
						F	Below 60

# Grades will be based on the following:

Assessment	Total points
Quizzes (14 quizzes, 10 points each)	140

Reflection essay	90
Peer review of reflection essay	30
Case studies (3 cases, 50 points each)	150
Ecological footprint exercise	50
Exam 1	180
Exam 2	180
Exam 3 (finals week, non-cumulative)	180
Total	1000

# Extra credit

Extra credit opportunities will be communicated in class

# Tentative course schedule

Week	Date	Topic	
1	8/23	Introduction, systems thinking, ecological footprint	
2	8/30	Biodiversity loss	
3	9/6	Land degradation and environmental conservation	
4	9/13	Food production and food security	
5	9/20	Human population and urbanization	
6	9/27	Global climate change	
		Exam 1 (UNL Digital Learning Center)	
7	10/4	Global climate change	
8	10/11	Hazards and disasters	
9	10/18	(Monday: Fall break)	
		Adaptation and resilience	
10	10/25	Environmental health and disease	
11	11/1	Solid and hazardous waste	
		Exam 2 (UNL Digital Learning Center)	
12	11/8	Air pollution and environmental justice	
13	11/15	Water resources and water pollution	
14	11/22	Monday: Water	
		(W-F: Thanksgiving break)	
15	11/29	Energy	
16	12/6	Environmental policy and sustainability	
Finals	12/13	Exam 3 (UNL Digital Learning Center)	

# All (non-textbook) required and optional readings, assignments, and quizzes can be found on Canvas. Check Canvas!

# University policies

#### Accommodations

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

# Academic honesty

Academic honesty is essential to the existence of an academic institution. The responsibility for maintaining that integrity is shared by all members of the academic community. The University's <u>Student Code of Conduct</u> addresses academic dishonesty. Students who commit acts of academic dishonesty are subject to disciplinary action and are granted due process and the right to appeal any decision. In this course, unintentional plagiarism is still considered plagiarism. It is essential that you properly cite your sources.

#### Academic Support Services

You can schedule free appointments for individual academic coaching with First-Year Experience and Transition Program staff through MyPLAN. You can also take advantage of study stops--which provide individual and group study with learning consultants in a variety of disciplines--and free group workshops on topics such as time management, goal setting, test preparation, and reading strategies. See <u>success.unl.edu</u> for schedules and more information.

# Counseling and Psychological Services

UNL offers a variety of options to students to aid them in dealing with stress and adversity. Counseling and Psychological & Services (CAPS); is a multidisciplinary team of psychologists and counselors that works collaboratively with Nebraska students to help them explore their feelings and thoughts and learn helpful ways to improve their mental, psychological and emotional well-being when issues arise. CAPS can be reached by calling 402-472-7450. Big Red Resilience & Well-Being (BRRWB) provides one-on-one well-being coaching to any student who wants to enhance their well-being. Trained well-being coaches help students create and be grateful for positive experiences, practice resilience and self-compassion, and find support as they need it. BRRWB can be reached by calling 402-472-8770.

#### Diversity and Inclusion

The University of Nebraska-Lincoln does not discriminate on the basis of race, ethnicity, color, national origin, sex (including pregnancy), religion, age, disability, sexual orientation, gender identity, genetic information, veteran status, marital status, and/or political affiliation.

#### Recording of class-related activity

I invite all of you to join me in actively creating and contributing to a positive, productive, and respectful classroom culture. Each student contributes to an environment that shapes the learning process. Any work and/or communication that you are privy to as a member of this course should be treated as the intellectual property of the speaker/creator, and is not to be shared outside the context of this course.

Students may not make or distribute screen captures, audio/video recordings of, or livestream, any class-related activity, including lectures and presentations, without express prior written consent from me or an approved accommodation from Services for Students with Disabilities. If you have (or think you may have) a disability such that you need to record or tape class-related activities, you should contact Services for Students with Disabilities. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Failure to follow this policy on recording or distributing class-related activities may subject you to discipline under the Student Code of Conduct.

### Equity Gap Project

Your instructor is participating in an inquiry into his/her/their teaching conducted by Dr. Taylor Livingston and Dr. Ibrahimpasic, colleagues in the School of Global Integrative Studies. They are examining the effectiveness of instructional strategies, comparing, and/or evaluating the effectiveness of instructional techniques, curricula, or classroom management methods. You are encouraged to participate in anonymous surveys administered at two time points during the semester (One Month and End of Semester). Your responses are very useful to demonstrate the success of various teaching methods and strategies. You may also be asked to meet with your professor. No data will be collected at this meeting. Your participation in this inquiry is voluntary, does not affect your grade for this course, and there is no compensation should you choose to participate. Your participation should total no more than 30 minutes of outside class time over the course of the semester. A consent form will be distributed via Qualtrics in the first survey.

# **COVID-19** related policies

#### Attendance

Students who are sick or who are engaging in self-quarantine in accordance with guidance from the Lincoln-Lancaster County Health Department or their health care professional should not physically attend in-person classes. They must notify the instructor of their absence and must still meet the stated engagement expectations of the course, and they must adhere to the usual codes of conduct and rules of academic integrity that remain in place.

#### Flexibility with instruction methods

This course is designated as an "in person" course for Fall 2021. However, we recognize that the current situation is fluid, and we may need to adapt to changing conditions.

# Revisions

2021-08-22: Removed one reflection essay and rebalanced points