

Geog 5402: Land-Use Geography

Dr. Darla Munroe; Derby 1123

Office hours: F 1:00 – 3:00 p.m. or by appointment

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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 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 small group work. Students will work on one land-use problem throughout the semester culminating in a final presentation.

Course evaluation, percent

Participation		10
Exams		
Quiz 1, Feb 23 rd	15	30
Quiz 2, April 20 th	15	
Land-Use Project		60
Article review	10	
Dataset description	10	
Research design	10	
PechaKucha	20	
Peer reviews	10	
Total		100

Class policies

Our primary joint responsibility in this class is to create a productive learning community. Good humor and support of one another are welcomed and encouraged. You should respect my right to teach and the right of your fellow students to learn. You are expected to conduct yourself with courtesy at all times and to treat everyone with respect.

Threatening or intimidating speech in any form will not be tolerated. Other disruptive behavior includes, but is not limited to, holding conversations with classmates, passing notes, making unnecessary comments, leaving and coming back into the classroom (except in emergencies), coming in late or leaving early on frequent occasions, surfing the web and failing to turn off cell phones. If you violate these standards of courtesy and respect, you may be dismissed from class.

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 final presentation, 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.

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) when encountering any problems. Students must themselves confirm that discussion postings are successfully posted or files are uploaded to Carmen 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.

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

Class participation: Students are expected to complete every assigned reading BEFORE we cover the topic in class. Please write down unfamiliar vocabulary and come in with questions. On most Thursdays, we will have some sort of discussion or group work. You need to be present, prepared, and participate to the best of your abilities.

Exams: There are two in-class quizzes. These quizzes will be a combination of short answer, short essay and essay format. All material: readings, lectures, film, in-class activities, are fair game.

Land-use project: In the first week of class, students will sign up on Carmen for a land-use topic that they will study comprehensively throughout the semester. This assignment is scaffolded into five sections.

- Article review – finding original, peer-reviewed research on the topic and critically reviewing
- Dataset – locating a geospatial dataset of use to study the problem
- Research design – sketching out the major actors, institutions and processes at work in shaping this land-use problem
- PechaKucha – a 6:40 minute presentation that will be recorded and uploaded to Carmen
- Peer reviews – students will watch and review 3 presentations made by their peers

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-

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.

Readings

- Alonso, W. (1960). A theory of the urban land market. *Papers and Proceedings of the Regional Science Association*, 6(1), 149-157.
- Buck, A. J., Deutsch, J., Hakim, S., Spiegel, U., & Weinblatt, J. (1991). A Von Thünen Model of Crime, Casinos and Property Values in New Jersey. *Urban Studies*, 28(5), 673-686.
- Cotula, L. (2012). The international political economy of the global land rush: A critical appraisal of trends, scale, geography and drivers. *The Journal of Peasant Studies*, 39(3-4), 649-680.
- Ellis, E. A., & Porter-Bolland, L. (2008). Is community-based forest management more effective than protected areas?: A comparison of land use/land cover change in two neighboring study areas of the Central Yucatan Peninsula, Mexico. *Forest Ecology and Management*, 256(11), 1971-1983.
- Foley, J. A., DeFries, R., Asner, G. P., Barford, C., Bonan, G., Carpenter, S. R., et al. (2005). Global Consequences of Land Use. [10.1126/science.1111772]. *Science*, 309(5734), 570.
- GLP (2005). *Science Plan and Implementation Strategy*. Stockholm, Sweden: IGBP Secretariat.
- Kumar, M. (Nd). *Ricardian Theory of Rent: Meaning, Assumptions, Statement and Features*. <http://www.economicdiscussion.net/theory-of-rent/ricardian-theory-of-rent-meaning-assumptions-statement-and-features/7454>.
- Lambin, E. F., & Meyfroidt, P. (2011). Global land use change, economic globalization, and the looming land scarcity. *Proceedings of the National Academy of Sciences*, 108(9), 3465-3472.
- Law, J., & McSweeney, K. (2013). Looking under the canopy: Rural smallholders and forest recovery in Appalachian Ohio. *Geoforum*, 44, 182-192.
- Liverman, D. M., & Cuesta, R. M. R. (2008). Human interactions with the Earth system: people and pixels revisited. *Earth Surface Processes and Landforms*, 33(9), 1458-1471.
- Munroe, D. K., Gallemore, C., & Van Berkel, D. (2017). Hot-tub cabin rentals and forest tourism in Hocking County, Ohio. *Revue économique*.
- York, A. M., & Munroe, D. K. (2010). Urban encroachment, forest regrowth and land-use institutions: Does zoning matter? *Land Use Policy*, 27(2), 471-479.

Schedule (subject to change)

Week	Date	Day	Topic	Reading	Due
1	10-Jan	Tue	Introduction to the course		
	12-Jan	Thurs	Land-use trends	Foley et al.	
Gradients of land fertility					
2	17-Jan	Tue	Land-use specialization	Manoj	
	19-Jan	Thurs	<i>The hinterland</i>		
3	24-Jan	Tue	Protected areas	Ellis and Porter-Bolland	
	26-Jan	Thurs	<i>Land sparing or sharing?</i>		
Gradients of accessibility					
4	31-Jan	Tue	Accessibility	Buck et al.	
	2-Feb	Thurs	<i>Cash crops</i>		
5	7-Feb	Tue	Bid-rent	Alonso	
	9-Feb	Thurs	<i>Urban sprawl</i>		Article review
6	14-Feb	Tue	Agents of change	Liverman et al.	
	16-Feb	Thurs	<i>Transnational corporations</i>		
7	21-Feb	Tue	Research design	GLP Science Plan	
	23-Feb	Thurs	Quiz 1		
Spatial spillovers					
8	28-Feb	Tue	Spatial interaction	Munroe et al.	
	2-Mar	Thurs	<i>Brownfields</i>		
9	7-Mar	Tue	Land institutions	York and Munroe	
	9-Mar	Thurs	<i>Leapfrogging</i>		Dataset description
10	14-Mar	Tue	Spring break		
	16-Mar	Thurs	Spring break		
Land mosaic					
11	21-Mar	Tue	Malheur occupation	Malheur background	
	23-Mar	Thurs	<i>Role playing activity</i>		
Proximate-ultimate					
12	28-Mar	Tue	Globalization of land use	Lambin and Meyfroidt	
	30-Mar	Thurs	<i>King Corn</i>		
13	4-Apr	Tue	Remittances	Davis and Lopez-Carr	Research design
	6-Apr	Thurs	<i>Resource peripheries</i>		
14	11-Apr	Tue	A Forest Returns	Law and McSweeney	
	13-Apr	Thurs	<i>Amenity migration</i>		Presentation must be uploaded
15	18-Apr	Tue	Land grabs	Cotula	
	20-Apr	Thurs	Quiz 2		
	26-Apr	Wed			Peer reviews due