Geog 5402: Land-Use Geography

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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. Learning over the course of the semester will cumulate in a final report and presentation.

Course evaluation

Carmen weekly discussion postings	20%
Class panel presentation	20% Presentation
	10% Write-up
Land-Use Report	10% Annotated bibliography
	10% Powerpoint presentation
	10% Peer review
	20% Report

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 report, 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; i.e., 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) 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 set of readings 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.

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 Report: Students will individually analyze a land-use issue of interest to them using one or more of the perspectives we have covered in class. The student will turn in an annotated bibliography on Tuesday, March 24th. Students will turn in a Powerpoint presentation summarizing the main points of their final report on April 23rd, the last day of class. These presentations will be peer-reviewed; each student must review eight other student presentations. The final report will be a maximum of five pages, and it is due on Wednesday, April 29th at 5 pm.

Class readings: The class readings are available on the Carmen content page. They have been compressed into a zipped file, ready for download.

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.

Week	Date	Day	Topic	Reading	Due
1	13-Jan	Tue	Intro to the class		
Land system science					
	15-Jan	Thurs	Land-use/cover change	Turner et al., Ellis & Ramankutty	
2	20-Jan	Tue			
	22-Jan	Thurs	Land use and climate change	Steffen et al., Nepstad et al.	
3	27-Jan	Tue			
	29-Jan	Thurs	Global Land Project	Verburg et al.	
Agricultural systems					
4	3-Feb	Tue	**Guest lecture, Jill Clark**		
	5-Feb	Thurs	Rural development	Munroe et al., D. Brown et al.	Panel 1: Land abandonment
5	10-Feb	Tue			
	12-Feb	Thurs	Film: King Corn	van Berkel et al., Smith & Krannich	
6	17-Feb	Tue	Multifunctionality		Panel 2: Agricultural policy
	19-Feb	Thurs	Food security	M. Brown et al.	
7	24-Feb	Tue			Panel 3: Food security
Resource peripheries					
	26-Feb	Thurs	Fracking in Ohio		
8	3-Mar	Tue	Resource curse	Hurley & Ari	Panel 4: Mining
	5-Mar	Thurs			
9	10-Mar	Tue	Film: A Forest Returns		Topic for final report due
	12-Mar	Thurs	Forest transition	Rudel 1998, Mansfield et al. 2010	
10	17-Mar	Tue	**Spring Break**		
	19-Mar	Thurs	**Spring Break**		
11	24-Mar	Tue	Amenity migration	Gosnell and Abrams	Annotated bibliography
	26-Mar	Thurs			Panel 5: Forest transitions
Teleconnections					
12	31-Mar	Tue	Proximate-ultimate drivers	Geist & Lambin, Gossling et al.	Panel 6: Globalization of land use
	2-Apr	Thurs			
13	7-Apr	Tue	Double exposures	O'Brien & Leichenko, Lambin and Meyfroidt	Panel 7: Vulnerability and hazards
	9-Apr	Thurs			
14	14-Apr	Tue	Telecoupling	Seto et al., Liu et al.	
	16-Apr	Thurs			Panel 8: Land grabs
15	21-Apr	Tue	**Synthesis**		
	23-Apr	Thurs	No class		Final report presentations due
	29-Apr	Wed	FINAL Report Due, 5 pm		

References

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