

## Geog 5402: Land-Use Geography

Dr. Darla Munroe; Derby 1123

Office hours: F 1:00 – 3:00 p.m.

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### Overview

The growing liberalization of trade and finance over the past decade has accelerated global economic change. New economic possibilities are, in turn, changing the pace, scale, and dynamics by which natural resources—land, minerals, carbon—are metabolized in economic systems. The world's most remote forests are increasingly enrolled into carbon offset markets. The rising demand for meat is concentrated among a burgeoning urban middle class often far removed from sites of production. Foreign capital finances 'land grabs' that erratically transform landscapes of smallholder production into 'flex crop' monocultures. The remittances from low-wage migrants are changing the production possibilities of landscapes half a world away. **What frameworks can we use to understand the study the commonalities among all these changes?**

**Land use** is the human management and modification of land. Land-use change could include the conversion of natural environment or wilderness into built environment such as settlements and semi-natural habitats such as arable fields, pastures, and managed woods. As such, land use could be considered as the physical expression of social interdependencies: supporting and facilitating particular types of benefits, while restricting or precluding others. Our globally integrated economy serves to mask how our actions result in major land-use changes. If you buy roses online, they might have been farmed in Ethiopia and exported by a Dutch company. If you have an IRA account with Prudential, they may have invested your withholdings in these transactions.

Land use (e.g., residential or commercial real estate; subsistence agriculture or plantations) directly affects land cover (e.g., forest, agriculture, grasslands or impervious surface), which in turn has significant impacts on climate and the structure and function of ecosystems. Climate mitigation and adaptation will involve changes in land use. What role will human-environment geographers play in these adaptations?

**Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 in room 150 Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities.**

This class will provide an introduction to some major trends in land use (resource extraction, forest recovery, rural development) with reference to underlying processes (globalization, neoliberalism, post-Fordist production systems). An underlying theme will be getting to know the interdisciplinary field of land-change science, which seeks to measure, monitor and model major land-use changes and provide support to stakeholders and policy makers.

### Course goals

Upon completing this course, students will:

- Be able to analyze land-use issues and problems; and
- Summarize the major processes, actors and themes at work.

*Format:* This course will be a combination of lecture and discussion. Student will take a pre-test on terms and concepts, which they will revise and reflect on at the end of the semester.

### **Course evaluation**

Carmen weekly discussion postings	20% Weekly posts
Class panel presentation	20% Presentation
	10% Write-up
Land-use transect analysis	5% Write-up
Land-use terms and theories	10% Pre-test
	20% Reflection paper
Article summary	15% Summary

*Course material:* Students are responsible for all material presented in class and all assigned readings. It is assumed that students have completed the readings before class. **Integration of course themes will be assessed in the reflection paper, and many of these themes will be discussed only in class.** Students are expected to attend all classes, complete the required reading, participate in class discussion and activities, and **turn in all assignments on the scheduled dates**. Students are also expected to take a proactive role by seeking assistance from the instructor when problems arise. Lecture outlines will be posted on Carmen. In the event that you miss class, seek detailed notes from a classmate.

*Classroom etiquette:* Please come to class on time. Please minimize eating, drinking or talking so as not to disturb the other students. **Students may use laptops for note-taking only.** Anyone surfing the web or using cell phones to make/receive calls or text messages during class will be asked to leave.

*Attendance:* Because this is an active classroom where discussion and in-class activities are emphasized, attendance is mandatory. Students are permitted a maximum of **four unexcused absences**. Missing five or more class sessions will result in a failing grade for the semester. An absence is excused when there is sufficient written documentation; e.g., a doctor's note, or a two-truck receipt.

*Missing work due to illness or other circumstances:* Students who miss class due to serious illness or other extreme circumstances must submit documentation to me within one week of the absence in order to turn in any work missed. If documentation is not received within this period excusing the absence, the student will receive a 0 (zero) grade for any work missed.

*Use of classroom technology:* It is the student's responsibility to ensure access to our learning technology website, Carmen, and all of its tools. This includes seeking technical support from OSU staff ([ocio.osu.edu](http://ocio.osu.edu)) when encountering any problems. Students must themselves confirm that discussion postings are successfully posted or files are uploaded to the Dropbox in order to receive credit.

*Gradebook:* It is also the student's responsibility to look at the **Carmen gradebook** regularly. We make every effort to keep your grade up to date and students should be well aware of their class standing at all times throughout the semester.

*Weekly discussion postings:* Students should post reactions (~100 words) to each assigned reading on the Carmen discussion board by 9:00 a.m. on the first day they will be discussed. These reactions will be the basis for class discussion. Students are also asked to come to class with questions on the readings.

*Land-use transect analysis:* Students will construct a transect (digitally, or by hand) that starts from a central point, and culminates in a chosen stopping place. You will analyze the variation in land use and land cover along this transect, and argue how it is of general interest to geographers.

*Class panel presentation:* In the first week of class, students will sign up on Carmen for a slot in one of eight scheduled class panel presentations. Each student will prepare a five-minute individual presentation to give along with a two-page write-up to submit on Carmen. Students within one panel should coordinate on topic. Each student will present one case study or controversy within their broader selected topic.

*Land-use terms and theories:* Students will assess their prior knowledge on terms and concepts relevant to the student of land use. At the end of the semester, students will review their responses to this pre-test, and reflect on what they have learned over the course of the semester.

*Article summary:* Students will select ONE journal article from the academic literature that presents a study of land use. This article must include both environmental and social variables in a quantitative format.

*Class readings:* The class readings are available on the Carmen content page.

*Academic Misconduct:* Academic misconduct in any form will not be tolerated. This includes, but is not limited to, cheating and plagiarism. Students are referred to the definitions of academic misconduct found here: [http://studentaffairs.osu.edu/pdfs/csc\\_12-](http://studentaffairs.osu.edu/pdfs/csc_12-)

31-07.pdf. Plagiarism is the representation of another's works or ideas as one's own: it includes the unacknowledged word for word use and/or paraphrasing of another person's work, and/or the inappropriate unacknowledged use of another person's ideas. All cases of suspected misconduct, in accordance with university rules, will be reported to the Committee on Academic Misconduct.

**Schedule** (subject to change)

Week	Date	Day	Topic	Reading	Due
1	11-Jan	M	Intro to the class		
			<i>Land system science</i>		
	13-Jan	W	Land-use/cover change	Mueller and Munroe	
<b>2</b>	<b>18-Jan</b>	<b>M</b>	<b>MLK Day, No class</b>		
	20-Jan	W		Turner et al.	Pre-test: land-use reflections
3	25-Jan	M	Land use and climate change	Deforestation is messing with our weather, and our food	
	27-Jan	W		Nepstad et al.	
4	1-Feb	M	Global Land Project	Verburg et al.	
			<i>Agricultural systems</i>		
	3-Feb	W	Rural development	Are Your Skinny Jeans Starving the World	Panel 1: Land Abandonment
5	8-Feb	M		Munroe et al.	
	10-Feb	W	Multifunctionality	Van Berkel et al.	Panel 2: Agricultural Policy
6	15-Feb	M		Smith and Krannich	
	17-Feb	W	Food security	Brown et al.	
7	22-Feb	M			Panel 3: Food Security
			<i>Resource peripheries</i>		
	24-Feb	W	Resource curse	Why the government owns so much land	
8	29-Feb	M			Panel 4: Mining
	2-Mar	W	Forest transition	Rudel	
9	7-Mar	M		Mansfield et al.	
	9-Mar	W	Amenity migration	Gosnell and Abrams	Select article for summary
<b>10</b>	<b>14-Mar</b>	<b>M</b>	<b>Spring Break</b>		
	<b>16-Mar</b>	<b>W</b>	<b>Spring Break</b>		
11	21-Mar	M			Panel 5: Forest Transitions
	23-Mar	W	Land-use transect assignment		
			<i>Teleconnections</i>		
12	28-Mar	M	Proximate-ultimate drivers	Global consumption an increasingly significant driver of tropical deforestation	Transect analysis
	<b>30-Mar</b>	<b>W</b>	<b>AAG, no class</b>		
13	4-Apr	M		Geist and Lambin	Panel 6: Globalization of Land Use
	6-Apr	W	Double exposures	O'Brien and Leichenko	
14	11-Apr	M			
	13-Apr	W	Telecoupling	Seto et al.	Panel 7: Vulnerability and Hazards
15	18-Apr	M			
	20-Apr	W	<b>Synthesis</b>		Panel 8: Land Grabs
16	25-Apr	M	No class		Reflection paper
Final	3-May		Article summary due at NOON		