

Fall 2020 Geography 465/565:

# Environment and Development: Facing Climate Change

T/Th 10:15-11:45, Remote

**Instructor:**

**Prof. Leigh Johnson**

Condon 151, ph: (541) 346-2644

Email contact via Canvas

Office hours: Wednesday 1:30-3:30

\*or by appointment

Office hours sign up at [Calendly.com/geoleigh](https://calendly.com/geoleigh)

**GE:**

**Kate Shields**

Condon 208

Email contact via Canvas

Office hours: Tues 12:00-1:00

\*or by appointment

Office hours sign up at [Calendly.com/geokate](https://calendly.com/geokate)



A girl walks through the flooded streets of her neighborhood. Heavy rains overnight on Thursday 09, 2012 in Haiti's northern city of Cap Haitien left streets, homes and fields flooded and hundreds of people homeless and up to 15 people dead. (Credit: UN Photo/Logan Abassi).

## Course Description:

It is now overwhelmingly obvious that the fossil-fuel intensive economic development pathways that have characterized the last 200 years – and which have brought high standards of living to countries in the “Global North” – can no longer be pursued if the earth is to remain habitable for all its people. Furthermore, we know that the populations and countries *least responsible* for historical emissions are those most vulnerable to the looming impacts of climate change such as sea level rise, extreme weather events, and heat-related disease and mortality. Finally, the Covid-19 pandemic is decimating the economies and livelihoods of some of the world’s poorest people, creating significant losses in development. Yet as we think of what “recovery” and “rebuilding” from Covid will look like, we have an opportunity to develop and incorporate principles for a more socially and ecologically just future. How can we make sure that the future is not just more “business as usual”?

## Learning Goals

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By the end of this course, you will be able to:

1. Explain the historical relationship between development and the environment, and why “development as usual” is untenable for the planet and vulnerable populations going forward
2. Explain the scientific, political and moral/ethical problems related to mitigation of and adaptation to climate change
3. Identify and advocate for principles for adaptation and mitigation in relation to specific contexts and countries
4. Access and interpret primary data about the world’s populations, economies, and emissions
5. Access and analyze actual proposals and existing plans for adaptation and mitigation actions

## Course structure

We will accomplish these goals through a combination of activities designed to engage you in processing existing material, grappling with terminology, searching for example cases, and applying concepts to real world proposals.

Our class meetings will be divided into sections, including introductory framing and “signposting” from the instructor, active work in small groups, student-led presentations, and full class discussions. The format may sometimes vary to include guest speakers.

This is a reading intensive course, consistent with 400-500 level courses at the UO. **A commitment to completing readings before each class session to which they are assigned is essential to success in the course.**

## Course materials

**Canvas and UO Library:** Readings will be drawn from a variety of reports, books, and academic journals. Some not available for you to download directly through the UO libraries or directly access on the web will be posted on Canvas.

**There is one required book to purchase** (via Amazon or other booksellers):

Robin Leichenko and Karen O’Brien (2019) *Climate and Society: Transforming the Future*. Polity.

**Web Resources:** We will rely heavily on web-based resources that you should familiarize yourself with. These include:

### **News updates from Climate Home News**

In order to get a sense of the currency of these topics, you are required to subscribe to the Climate Home News updates at <http://www.climatechangenews.com/#>. Subscribing will sign you up for a newsletter with links to current journalistic accounts of climate change policy topics. These stories often provide good topics to connect with in your reading preps and Daily Connection presentations.

### **Climate Interactive’s simulator En-ROADS** <https://en-roads.climateinteractive.org>

We will use EN-ROADS routinely to test out scenarios (“what would happen if”) and explore options, as well as dive in to some of the underlying assumptions in integrated models.

### **ND-GAIN Global Adaptation Initiative**

The University of Notre Dame maintains a very useful website and datasets we will refer to frequently, including the:

- Country Index (Vulnerability and Readiness) <https://gain.nd.edu/our-work/country-index/>
- U.S. Urban Adaptation Assessment <https://gain-uaa.nd.edu/>

## Assessment

*As the university community adjusts to teaching and learning remotely in the context of the COVID-19 pandemic, assessment elements, deadlines, and grading percentages are subject to change.*

### **465 Assessment (undergraduate students):**

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|---|-------|
| 1. Pre-class engagement                   | (30%) |
| 2. Midterm                                | (15%) |
| 3. Presentation: “The Daily Dose of Hope” | (10%) |
| 4. Final Simulation group presentation    | (15%) |
| 5. Final exam take-home essays            | (15%) |
| 6. Participation and attendance           | (15%) |

### **565 Assessment (graduate students)<sup>1</sup>**

- |   |       |
|---|-------|
| 1. Pre-class engagement                   | (25%) |
| 2. Midterm                                | (10%) |
| 3. Presentation: “The Daily Dose of Hope” | (10%) |
| 4. Final Simulation group presentation    | (10%) |
| 5. Prospectus [5%] and Final paper [30%]  | (35%) |
| 6. Participation and attendance           | (10%) |

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<sup>1</sup> Grads note that assignment weights on Canvas are for *undergraduates*, thus the final grade Canvas calculates for graduate students is not correct. I will calculate your grade (and you can do the same) using the weights listed here.

## Assessment Elements

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### Pre-class engagement

- **Reading Prep for peer reading groups:**

The core of this course is the work you will do in your fixed peer reading groups. The discussion-based format of a seminar requires that students engage in the deep reading of assigned texts. You will be assigned to a fixed reading group of 4-5 people, with whom you will meet for 20-30 minutes *during class* on days noted with "RP" in the calendar. Every week, you will have a specific task for which you'll prepare a reading prep sheet.

- You will sign up for a different *role* for each reading group session ("discussion leader", "creative connector", "devil's advocate", etc). Details will be posted on Canvas.
- You will post a reading prep sheet to your group's Canvas Discussion Board by 9 pm the day before the class meeting, and have your contribution available to reference during class.
- Reading prep sheets will be assessed by the GE or instructor each week. Prompts are graded "complete"/"needs improvement"/"not submitted".
- Your reading group prep work contributes to both your pre-class engagement and participation grades.
- Each student earns their own grade based on the quality of their individual contribution.

- **Discussion comments and tasks:**

On days when you do not meet with your peer reading groups, you will still be asked to demonstrate pre-class engagement with the material. On these days, you will post a substantive, 100 to 150 word discussion comment, question, or critique to the whole class Canvas Discussion board by 9 pm the day before each class (noted with a "d" in the schedule). We will use discussion questions to get a sense of which topics are most interesting and confusing for you. You may engage with the posts of your peers, but you must demonstrate that you have actually read and considered the assigned material. On a few occasions, you will be given a set of structured tasks and questions to prepare before class. Discussion comments and tasks are marked "complete" when submitted. If you repeatedly submit questions that demonstrate a lack of genuine engagement with the material, they may be marked as incomplete.

- Because all pre-class engagement is to be done *before class*, there are no make-up options for this particular assessment element. If you cannot make it to class for whatever reason, please still make an effort to turn in your pre-class engagement.

### Midterm:

The midterm is an open-book, open-note take home exam, distributed on Thursday Oct 29 of Week 5 and due uploaded to Canvas on Sunday Nov 1, beginning of Week 6. Primarily short answer and essay based, it is designed to evaluate your comprehension of key concepts and apply them to particular cases or instances. Late midterms will lose 30% of their value per day late.

### Presentation – The Daily Dose of Hope:

We are living through some extremely challenging times, and the subject matter of this class can be bleak. But I do not want you to leave our class time even more distressed than when we began! Thus, the "Daily Dose of Hope" assignment asks you, in a pair with one other student, to inspire us with course-related material at the end of class. Each student will create and present a "Daily Dose" *once* during the quarter. Our full class discussion will have a *hard stopping time* 12 minutes before the end of class. Allowing time for transition, you have 10 minutes to fill, showing and telling us something you've found exciting, inspiring or hopeful that is related to class themes. Ideally, this would be something related to our current or previous week's topics, but it can also be related to any other class themes. Be creative! You can create or edit a series of videos, show us photos, tell us about an event in the news, take us on a virtual tour, etc. Further guidelines are posted on Canvas.

### Simulation Group Presentation (Slides, written talking points and oral presentation):

- For the simulation in Week 10, you will select from a list of a real, recent proposals made to the United Nations' Green Climate Fund (GCF) to fund climate change adaptation or emissions reductions projects in countries in the Global South. A detailed guide on the simulation assignment will be posted on Canvas.
- Within your group, you will act either as an *advocate* (presenting, contextualizing, and motivating the proposal) or a *reviewer* (assessing the proposal according to the GCF criteria and recommending support or modifications).

Your group will submit written talking points before your presentation and a set of Powerpoint slides addressing key questions. All group members are required to contribute to the oral presentation.

- All students will also act as members of the GCF board who will debate and reach a final decision on proposals to support at the end of Week 10.

### Final exam take-home essays: Simulation proposal synthesis

The final exam will ask you to relate core concepts and readings from the quarter to specific cases from the simulation, and reflect on what you learned from the simulation. Late final exam papers lose 30% per day.

### Participation and Attendance:

- This class is designed to be as participatory as possible. Your learning will depend on a collective exchange of ideas and your engagement in class activities. You are expected to attend all class meetings except in the case of medical or personal hardship. If you know you will be absent for a school or work related activity, please let the GE know as far in advance as possible.
- Missing three or more classes will result in a lower final grade, as will gratuitous tardiness.
- Participation includes: logging in on time, with the assigned readings completed, with copies of the readings for the day readily available, completing in-class exercises, and actively engaging in class discussion/activities.
- At the end of the quarter, your reading group members will assess every group member's participation in and contributions to the small group. This counts as 5% of your participation grade.
- **Missed attendance and participation:** For [Fall 2020, the UO Academic Council](#) allows instructors to count attendance and participation as part of the grade provided they have reasonable ways for students to complete make-up assignments for missed class sessions or participation points without loss of credit. We will develop and post a bank of "make-up activities" on Canvas which may be used up to five times by any student for any reason.

### Graduate student-specific (565):

**Reading prep sheet assignments** are slightly more intensive for graduate students, and in many cases additional texts will be assigned (noted as [565] in the detailed reading list).

**Prospectus and Final Paper:** Over the course of the quarter, you will develop a research paper (tailored towards developing your thesis or dissertation) incorporating course readings and concepts.

- You must meet with me by the end of Week 4 to discuss your topic and plan.
- By the end of Week 6, you will circulate (to me and fellow graduate students) a written prospectus for this paper that includes a 2-page problem framing, *annotated* bibliography (at least 5 sources outside of class materials), and a structured plan for the remaining work to be done.
- We will meet as a group (graduate students and Prof Johnson) in **Week 7** to workshop everyone's prospectus.

## Course Policies

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### Communication

Our class will communicate through our Canvas site. **Please use Canvas for all email communication with the instructor and the GE.** It is much easier for us to find your message and make sure it is responded to appropriately in Canvas. Announcements and emails are archived there and automatically forwarded to your UO email, and can even reach you by text. Check and adjust your settings under Account > Notifications. If you contact us with a question, we will try to respond within one business day.

### Office Hours

The instructor and GE will both host "live" office hours through Zoom each week. See the top of the syllabus for the hours and URL to schedule a slot. We also have a running discussion forum on our Canvas page called "Course Logistics Question and Answer" for the entire group to ask and answer. We are also available for meetings outside our regular office hours, too; please Canvas message us to set a time.

### Accessibility

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center at 541-346-1155 or [uoaec@uoregon.edu](mailto:uoaec@uoregon.edu).

## Technical Requirements

Access our class Zoom meeting through [canvas.uoregon.edu](https://canvas.uoregon.edu). Log in using your DuckID to access our class. Click on the “Zoom” link on the left side of the page. If you have questions about accessing and using Canvas, visit the Canvas support page. Canvas and Technology Support also is available by phone or live chat: 541-346-4357 | [livehelp.uoregon.edu](https://livehelp.uoregon.edu)

## Zoom Netiquette

- All of us occasionally need to hide video, but know that seeing your faces is a joy to me and, I believe, enriches our ways of relating—when you can, I value video on.
- That said, please be mindful that others can see you and your surroundings if your video is on. Try to find a quiet setting without lots of noise or busy activities in the background. Please minimize distractions like eating or multitasking.
- Mute your audio when you are not actively contributing. When contributing, avoid making other noises such as typing or eating or having side conversations with others that might be present with you.
- Use chat to pose questions or offer insights “on the side” while others are contributing. The chat can be read by all and should reflect a high standard of respect for our class community. I have disabled “private chat” for our course.
- For help and troubleshooting with Zoom, visit the [UO Service Portal](#).

## Overview: Weekly Topics and Submissions

Week	Date	Topic	Assignments due before class *
<b>I. SCAFFOLDING: WHERE ARE WE &amp; HOW DID WE GET HERE?</b>			
1	Sept 29	Introduction	
	Oct 1	Our present predicament: Climate change and human development	d
2	Oct 6	What will a warmer world mean? Reviewing the science and impact projections	d
	Oct 8	How did we get here? Colonialism, Postcolonialism, and Development Discourses	RP
3	Oct 13	The legacies of modernization and neoliberalism	RP
	Oct 15	Unequal rights to the atmosphere: National carbon footprints	d
4	Oct 20	The creation of vulnerability	RP
	Oct 22	The U.N. and the failures of global governance	d
5	Oct 27	Technological fixes? Ecomodernization and Jevon's Paradox	RP
	Oct 29	Jevon's Paradox in Agriculture: Feeding the world with soy, meat, and palm	d
<b>Take-home midterm</b> posted Thurs October 29 5:00 pm		Due Sun Nov 1 at 11:59 pm	
<b>II. WORLDS OF ADAPTATION AND MITIGATION</b>			
6	Nov 3	Adaptation and maladaptation	RP
	Nov 5	Environmental migration and relocation, or Indigenous climate vulnerability and adaption	d
7	Nov 10	Agriculture, climate risk, and rural livelihoods	RP
	Nov 12	Decarbonization pathways: Energy transformations	d
8	Nov 17	Decarbonization pathways: Afforestation and carbon removal	RP
	Nov 19	Decarbonization pathways: Degrowth and Energy Poverty	d Sign-up for Simulation group today
9	Nov 24	Geoengineering and the politics of vulnerability	RP
	Nov 26	NO CLASS: Thanksgiving	
<b>III. ASSESSING PATHS FORWARD</b>			
10	Dec 1	Simulation Day 1: Green Climate Fund Proposals and Technical Review	ALL Presentations Due to Canvas 9 am Dec 1
	Dec 3	Simulation Day 2: Green Climate Fund Proposals and Technical Review	
11	<b>Take-home final exam essays</b> posted Fri Dec 4 5:00 pm		Due uploaded to Canvas Wed Dec 9 by 8 am

RP: Normal reading prep sheets due posted to your group's Canvas discussion board.

d: Discussion prompt or specific reading task posted to Canvas whole class discussion board