

## Term Information

Effective Term Autumn 2021  
[Previous Value](#) Summer 2012

## Course Change Information

### What change is being proposed? (If more than one, what changes are being proposed?)

We are requesting the addition of hybrid as an optional mode of course delivery.

### What is the rationale for the proposed change(s)?

Due to Covid-19, a hybrid model has been established and syllabus created. We would like the option to teach 5402 in a hybrid model in future semesters.

### What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

None.

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

## General Information

Course Bulletin Listing/Subject Area	Geography
Fiscal Unit/Academic Org	Geography - D0733
College/Academic Group	Arts and Sciences
Level/Career	Graduate, Undergraduate
Course Number/Catalog	5402
Course Title	Land Use Geography
Transcript Abbreviation	Land Use Geog
Course Description	Causes and consequences of recent regional and national land-use changes; urban decentralization, suburbanization of jobs and people; changing relationships between economic activity and the environment.
Semester Credit Hours/Units	Fixed: 3

## Offering Information

Length Of Course	14 Week, 12 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	Yes
Is any section of the course offered	Greater or equal to 50% at a distance
<a href="#">Previous Value</a>	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

## Prerequisites and Exclusions

### Prerequisites/Corequisites

### Exclusions

### [Previous Value](#)

Not open to students with credit for qtr. crs. GEOG 655

### Electronically Enforced

No

## Cross-Listings

### Cross-Listings

## Subject/CIP Code

### Subject/CIP Code

45.0701

### Subsidy Level

Doctoral Course

### Intended Rank

Junior, Senior, Masters, Doctoral

## Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

## Course Details

### Course goals or learning objectives/outcomes

- View land use as geographic phenomena that connect global human and environmental systems; Describe strengths and weaknesses of various approaches; Evaluate current research strategies; Analyze a case studies; Create oral and written arguments

### [Previous Value](#)

### Content Topic List

- Land-use changes
- Urban decentralization
- Changing relationships between economic activity and the environment.
- Suburbanization

### Sought Concurrence

No

## Attachments

- Syllabus Geog 5402 hybrid AU 2020.pdf: Hybrid Syllabus  
*(Syllabus. Owner: Grandey,Mary Allison)*
- ASCTech\_Syllabus\_Review.pdf: ASC Tech syllabus review  
*(Other Supporting Documentation. Owner: Grandey,Mary Allison)*
- Geog 5402 AU 2019 syllabus\_In Person.docx: In Person Syllabus  
*(Syllabus. Owner: Grandey,Mary Allison)*
- Syllabus Geog 5402 hybrid AU 2020 revised jan 2021.pdf: Revised Hybrid Syllabus  
*(Syllabus. Owner: Grandey,Mary Allison)*

**COURSE CHANGE REQUEST**  
5402 - Status: PENDING

Last Updated: Haddad,Deborah Moore  
01/27/2021

**Comments**

- Revised hybrid syllabus (per panel feedback) uploaded 1/27/21 *(by Grandey,Mary Allison on 01/27/2021 02:54 PM)*
- See panel feedback sent on 1/26/21 *(by Vankeerbergen,Bernadette Chantal on 01/26/2021 04:47 PM)*
- 09.09.20: Both "greater or equal to 50%" and "less than 50%" are checked for DL instruction. Please uncheck one of them. *(by Haddad,Deborah Moore on 09/09/2020 03:15 PM)*

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Grandey,Mary Allison	09/09/2020 02:19 PM	Submitted for Approval
Approved	Ettlinger,Nancy	09/09/2020 02:35 PM	Unit Approval
Revision Requested	Haddad,Deborah Moore	09/09/2020 03:15 PM	College Approval
Submitted	Grandey,Mary Allison	09/10/2020 06:56 AM	Submitted for Approval
Approved	Ettlinger,Nancy	09/10/2020 06:59 AM	Unit Approval
Approved	Haddad,Deborah Moore	09/10/2020 08:21 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	09/16/2020 03:59 PM	ASCCAO Approval
Submitted	Munroe,Darla Karin	12/07/2020 10:53 AM	Submitted for Approval
Approved	Ettlinger,Nancy	12/07/2020 10:55 AM	Unit Approval
Approved	Haddad,Deborah Moore	12/07/2020 11:03 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	01/26/2021 04:47 PM	ASCCAO Approval
Submitted	Grandey,Mary Allison	01/27/2021 02:54 PM	Submitted for Approval
Approved	Ettlinger,Nancy	01/27/2021 02:58 PM	Unit Approval
Approved	Haddad,Deborah Moore	01/27/2021 06:55 PM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Oldroyd,Shelby Quinn Hilty,Michael Vankeerbergen,Bernadette Chantal	01/27/2021 06:55 PM	ASCCAO Approval



THE OHIO STATE UNIVERSITY

COLLEGE OF ARTS AND SCIENCES

# SYLLABUS: GEOG 5042 (HYBRID) LAND USE GEOGRAPHY AUTUMN 2020

## COURSE OVERVIEW

### Instructor

Instructor: Darla Munroe

Email address: [munroe.9@osu.edu](mailto:munroe.9@osu.edu)

Office hours: 10-11 am Thursdays on CarmenZoom, by appointment

Office Location: Derby Hall 1036

Class meeting times / location: Tuesday OR Thursday, 2:20 – 3:40 pm, 306 Hitchcock

**Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.**

### Course description

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?

## Course learning outcomes

By the end of this course, students should successfully be able to:

- Conceptualize land use as geographic phenomena that connect global human and environmental systems
- Describe strengths and weaknesses of various approaches to land use
- Evaluate current research strategies and debates in land use
- Analyze a case study of the student's choice
- Generate oral and written presentations from this analysis

## How this course works

**Hybrid mode of delivery:** This course is mostly online. There is one 80-minute required in person class session per week.

**Pace of online activities:** This course is divided into **four modules** that have weekly assigned readings, as well as supplementary materials. Students are expected to keep pace with weekly discussion posts. Students must be prepared for weekly in-class sessions.

**Credit hours and work expectations:** This is a **3-credit-hour course**. According to [Ohio State policy](#), students should expect around 3 hours per week of time spent on direct instruction (in-class instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of average. Of this allocated time, one 80-minute session will be held in person.

## Course materials (no purchases required!)

**Required – all resources will be available electronically through Carmen**

The full reading list is provided following the Course Schedule at the end of this document.

**Films - All Films are available through either DocuSeek or Kanopy (both streaming platforms are OSU supported and have been vetted for accessibility standards, both provide adequate captioning, please contact the instructor if you need alternative assignments)**

Blind Spot: Peak Oil & the Coming Global Crisis (55 min, 2009)

Sowing for Need Sowing for Greed (56 min, 1990)

Grandmas of Chernobyl (Babushkas of Chernobyl) (70 mins, 2015)

Spillover: Zika, Ebola & Beyond (56 mins, 2016)

Black Gold: A Look at Coffee Production Around the World (78 min, 2006)

Frightened - The Real Price of Shipping (53 min, 2016)

Our Vanishing Forests (58 min, 1993)

**Case studies – there are three supplemental case studies for first three modules**

A Crack in the World As the Antarctic Heats Up

Chernobyl has become a refuge for wildlife

Victoria's Secret Revealed in Child Labor

**Articles - All articles are directly embedded in Carmen (see course schedule)**

Academic journal articles are numbered for weeks 1-9; you should be reading and discussing weekly (along with posting reactions to films and case studies)

### **Protecting Forests and Empowering Local Communities**

The final module of the class (centered around Renewal) will be a role-playing exercise.

Required articles for your assigned stakeholder role will also be available on Carmen.

## Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** <http://ocio.osu.edu/selfservice>
- **Phone:** 614-688-HELP (4357)
- **Email:** [8help@osu.edu](mailto:8help@osu.edu)
- **TDD:** 614-688-8743

### Baseline technical skills necessary for online courses

- Basic computer and web-browsing skills
- Navigating Carmen

### Technology skills necessary for this specific course

- [CarmenZoom](#) text, audio, and video chat
- Recording a slide presentation with audio narration
- Recording, editing, and uploading video

### Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

### Necessary software

- [Microsoft Office 365 ProPlus](#) All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Each student can install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five phones.
  - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.
  - Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found <https://ocio.osu.edu/kb04733>.

### Carmen Access

You will need to use [BuckeyePass](#) multi-factor authentication to access your course in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass-Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click "Enter a Password" and then click "Text me new

codes” button that appears. This will text you ten passcodes good for 365 days that can be each used once.

- [Download the Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or wi-fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4537 (HELP) and the IT support staff will work out a solution with you.

## Grading and faculty response

### Grades

Assignments	each	Due date	Total
<b>Discussion boards</b>			30
Anthrome, Disasters, Globalization	10	weekly	
<b>Individual papers</b>			15
Data brief	10	9-Oct	
Course debrief	5	7-Dec	
<b>Group assignments</b>			10
Group paper, Dragnet	5	18-Sep	
Group paper, Socioecological diagram	5	30-Oct	
<b>Peer reviews</b>	5	18-Sep, 30-Oct	10
<b>Roundtable module</b>			35
Position paper	10	13-Nov	
Talking points discussion post	5	16-Nov	
Opening statements	5	13-Nov	
Negotiation and debate posts	10	24-Nov	
Proposal vote and justification	5	30-Nov	
<b>Total</b>			<b>100</b>

*See course schedule, below, for more information*

### Assignment information

*There are no final essays or final exams in this class. The assignments are organized to provide multiple lower stakes opportunities. While they will build of learning from various module, there are no cumulative high stakes assignments.*



**Discussion posts & responses:** At the end of each week students will write a discussion post in your class section thread. There is one discussion board for each of the first three modules (Anthrome, Disasters, Globalization). The purpose of the discussion boards is to help you discuss and analyze the assigned material (films, newspaper articles, journal articles). You should post at least once per week, and comment on someone else's post at least twice per week. Rubrics will be provided for discussion posts at the end of each module. Excellent work should respond to the main arguments in the reading materials and films that both demonstrates knowledge of content area as well as draws connections between content. Follow-up responses should evaluate the argument provided in peer's responses by engaging course material. Responses should be well-written, constructive and contribute to the group dialog.

**Individual papers:** Each student will write two individual papers. The **Data Brief** is part of the Disasters module: each student will research and identify four datasets (two human, and two physical) that could be used to study a particular natural disaster. The second individual paper is a short **Course Debrief**, reflecting on course learning, due on December 7<sup>th</sup> in lieu of a final exam. Excellent work in these individual papers demonstrates that student has read course material and can apply these concepts and details from case studies to a topic of one's own interest.

**Group Papers:** Students are assigned to Working Groups which they will remain in throughout the first three modules. They will collaboratively write two papers. The first paper is called a **Dragnet paper** (like the TV detectives: "Just the facts!"). The group will agree on an example coupled natural-human system where social and environmental mutual interdependence is evident. The "facts" to discuss include specific details about this system and how it functions. The second group paper expands an example to include both local and global interconnections using a diagram. Excellent work demonstrates teamwork, input from the diverse backgrounds of individual team members, and the application of readings and class content to topics of the students' choice.

**Peer Reviews:** Students will have the opportunity to review their group member's contribution at the end of the first and third modules: how helpful, collaborative and professional communication has been among the members of a group.

**Tambopata, Peru: Protecting Forests and Empowering Local Communities:** The final module of the semester will entail an online roundtable discussion. The core aim of this activity is to bring to life an example of community-engaged environmental conservation in the Peruvian Amazon. Specifically, students play stakeholder roles based on a real-life participatory zoning exercise for Tambopata National Reserve. Students will be assigned into various roles (nut grower, palm oil producer, mining company executive, et al.), and background readings will be provided for each role. Ultimately, the class will have to agree on a map proposal to conserve forest resources in the region while allowing a mixture of other land-use activities. Toward this end each student will write a position paper summarizing their land-use priorities, and talking points to prepare for negotiation with other stakeholders. The roundtable will happen through the Carmen

discussion board, including [opening statements](#) from each stakeholder, [negotiation and debate](#) to reconcile competing claims for land and varying priorities on forest conservation. Finally, each student will [vote on a zoning proposal](#), and justify their choice.

#### Other in-class activities:

- **Concept review:** The instructor will review major course concepts and provide examples in class each week
- **Worksheets:** Students will complete worksheets through Google Docs to ask questions as well respond to short, informal, ungraded quizzes to assess understanding on an ongoing basis.

## Late assignments

Late submissions will be accepted up to a week past the due date. One day late will incur a 10% penalty. Two days late will incur 20% penalty. Three days will incur a 30% penalty. Four days late will incur a 40% penalty. Five to seven days late will only receive 50% credit of the grade you would have received if it was submitted on time. If you contact me ahead of time for deadline adjustments you will not incur any penalty. Please refer to Carmen for due dates.

## Grading scale

93–100: A  
90–92.9: A-  
87–89.9: B+  
83–86.9: B  
80–82.9: B-  
77–79.9: C+  
73–76.9: C  
70–72.9: C-  
67–69.9: D+  
60–66.9: D  
Below 60: E

## Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

### Grading and feedback

For large weekly assignments, you can generally expect feedback within **7 days**.

### E-mail

I will reply to e-mails within **48 hours**, I will aim for **24 hours during school days** .

### Discussion board

I will check and reply to messages in the discussion boards every **24 hours on school days**.

### Office Hours

In-person and virtual office hours (held on CarmenZoom) require at least **24 hours notification** and will only be offered **during school days**.

## Attendance, participation, and discussions

### Student participation requirements

Because this is a hybrid course, your attendance is partially based on your online activity and participation. The following is a summary of everyone's expected participation:

- **Attending class: ONCE PER WEEK**  
Each student is assigned to one cohort with a meeting date of Tuesday or Thursday. You should attend class regularly on that day. In the case of serious illness or other extenuating factors preventing your attendance, please email the instructor.
- **Logging in: AT LEAST TWICE PER WEEK**  
Be sure you are logging in to the course in Carmen each week, including weeks with holidays or weeks with minimal online course activity. (During most weeks you will probably log in many times.) If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.
- **Office hours: OPTIONAL OR FLEXIBLE**  
I will hold office hours on Thursday mornings. Drop in, or if you are interested in discussing an assignment with me, please contact me at the beginning of the week to schedule an appointment.
- **Participating in discussion forums: 2 TIMES PER WEEK**  
As participation, each week you can expect to post two times as part of our substantive class discussion on the week's topics (see assignment information for discussion posts). One post should be your original post, and a second post, a response or comment to another student in your group.

### Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style:** While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. Informality (including an occasional emoticon) is fine for non-academic topics.
- **Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say. (For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.)
- **Backing up your work:** Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

## Other course policies

### Academic integrity policy

#### Policies for this hybrid course

- **Written assignments:** Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow the [Publication Manual of the American Psychological Association](#) ([click here for online version](#)) to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.
- **Falsifying research or results:** All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- **Collaboration and informal peer-review:** The course includes many opportunities for formal collaboration with your classmates. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on an individual assignment is not permitted. If you're unsure about a particular situation, please feel free just to ask ahead of time.
- **Group projects:** This course includes group projects, which can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. I have

attempted to make the guidelines for group work as clear as possible for each activity and assignment, but please let me know if you have any questions.

### **Ohio State's academic integrity policy**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

### **Copyright disclaimer**

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

### **Statement on title IX**

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator, Molly Peirano, at [titleix@osu.edu](mailto:titleix@osu.edu)

### **Your mental health!**

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting [ccs.osu.edu](https://ccs.osu.edu) or calling 614- 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273- TALK or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)

## Accessibility accommodations for students with disabilities

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

### Accessibility of course technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [Carmen \(Canvas\) accessibility](#)
- Streaming audio and video (Kanopy & Docuseek)
- Synchronous course tools

## Additional Student Support Services

**Student Advocacy Center:** Answer students' questions, direct students to appropriate resources and departments, provides general university guidance

- 614-292-1111 <http://advocacy.osu.edu/>

**Student Wellness Center:** Promoting student wellness through nine dimensions of wellness

- 614-292-4527 <http://swc.osu.edu/>

**Multicultural Center:** Offering programs, services and outreach for all OSU students; supporting and celebrating all students through a intercultural model

- 614-688-8449 <http://www.mcc.osu.edu/>

**Academic Advising:** Advising for undergraduate students on the Columbus campus is provided by the individual college or department that offers the program of study you are pursuing. This allows you to get advice from someone who knows the specifics of your curriculum

- <https://advising.osu.edu/>

**Student Academic Services:** Find information by topic and take care of your personal Buckeye business (i.e. Financial Aid and other services) online at [buckeyelink.osu.edu](http://buckeyelink.osu.edu). Or speak with someone in person.

- Student Academic Services Bldg., Lobby  
281 W. Lane Ave. [\[map\]](#)  
Monday–Thursday: 9 a.m. to 5 p.m.  
Friday: 9 a.m. to 4 p.m.

**Academic Support Services:** This includes various resources for learning support from tutoring and study strategies to stress management and confidence building.

- <http://youkinsuccess.osu.edu/academic-services/>

## Course schedule (subject to change)

Week 1 – Introduction to the course

### MODULE 1 – ANTHROPOCENE

Week 2 – Defining the Anthropocene

Readings: Lewis and Maslin; *Nat Geo* “A Crack in the World”

Films: *Peak Oil*

DUE: Discussion post

Week 3 – Climate change and justice

Readings: Munroe and McSweeney

Films: *Sowing for Need, Sowing For Greed*

DUE: Discussion post

Week 4 – Resilience

Readings: Kelly et al.

DUE: Discussion post; 1<sup>st</sup> Peer review, GROUP dragnet summary

### MODULE 2 – DISASTERS

Week 5 – Disasters and Vulnerability

Readings: Cutter; *The Conversation* “Chernobyl has become a refuge for wildlife”

Films: *Grandmas of Chernobyl*

DUE: Discussion post

Week 6 - Disasters as Socioecological System (SES)

Readings: Armenteras et al; Strader et al

Films: *Spillover: Zika, Ebola*

DUE: Discussion post

Week 7 – Infectious disease as Socioecological system outcome

Readings: Vanwembeke et al.

DUE: Discussion post, Data brief

## MODULE 3 – GLOBALIZATION OF LAND SYSTEMS

Week 8 – Land grabs

Readings: *Financial Times*: “Investing in Land in Ethiopia”

DUE: Discussion post

Week 9 – Migration as SES

Readings: Radel et al.; *Bloomberg* “Victoria’s Secret Revealed in Child Labor”

Films: *Black Gold*

DUE: Discussion post

Week 10 – Transhumance and SES

Readings: Aryal et al.

Films: *Frightened*

DUE: Discussion post, 2<sup>nd</sup> Peer review, GROUP Socioecological Diagram

## MODULE 4 – FOREST CONSERVATION IN TAMBOPATA, PERU

Week 11 – Orientation to the Module: participatory forest governance and zoning

Readings: Select **four peer reviewed sources and two non peer-reviewed readings** from your corresponding stakeholder role’s list to read in Weeks 11-13

Week 12 – Position paper preparation

DUE: Position paper

Week 13 – Roundtable and vote

DUE: Talking points, Roundtable opening statements

Week 14 – Differing stakeholder reactions to outcome

DUE: Vote with justification

DEBRIEF

Week 15 – Final summary paper



## Modules 1-3 journal article readings

- Armenteras, Dolors, Laura Schneider, and Liliana María Dávalos. "Fires in Protected Areas Reveal Unforeseen Costs of Colombian Peace." *Nature Ecology & Evolution* 3, no. 1 (January 2019): 20–23. <https://doi.org/10.1038/s41559-018-0727-8>.
- Aryal, Suman, Geoff Cockfield, and Tek Narayan Maraseni. "Globalisation and Traditional Social-Ecological Systems: Understanding Impacts of Tourism and Labour Migration to the Transhumance Systems in the Himalayas." *Environmental Development* 25 (March 1, 2018): 73–84. <https://doi.org/10.1016/j.envdev.2017.09.001>.
- Cutter, Susan L. "The Forgotten Casualties Redux: Women, Children, and Disaster Risk." *Global Environmental Change* 42 (January 1, 2017): 117–21. <https://doi.org/10.1016/j.gloenvcha.2016.12.010>.
- Kelly, Claire, Agostino Ferrara, Geoff A. Wilson, Francesco Ripullone, Angelo Nolè, Nichola Harmer, and Luca Salvati. "Community Resilience and Land Degradation in Forest and Shrubland Socio-Ecological Systems: Evidence from Gorgoglione, Basilicata, Italy." *Land Use Policy* 46 (July 1, 2015): 11–20. <https://doi.org/10.1016/j.landusepol.2015.01.026>.
- Lewis, Simon L., and Mark A. Maslin. "Defining the Anthropocene." *Nature* 519, no. 7542 (March 2015): 171–80. <https://doi.org/10.1038/nature14258>.
- Munroe, Darla K., Caleb Gallemore, and Derek Van Berkel. "Hot Tub Cabin Rentals and Forest Tourism in Hocking County, Ohio." *Revue économique* Vol. 68, no. 3 (April 26, 2017): 491–510.
- Munroe, Darla K., and Kendra McSweeney. "Addressing Root Drivers of Land-Climate Dynamics." *One Earth* 1, no. 2 (October 25, 2019): 181–84. <https://doi.org/10.1016/j.oneear.2019.10.001>.
- Radel, Claudia, Brad D. Jokisch, Birgit Schmook, Lindsey Carte, Mariel Aguilar-Støen, Kathleen Hermans, Karl Zimmerer, and Stephen Aldrich. "Migration as a Feature of Land System Transitions." *Current Opinion in Environmental Sustainability, Sustainability governance and transformation*, 38 (June 1, 2019): 103–10. <https://doi.org/10.1016/j.cosust.2019.05.007>.
- Strader, Stephen M., Walker S. Ashley, Thomas J. Pingel, and Andrew J. Kremenec. "How Land Use Alters the Tornado Disaster Landscape." *Applied Geography* 94 (May 1, 2018): 18–29. <https://doi.org/10.1016/j.apgeog.2018.03.005>.
- Vanwambeke, Sophie O, Catherine Linard, and Marius Gilbert. "Emerging Challenges of Infectious Diseases as a Feature of Land Systems." *Current Opinion in Environmental Sustainability* 38 (June 2019): 31–36. <https://doi.org/10.1016/j.cosust.2019.05.005>.

## Module 4 readings: Tambopata role-playing exercise readings

### Curated reading references for each stakeholder

Below you will find the full potential reading list for the final module. Every student will be assigned to one stakeholder group. For the position paper, you will have to read and use material from **at least four peer reviewed sources and two other sources** on your stakeholder list of resources.

### ***Brazil nut harvester***

**Highlighted reading:** Evans, Monica. 12 Sept 2017. "[Are Brazil nuts the saviors of the Amazon Basin?](#)" CGIAR Research Program on Forests, Trees and Agroforestry. *Short popular press article summarizing findings from Guariguata et al. study published in 2017 (below).*

#### Overview:

- Salo, M. Sirén, A. and Kalliola, R. 2013. "Chapter 8 – Collect Locally, Eat Globally – The Journey of the Brazil Nut." *Diagnosing Wild Species Harvest. Resource Use and Conservation*: 143-160.
- Guariguata, M.R., Cronkleton, P., Duchelle, A.E. et al. 2017. "Revisiting the 'cornerstone of Amazonian conservation': a socioecological assessment of Brazil nut exploitation." *Biodiversity and Conservation* 26: 2007–2027. *Peer reviewed source.*
- On the possibility of brazil nut harvesting matching or exceeding the economic returns of informal mining:  
Fisher, J. Arora, P, and Rhee, Sp. 2018. "Conserving Tropical Forests: Can Sustainable Livelihoods Outperform Artisanal or Informal Mining?," *Sustainability* 10(8): 2586. *Peer reviewed source.*

#### On compatibility of brazil nut harvesting and forest carbon projects (REDD+):

- Two links that concisely explain what is REDD+:  
World Bank's Forest Carbon Partnership: [What is REDD+?](#)  
UN-REDD Programme: [About REDD+](#)
- CIFOR's 2014 Case Report on *Bosques Amazónicos'* REDD+ project in Brazil nut concessions in Madre de Dios: "[The REDD Project in Brazil Nut Concessions in Madre de Dios, Peru.](#)"
- Fulbright scholar Ben Block's [blog post](#) providing a critical assessment of Brazil nut harvesters' experiences in *Bosques Amazónicos'* REDD+ project in Madre de Dios.

#### On compatibility of Brazil nut harvesting and timber harvesting:

- Moncrieff, Virginia. 21 Sept 2015. "[For Brazil nuts, a little logging may go a long way.](#)" CIFOR Forest News.
- Rockwell CA, et al. 2015. "Nut Production in *Bertholletia excelsa* across a Logged Forest Mosaic: Implications for Multiple Forest Use." *PLoS ONE* 10(8):e0135464. *Peer reviewed source.*

***Ese'ija indigenous community member & FENAMAD leader***

**Highlighted reading:** Fraser, Barbara. 22 Jan 2015. "[Indigenous territories play dual role as homelands and protected areas](#)," Mongabay.

### Overview/Context:

- Borrini, G., Kothari, A., and Oviedo, G. *Indigenous and local communities and protected areas: towards equity and enhanced conservation*. IUCN, World Commission on Protected Areas. Best Practice Protected Area Guidelines Series No. 11. Available at: <https://portals.iucn.org/library/node/8549>
- Redford, K. H. 1996. "Getting to Conservation", In K.H. Redford & J.A. Mansour, eds., *Traditional Peoples and Biodiversity Conservation in Large Tropical Landscapes*, Arlington: The Nature Conservancy.
- [FENAMAD Facebook page](#) [IN SPANISH ONLY]

### On indigenous lands and forest protection:

- Blackman, A. Corral, L. Santos Lima, E. et al. 2017. "Titling indigenous communities protects forests in the Peruvian Amazon," *PNAS* 114(16): 4123-4128. *Peer reviewed source*.
- Popular press summary of Asner et al. 2017's peer reviewed study (below) on effectiveness of indigenous lands (and other protected area/concession types) on the protection of many forest types:  
Cannon, J. C. 05 May 2017. "[Indigenous lands 'critical' to forest protection in Peru, biodiversity maps show](#)," Mongabay.
- Asner, G. P., Martin, R. E., Tupayachi, R., Lactayo, W. 2016. "Conservation assessment of the Peruvian Andes and Amazon based on mapped forest functional diversity," *Biological Conservation* 210, Part A: 80-88. *Peer reviewed source*.
- On the effectiveness of Indigenous Territories to prevent deforestation:  
Schleicher, J. Peres, C. A., Amano, T., et al. 2017. "Conservation performance of different conservation governance regimes in the Peruvian Amazon." *Nature Scientific Reports* 7: Article number 11318. *Peer reviewed source*.

### Effects of Deforestation:

- Cannon, J. C. 23 Oct 2019. "[Malaria surges in deforested parts of the Amazon, study finds](#)," Mongabay.
- Sanchez, JF, Carnero, AM, Rivera, E. et al. 2017. "Unstable Malaria Transmission in the Southern Peruvian Amazon and Its Association with Gold Mining, Madre de Dios, 2001-2012," *An J Trop Med Hyg* 96 (2): 304-211. *Peer reviewed source*.

### On indigenous territories and tourism:

- Study that shows low effectiveness of indigenous communities in Madre de Dios on defor protection but high effectiveness for ecotourism concessions:  
Vuohelainen, A. J., Coad, L. Marthews, T.R. et al. 2012. "The Effectiveness of Contrasting Protected Areas in Preventing Deforestation in Madre de Dios, Peru," *Environmental Management* 50:645-663. *Peer reviewed source*.

### On the fight against resource extraction and other land uses on or near indigenous lands:

- John, B. 7 May 2019. "[Voices on the road,](#)" *The Ecologist*.
- PBS 8-minute series on the current day mining challenge in Madre de Dios
  - <https://www.pbs.org/newshour/show/gold-mining-leaves-heart-of-peruvian-amazon-a-wasteland>
  - <https://www.pbs.org/newshour/show/peru-looks-for-reforms-after-mining-decimates-the-amazon>
- 4-minute audio interview. 10 Sept 2014. "[Illegal Loggers Suspected in Death of Peruvian \[Indigenous\] Activist,](#)" *All Things Considered*.
- 21 Sept. 2014. "[Peru creates new anti-illegal logging commission after murders,](#)" BBC News.
- Fraser, B. 01 Mar 2016. "[The African palm oil frontier expands deeper into the Peruvian Amazon, impacting indigenous communities territories,](#)" Mongabay.
- Gallice, G., Larrea\_Gallegos, G. Vázquez-Rowe, I. 2019. "The threat of road expansion in the Peruvian Amazon," *Oryx* 53(2): 284-292. *Peer reviewed source*.

### On indigenous territories and REDD+:

- Two links that concisely explain what is REDD+:  
World Bank's Forest Carbon Partnership: [What is REDD+?](#)  
UN-REDD Programme: [About REDD+](#)
- Rodriguez-Ward, D., Larson, A.M. & Ruesta, H.G. 2018. "Top-down, Bottom-up and Sideways: The Multilayered Complexities of Multi-level Actors Shaping Forest Governance and REDD+ Arrangements in Madre de Dios, Peru." *Environmental Management* 62: 98–116. *Peer reviewed source*.
- Collyns, D. 6 Oct 2016. "[Peru's REDD+ conservation efforts paying off,](#)" Mongabay.
- 30 Nov 2011. "[Carbon piracy, lack of recognition of indigenous rights undermining REDD in Peru, alleges report,](#)" Mongabay.

-  
**Colonist farmer**

**Highlighted reading:** Marquette, C.M. 2006. "Settler Welfare on Tropical Forest Frontiers in Latin America," *Popul Environ* 27: 397–444. *Peer reviewed source.*

#### Overview:

- Socioeconomic data for smallholders in Madre de Dios and the determinants of and contributors to their income generation:  
Oliveira, A.S., Soares-Filho, B. S., Costa, M. A., et al. 2019. "Bringing economic development for whom? An exploratory study of the impact of the Interoceanic Highway on the livelihood of smallholders in the Amazon," *Landscape and Urban Planning* (188): 171-179. *Peer reviewed source.*
- On the experience of a colonist farmer:  
Schjellerup, I. 2000. "La Morada, A Case Study on the Impact of Human Pressure on the Environment in the Ceja de Selva, Northeastern Peru", *AMBIO: A Journal of the Human Environment* 29 (7):451-454. *Peer reviewed source.*

#### On agroforestry:

- Perz, Stephen G. 2004. "Are Agricultural Production and Forest Conservation Compatible? Agricultural Diversity, Agricultural Incomes and Primary Forest Cover Among Small Farm Colonists in the Amazon," *World Development* 32 (6): 957-977. *Peer reviewed source.*
- On agroforestry in the buffer zone of Tambopata: Ferrari, N. "[Restoring the Peruvian Amazon, One of the Most Ecologically Valuable Forests in the World](#)," Mongabay.
- On ICRAF and agroforestry with smallholders: [ICRAF in Peru: putting down roots on Amazonia.](#)

#### On certified organic cacao:

- Viteri Salazar, O., Ramón-Martín, J, and Lomas, P. 2018. "Livelihood sustainability assessment of coffee and cacao producers in the Amazon region of Ecuador using household types," *Journal of Rural Studies* 62:1-9. *Peer reviewed source.*
- Emenius, C. 2012. "Livelihood and Transition to Certified Cacao Production in the Peruvian Amazonas," Master's thesis.
- Schroth, G., & Harvey, C. A. 2007. "Biodiversity conservation in cocoa production landscapes: An overview," *Biodiversity and Conservation*, 16(8): 2237–2244. *Peer reviewed source.*

#### On REDD+ and smallholders:

- Two links that concisely explain what is REDD+:  
World Bank's Forest Carbon Partnership: [What is REDD+?](#)  
UN-REDD Programme: [About REDD+](#)
- Chomba, S. Kariuki, J. et al. 2016. "Roots of inequity: How the implementation of REDD+ reinforces past injustices," *Land Use Policy* 50: 2020-213. *Peer reviewed source.*
- Ranmig. 4 Mar 2020. "[Tropical carbon sinks are saturating at different times on different continents,](#)" News and Views. *Nature.*
- Pokorny, B., Scholz, I., & De Jong, W. 2013. "REDD for the poor or the poor for REDD ? About the limitations of environmental policies in the Amazon and the potential of achieving environmental goals through pro-poor policies." *Ecology and Society*, 18(2). *Peer reviewed source.*
- Lang, Chris. 26 April 2013. [Federation of small farmers in Peru attacks REDD: "No REDD projects! No carbon trading!"](#). *Redd-monitor.org*

#### **Other non-peer reviewed sources:**

- Tambopata-specific report on mining and agriculture [*choose the section of this report that is most pertinent to your stakeholder*]: Pineiro, Valeria and Thomas, Jenny and Elverdin, Pabl. 09 Dec. 2016. "The Agricultural Sector as an Alternative to Illegal Mining in Peru: A Case Study of Madre de Dios," IFPRI Discussion Paper No. 1582.
- "Technology Adoption by Colonist Farmers in the Tropical Forest Margins of Peru: An Inherent Environmental-Economic Tradeoff," Douglas White, Ricardo Labarta and Wagner Guzman. *Centro Internacional de Agricultura Tropical - CIAT, International Centre for Research on Agroforestry - ICRAF El Centro Eco-Regional A.P. 558 Pucallpa, Peru*

#### **Leader of FADEMAD**

**Highlighted reading:** Perz, Stephen G. 2004. "Are Agricultural Production and Forest Conservation Compatible? Agricultural Diversity, Agricultural Incomes and Primary Forest Cover Among Small Farm Colonists in the Amazon," *World Development* 32 (6): 957-977. *Peer reviewed source.*

#### **Overview:**

- Socioeconomic data for smallholders in Madre de Dios and the determinants of and contributors to their income generation:  
Oliveira, A.S., Soares-Filho, B. S., Costa, M. A., et al. 2019. "Bringing economic development for whom? An exploratory study of the impact of the Interoceanic

Highway on the livelihood of smallholders in the Amazon," *Landscape and Urban Planning* (188): 171-179. *Peer reviewed source.*

- On the experience of a colonist farmer:  
Schjellerup, I. 2000. "La Morada, A Case Study on the Impact of Human Pressure on the Environment in the Ceja de Selva, Northeastern Peru", *AMBIO: A Journal of the Human Environment* 29 (7):451-454. *Peer reviewed source.*
- Murphy, Laura L 2001. "Colonist farm income, off-farm work, cattle, and differentiation in Ecuador's northern Amazon," *Human Organization* 60 (1). *Peer reviewed source.*
- Naughton-Treves, Lisa, et al. 2003. "Wildlife survival beyond park boundaries: the impact of slash-and-burn agriculture and hunting on mammals in Tambopata, Peru," *Conservation Biology* 17.4: 1106-1117. *Peer reviewed source.*
- On the possibility of fish farming and brazil nut harvesting matching or exceeding the economic returns of informal mining:  
Fisher, J. Arora, P, and Rhee, Sp. 2018. "Conserving Tropical Forests: Can Sustainable Livelihoods Outperform Artisanal or Informal Mining?," *Sustainability* 10(8): 2586. *Peer reviewed source.*
- L.H.O. Wadta, K.A. Kainerb, C.L. Staudhammerb, R.O.P. Serranod, 2008. "Sustainable forest use in Brazilian extractive reserves: Natural regeneration of Brazil nut in exploited populations," *Biological Conservation* 141(2008) pp. 332-346. *Peer reviewed source.*
- Marquette, C.M. 2006. "Settler Welfare on Tropical Forest Frontiers in Latin America," *Popul Environ* 27: 397-444. *Peer reviewed source.*
- Smith, J., van de Kop, P., Reategui, K. et al. 1999. "Dynamics of secondary forests in slash-and-burn farming: Interactions among land use types in the Peruvian Amazon.," *Agriculture, Ecosystems and Environment* 76 (2-3): 85-98. *Peer reviewed source.*

#### **On agroforestry:**

- Perz, Stephen G. 2004. "[Are Agricultural Production and Forest Conservation Compatible? Agricultural Diversity, Agricultural Incomes and Primary Forest Cover Among Small Farm Colonists in the Amazon,](#)" *World Development* 32 (6): 957-977. *Peer reviewed source.*
- On agroforestry in the buffer zone of Tambopata: Ferrari, N. "[Restoring the Peruvian Amazon, One of the Most Ecologically Valuable Forests in the World,](#)" World Resources Institute.
- On ICRAF and agroforestry with smallholders: [ICRAF in Peru: putting down roots on Amazonia.](#)

#### **On certified organic cacao:**

- Viteri Salazar, O., Ramón-Martín, J, and Lomas, P. 2018. "Livelihood sustainability assessment of coffee and cacao producers in the Amazon region of Ecuador using household types," *Journal of Rural Studies* 62:1-9. *Peer reviewed source.*
- Emenius, C. 2012. "Livelihood and Transition to Certified Cacao Production in the Peruvian Amazonas," Master's thesis.
- Schroth, G., & Harvey, C. A. 2007. "Biodiversity conservation in cocoa production landscapes: An overview (Links to an external site.)," *Biodiversity and Conservation*, 16(8): 2237–2244. *Peer reviewed source.*

#### **On the fight against excessive resource extraction and other land uses:**

- John, B. 7 May 2019. "Voices on the road," *The Ecologist*.
- PBS 8-minute series on the current day mining challenge in Madre de Dios
  - <https://www.pbs.org/newshour/show/gold-mining-leaves-heart-of-peruvian-amazon-a-wasteland>
  - <https://www.pbs.org/newshour/show/peru-looks-for-reforms-after-mining-decimates-the-amazon>
- 4-minute audio interview. 10 Sept 2014. "Illegal Loggers Suspected in Death of Peruvian [Indigenous] Activist," *All Things Considered*.
- 21 Sept. 2014. "Peru creates new anti-illegal logging commission after murders," BBC News.
- Fraser, B. 01 Mar 2016. "The African palm oil frontier expands deeper into the Peruvian Amazon, impacting indigenous communities territories," Mongabay.
- Gallice, G., Larrea\_Gallegos, G. Vázquez-Rowe, I. 2019. "The threat of road expansion in the Peruvian Amazon," *Oryx* 53(2): 284-292. *Peer reviewed source.*
- "Peru's gold rush sparks fears of ecological disaster", BBC News. *Published: 2009/12/20 12:00:59 GMT.*
- Vidal, J. 13 Jun 2009. "We are fighting for our lives and our dignity," *The Guardian*.

#### **On REDD+ and smallholders:**

- Two links that concisely explain what is REDD+:  
World Bank's Forest Carbon Partnership: [What is REDD+?](#)  
UN-REDD Programme: [About REDD+](#)
- Chomba, S. Kariuki, J. et al. 2016. "Roots of inequity: How the implementation of REDD+ reinforces past injustices," *Land Use Policy* 50: 2020-213. *Peer reviewed source.*
- Ranmig. 4 Mar 2020. "Tropical carbon sinks are saturating at different times on different continents," News and Views. *Nature*.



- Pokorny, B., Scholz, I., & De Jong, W. 2013. "REDD for the poor or the poor for REDD ? About the limitations of environmental policies in the Amazon and the potential of achieving environmental goals through pro-poor policies." *Ecology and Society*, 18(2). *Peer reviewed source.*
- Lang, Chris. 26 April 2013. [Federation of small farmers in Peru attacks REDD: "No REDD projects! No carbon trading!"](#). *Redd-monitor.org*
- *Bosques Amazónicos'* [REDD+ project in Brazil nut concessions](#) in Madre de Dios.
- CIFOR's 2014 Case Report on *Bosques Amazónicos'* REDD+ project in Brazil nut concessions in Madre de Dios: "[The REDD Project in Brazil Nut Concessions in Madre de Dios, Peru.](#)"
- Fulbright scholar Ben Block's [blog post](#) providing a critical assessment of Brazil nut harvesters' experiences in *Bosques Amazónicos'* REDD+ project in Madre de Dios.

#### **Misc. other peer-reviewed sources:**

- Study that shows low effectiveness of indigenous communities in Madre de Dios on defor protection but high effectiveness for ecotourism concessions:  
Vuohelainen, A. J., Coad, L. Marthews, T.R. et al. 2012. "The Effectiveness of Contrasting Protected Areas in Preventing Deforestation in Madre de Dios, Peru," *Environmental Management* 50:645-663. *Peer reviewed source.*

#### **Other non-peer reviewed sources:**

- Resources from Conservation X Labs' [Artisanal Mining Grande Challenge](#).
- "[Peru: Artisanal Gold Mining \(ASGM\) Remediation Planning](#)," *Pure Earth*.
- Tambopata-specific report on mining and agriculture [*choose the section of this report that is most pertinent to your stakeholder*]: Pineiro, Valeria and Thomas, Jenny and Elverdin, Pabl. 09 Dec. 2016. "The Agricultural Sector as an Alternative to Illegal Mining in Peru: A Case Study of Madre de Dios." IFPRI Discussion Paper No. 1582.
- "Technology Adoption by Colonist Farmers in the Tropical Forest Margins of Peru: An Inherent Environmental-Economic Tradeoff," Douglas White, Ricardo Labarta and Wagner Guzman. *Centro Internacional de Agricultura Tropical - CIAT, International Centre for Research on Agroforestry - ICRAF El Centro Eco-Regional A.P. 558 Pucallpa, Peru.*

#### **Co-founder of Rainforest Expeditions**

**Highlighted readings:** Overview: Stronza, A. Junt, C. and Fitzgerald, L. 2019. "Ecotourism for Conservation?," *Annual Review of Environment and Resources* 44:229-253. *Peer reviewed source.*

**AND**

[Video interview with conservation biologist Christopher Kirkby](#) on the challenge and benefits of ecotourism in Tambopata.

**On the profitability of ecotourism vs. other land uses in Tambopata:**

- Kirkby, C. A., Giudice-Granados, R., Day, B., et al. 2010. "The Market Triumph of Ecotourism: An Economic Investigation of the Private and Social Benefits of Competing Land Uses in the Peruvian Amazon," *PLoS ONE* 5(9): E13015. *Peer reviewed source.*
- Kirkby, C. A., Guidice, R., Day, B. et al. 2011. "Closing the eco-tourism-conservation loop in the Peruvian Amazon," *Environmental Conservation* (38) 1: 6-17. *Peer reviewed source.*

**On ecotourism and forest and biodiversity protection:**

- Study that shows high effectiveness of ecotourism concessions in Madre de Dios on protection against defor compared to other protection types:  
Vuohelainen, A. J., Coad, L. Marthews, T.R. et al. 2012. "The Effectiveness of Contrasting Protected Areas in Preventing Deforestation in Madre de Dios, Peru," *Environmental Management* 50:645-663. *Peer reviewed source.*
- Stronza, A. Junt, C. and Fitzgerald, L. 2019. "Ecotourism for Conservation?," *Annual Review of Environment and Resources* 44: 229-253. *Peer reviewed source.*
- "[About the Giant River Otter](#)," Rainforest Expeditions.
- Recharte, M. , Bride, I., and Bowler, M. 2015. "A recovering flagship: giant otters, communities and tourism in northern Peru," *Wildlife Research* 41(6): 490-498. *Peer reviewed source.*

**On ecotourism and the community:**

- Stronza, A. and Gordillo, J. 2008. "Community views of ecotourism," *Annals of Tourism Research* 35 (2): 448-469. *Peer reviewed source.*
- Stronza, A. and Pêgas, F. 2008. "Ecotourism and Conservation: Two Cases from Brazil and Peru," *Human Dimensions of Wildlife* 13:4, 263-279. *Peer reviewed source.*
- For historical context:  
Honey, M. 1999. "Treading lightly? Ecotourism's impact on the environment," *Environment* 41(5): 4-9. *Peer reviewed source.*

### On tourism and indigenous territories:

- “Rumble in the Jungle: Ecotourism in Peru,” *The Economist*, April 12, 2008, Volume 387, Number 8575, pg. 42-43.
- Study that shows high effectiveness of ecotourism concessions in Madre de Dios on deforestation protection but low effectiveness of indigenous communities:  
Vuohelainen, A. J., Coad, L. Marthews, T.R. et al. 2012. “The Effectiveness of Contrasting Protected Areas in Preventing Deforestation in Madre de Dios, Peru,” *Environmental Management* 50:645-663. *Peer reviewed source*.

### Wildlife ecologist

**Highlighted reading:** Gibson, Luke, et al. 2011. "Primary forests are irreplaceable for sustaining tropical biodiversity." *Nature* 478.7369: 378-381. *Peer reviewed source*.

### Overview:

- Barlow, Jos, et al. 2016. "Anthropogenic disturbance in tropical forests can double biodiversity loss from deforestation." *Nature* 535.7610: 144. *Peer reviewed source*.
- Peres, Carlos A. 2005. "Why we need megareserves in Amazonia," *Conservation Biology* 19.3 (2005): 728-733. *Peer reviewed source*.
- Martínez-Ramos, M., Pingarrón, A., Rodríguez-Velázquez, J., Toledo-Chelala, L., Zermeno-Hernández, I., & Bongers, F. 2016. "Natural forest regeneration and ecological restoration in human-modified tropical landscapes," *Biotropica*, 48(6): 745–757. *Peer reviewed source*.

### Specific to Peruvian Amazon:

- [“About the Giant River Otter,”](#) Rainforest Expeditions.
- Naughton-Treves, Lisa, et al. 2003. "Wildlife survival beyond park boundaries: the impact of slash-and-burn agriculture and hunting on mammals in Tambopata, Peru," *Conservation Biology* 17.4: 1106-1117. *Peer reviewed source*.
- On the importance of wetland habitats for both otters and drinking water:  
Householder, J. Ethan, et al. 2012. "Peatlands of the Madre de Dios River of Peru: distribution, geomorphology, and habitat diversity," *Wetlands* 32.2: 359-368. *Peer reviewed source*.
- About the wild aguaje palm (important giant river otter habitat; different from oil palm):  
Manzi, Maya, and Oliver T. Coomes. 2009. "Managing Amazonian [wild] palms for

community use: a case of aguaje palm (*Mauritia flexuosa*) in Peru," *Forest Ecology and Management* 257.2: 510-517. *Peer reviewed source*.

- Ashe K (2012) Elevated Mercury Concentrations in Humans of Madre de Dios, Peru. PLoS ONE 7(3): e33305. *Peer reviewed source*.
- Asner, G. and Tupayachi, R. 2017. "Accelerated losses of protected forests from gold mining in the Peruvian Amazon," *Environmental Research Letters* 12 (9).
- Vuohelainen, A. J., Coad, L. Marthews, T.R. et al. 2012. "The Effectiveness of Contrasting Protected Areas in Preventing Deforestation in Madre de Dios, Peru," *Environmental Management* 50:645-663. *Peer reviewed source*.
- Recharte, M. , Bride, I., and Bowler, M. 2015. "A recovering flagship: giant otters, communities and tourism in northern Peru," *Wildlife Research* 41(6): 490-498. *Peer reviewed source*.
- Mayor, Pedro, et al. "Effects of selective logging on large mammal populations in a remote indigenous territory in the northern Peruvian Amazon," *Ecology and Society* 20 (4): 36. *Peer reviewed source*.
- Gallice, G., Larrea\_Gallegos, G. Vázquez-Rowe, I. 2019. "The threat of road expansion in the Peruvian Amazon," *Oryx* 53(2): 284-292. *Peer reviewed source*.

#### **On forest carbon projects (REDD+):**

- Two links that concisely explain what is REDD+:  
World Bank's Forest Carbon Partnership: [What is REDD+?](#)  
UN-REDD Programme: [About REDD+](#)
- *Bosques Amazónicos'* [REDD+ project in Brazil nut concessions](#) in Madre de Dios.
- Ranmig. 4 Mar 2020. "[Tropical carbon sinks are saturating at different times on different continents](#)," News and Views. *Nature*.
- CIFOR's 2014 Case Report on *Bosques Amazónicos'* REDD+ project in Brazil nut concessions in Madre de Dios: "[The REDD Project in Brazil Nut Concessions in Madre de Dios, Peru.](#)"

#### **Owner of Peruvian logging company 'Madera Grande' [Big Timber]**

**Highlighted reading(s):** a set of 3 articles responding to each other:

- Putz et. al. 2012. "Sustaining conservation values in selectively logged tropical forests: the attained and the attainable," *Conservation Letters* 5:296-303. *Peer reviewed source*

- Kormos, C. and Zimmerman, B. 2014. "Response to: Putz et al., Sustaining Conservation Values in Selectively Logged Tropical Forests: The Attained and the Attainable," *Conservation Letters* 7(2): 143-144. *Peer reviewed source*
- Putz, et al. 2014 "A More Realistic Portrayal of Tropical Forestry: Response to Kormos and Zimmerman," *Conservation Letters* 7(2): 145-146. *Peer reviewed source*

**Overview:**

- Putzel, Louis, Charles M. Peters, and Mónica Romo. 2011. "Post-logging regeneration and recruitment of shihuahuaco (*Dipteryx* spp.) in Peruvian Amazonia: Implications for management." *Forest ecology and management*6: 1099-1105. *Peer reviewed source*.
- Goodman, Rosa C., et al. 2019. "Carbon emissions and potential emissions reductions from low-intensity selective logging in southwestern Amazonia." *Forest Ecology and Management* 439: 18-27. *Peer reviewed source*.
- Putz, Francis E., and Claudia Romero. 2015. [Futures of tropical production forests](#). CIFOR Paper, Vol. 143.
- Tobler, Mathias W., et al. 2018. "Do responsibly managed logging concessions adequately protect jaguars and other large and medium-sized mammals? Two case studies from Guatemala and Peru." *Biological Conservation* 220: 245-253. *Peer reviewed source*.
- Naughton-Treves, L. 2004. "Deforestation and Carbon Emissions at Tropical Frontiers: A Case Study from the Peruvian Amazon," *World Development* Vol. 32 (1): 173-190. *Peer reviewed source*.
- Ranmig. 4 Mar 2020. "[Tropical carbon sinks are saturating at different times on different continents](#)," News and Views. *Nature*.

**Sustainable/selective logging by brazil nut harvesters and/or indigenous communities:**

- Video on harvesting brazil nuts and selective, low-impact logging in Peru. CIFOR. 2015: [Brazil nuts and selective logging](#)
- Moncrieff, Virginia. 21 Sept 2015. "[For Brazil nuts, a little logging may go a long way.](#)" CIFOR Forest News.
- Rockwell CA, et al. 2015. "Nut Production in *Bertholletia excelsa* across a Logged Forest Mosaic: Implications for Multiple Forest Use. *PLoS ONE* 10(8):e0135464. *Peer reviewed source*.
- Zwick, S. 29 Nov 2018. "[Can Sustainable Logging Help Save An Indigenous Way of Life?](#)," Ecosystem Marketplace.

**Loggers and communities:**

- Medina, G., Benno Pokorny and Bruce Campbell 2009. "Loggers, Development Agents and the Exercise of Power in Amazonia," *Development and Change* 40 (4):745-767. *Peer reviewed source*.
- 31 Oct 2019. "['Unprecedented' murder charges for loggers in deaths of indigenous activists](#)," *The Guardian*.

### **Gold miner and Leader of Mining Federation (FEDEMIN)**

**Highlighted reading:** Salo, Matti, et al. 2016. "Local perspectives on the formalization of artisanal and small-scale mining in the Madre de Dios gold fields, Peru," *The Extractive Industries and Society* 3.4: 1058-1066. *Peer reviewed source*.

#### **Overview:**

- Cortés-McPherson, Dolores. 2019. "Expansion of small-scale gold mining in Madre de Dios: 'capital interests' and the emergence of a new elite of entrepreneurs in the Peruvian Amazon." *The Extractive Industries and Society* 2: 382-389. *Peer reviewed source*.
- Duff, P., and Downs, T. 2019. "Frontline narratives on sustainable development challenges/opportunities in the 'illegal' gold mining region of *Madre de Dios*, Peru: Informing an integrative collaborative response," *The Extractive Industries and Society* 6 (2): 552-561. *Peer reviewed source*.
- Veiga, Marcello M., Gustavo Angeloci-Santos, and John A. Meech. 2014. "Review of barriers to reduce mercury use in artisanal gold mining," *The Extractive Industries and Society* 2: 351-361. *Peer reviewed source*.
- Veiga, Marcello M., et al. 2015. "Reducing mercury pollution by training Peruvian artisanal gold miners." *Journal of Cleaner Production* 94: 268-277. *Peer reviewed source*.
- Román-Dañobeytia, Francisco, et al. 2015. "Reforestation with four native tree species after abandoned gold mining in the Peruvian Amazon," *Ecological Engineering* 85: 39-46. *Peer reviewed source*.

#### **Other non-peer reviewed sources:**

- Resources from Conservation X Labs' [Artisanal Mining Grande Challenge](#).
- "[Peru: Artisanal Gold Mining \(ASGM\) Remediation Planning](#)," *Pure Earth*.
- Tambopata-specific report on mining and agriculture [*choose the section of this report that is most pertinent to your stakeholder*]: Pineiro, Valeria and Thomas, Jenny and Elverdin, Pabl. 09 Dec. 2016. "The Agricultural Sector as an Alternative to Illegal Mining in Peru: A Case Study of Madre de Dios." IFPRI Discussion Paper No. 1582.

- John, B. 7 May 2019. "[Voices on the road,](#)" *The Ecologist*.
- PBS 8-minute series on the current day mining challenge in Madre de Dios
  - <https://www.pbs.org/newshour/show/gold-mining-leaves-heart-of-peruvian-amazon-a-wasteland>
  - <https://www.pbs.org/newshour/show/peru-looks-for-reforms-after-mining-decimates-the-amazon>
- Boyd, S. 28 Oct 2013. "Who's To Blame For Peru's Gold-Mining Troubles?" *The New Yorker*.
- "Threat of Mercury Poisoning Rises With Gold Mining Boom," Siegel, Shefa. *Yale Environment 360* - POSTED ON 03 JAN 2011.
- [Illegal gold miners riot in Peru](#). FRANK BAJAK. *AP English Worldstream - English*, 03/14/2012.
- Information from the United States' Environmental Protection Agency on [Artisanal and Small-Scale Gold Mining Without Mercury](#).
- "A Guide to Gold Mining Machinery used in Tambopata - from small-scale to semi-industrial," N. Alvarez, citing original source: Mosquera, C. Chávez, M. Pachas, H., Moschella. P. 2009. *Diagnosis of Artisanal Mining Activities in Madre de Dios. Conservation International, Perú*.
- Small scale gold mining and social and environmental conflict in the Peruvian Amazon, Gerardo Damonte et al. in *Small Scale Gold Mining in the Amazon: The Cases of Bolivia, Brazil, Columbia, Peru and Suriname*.
- Koebler, Jason. 04 Mar 2014. "[Peru Thinks 'Ethical Gold' Can End the Misery of Amazonian Mining](#)." Vice.com
- Mullady, Michael. 10 August, 2014. "[Peru's New Cocaine.](#)" Vice.com
- 2016. "[Mining in Latin America. From conflict to co-operation.](#)" *The Economist*. 6 Feb.

### ***Development officer for Peruvian oil palm company***

**Highlighted reading:** Bennett, Aoife, et al. 2019. "Smallholder oil palm production in the Peruvian Amazon: rethinking the promise of associations and partnerships for economically sustainable livelihoods." *Frontiers in Forests and Global Change*. Peer reviewed source.

### **Overview:**

- Furumo, Paul Richard, and T. Mitchell Aide. 2017. "Characterizing commercial oil palm expansion in Latin America: land use change and trade," *Environmental Research Letters* 2: 024008. Peer reviewed source.

- Gibbs, Holly K., et al. 2008 "Carbon payback times for crop-based biofuel expansion in the tropics: the effects of changing yield and technology," *Environmental Research Letters* 3: 034001. *Peer reviewed source*.
- Summary of the Gibbs et al paper on carbon payback times (peer-reviewed publication above): <https://news.mongabay.com/2008/07/biofuels-can-reduce-emissions-but-not-when-grown-in-place-of-rainforests/>
- 4-minute video by United Nations. 2009. [Palm Oil: Sustainable Crops in Peru.](#)

#### **On the impact of oil palm on deforestation/forest protection:**

- Bennett, Aoife, Ashwin Ravikumar, and Homero Paltán. 2018. "The Political Ecology of Oil Palm Company-Community partnerships in the Peruvian Amazon: Deforestation consequences of the privatization of rural development." *World Development* 109: 29-41. *Peer reviewed source*.
- Gutiérrez-Vélez, Víctor H., et al. 2011. "High-yield oil palm expansion spares land at the expense of forests in the Peruvian Amazon." *Environmental Research Letters* 4: 044029. *Peer reviewed source*.
- Koh, Lian Pin, and David S. Wilcove. 2008. "Is oil palm agriculture really destroying tropical biodiversity?," *Conservation Letters* 2: 60-64. *Peer reviewed source*.

#### **On the possibility of sustainable palm oil production:**

- Tan, K. T., et al. 2009. "Palm oil: addressing issues and towards sustainable development," *Renewable and Sustainable Energy Reviews* 2: 420-427. *Peer reviewed source*.
- ["What is \[Certified\] Sustainable Palm Oil?"](#) Green Palm Sustainability.
- Grupo Palmas (a Peruvian Company) explanation of how they meet their pledge to produce Palm Oil sustainably: [https://www.palmas.com.pe/politica\\_sostenibilidad](https://www.palmas.com.pe/politica_sostenibilidad)
- Video: Explanation of how smallholders oil palm certification can be certified , produced by the Roundtable on Sustainable Palm Oil (RSPO): <https://rspo.org/smallholders>
- Explanation by an international research organization (CIFOR) on how to make oil palm less environmentally destructive and more pro-poor: <https://forestsnews.cifor.org/56109/oil-palm-for-the-people?fnl=en>



## Geog 5402: Land-Use Geography

Dr. Darla Munroe; Derby 1036

TA: Brookes Hammock, Derby 1083

Office hours: T/Th 2:30 – 4:00 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 they may need an accommodation based on the impact of a disability should contact me privately to discuss their specific needs. Please contact the Student Life Disability Services at 614-292-3307 in room 098 Baker Hall to coordinate reasonable accommodations for 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 individually research one land-use problem throughout the semester culminating in a presentation.

### **Course evaluation, percent**

<b>In-class assignments</b>	3 each	30
<b>Responses to the readings</b>	2 each	20
<b>Exams</b>		
Midterm, October 17	15	30
Final, December 10	15	
<b>Land-Use Project</b>		20
Proposal	5	
PechaKucha	10	
Peer reviews	5	
<b>Total</b>		<b>100</b>

### **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 land-use project, 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 in a zip file on the Carmen Modules page. You must submit short (~200) reactions to the readings before 3 pm each Tuesday (except for Thursday in Week 1). One reaction grade will be dropped.

*Class participation:* Students are expected to complete every assigned reading BEFORE we cover the topic in class.

*In-class assignments:* On most Thursdays, we will have some sort of discussion or group work. You need to be present and prepared, and you should participate to the best of your abilities. One ICA grade will be dropped. There are no make-ups for missed ICAs.

*Exams:* There are two exams (a midterm and a final). These exams 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:* Students will sign up on Carmen for a land-use topic that they will investigate individually, culminating in a presentation toward the end of the semester.

- Proposal – finding original, peer-reviewed research on the topic and critically reviewing
- PechaKucha – a 6:40 minute presentation that will be recorded and uploaded to Carmen
- Peer reviews – students will watch and review 4 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

<https://trustees.osu.edu/sites/default/files/migrated/assets/files/RuleBook/CodeStudentConduct.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** (all readings can be found on Carmen in one zip file)

- Alonso, W. (1960). A theory of the urban land market. *Papers and Proceedings of the Regional Science Association*, 6(1), 149-157.
- Burgis, T. (n.d.). The Great Land Rush: The billionaire's farm in Ethiopia. Retrieved August 19, 2019, from <https://ig.ft.com/sites/land-rush-investment/ethiopia/>
- Davis, J., & Lopez-Carr, D. (2014). Migration, remittances and smallholder decision-making: implications for land use and livelihood change in Central America. *Land Use Policy*, 36, 319-329.
- 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. doi:<http://dx.doi.org/10.1016/j.foreco.2008.07.036>
- Foley, J. A., DeFries, R., Asner, G. P., Barford, C., Bonan, G., Carpenter, S. R., . . . Snyder, P. K. (2005). Global Consequences of Land Use. *Science*, 309(5734), 570.
- Gallaher, C. (2016). Placing the Militia Occupation of the Malheur National Wildlife Refuge in Harney County, Oregon. *ACME: An International Journal for Critical Geographies*, 15(2), 293-308.
- Hayter, R., Barnes, T. J., & Bradshaw, M. J. (2003). Relocating resource peripheries to the core of economic geography's theorizing: rationale and agenda. *Area*, 35(1), 15-23.
- Irwin, E. G. (2002). The effects of open space on residential property values. *Land Economics*, 78(4), 465-480.
- 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. doi:10.1073/pnas.1100480108
- 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. doi:10.1002/esp.1715
- Munroe, D. K., Gallemore, C., & Van Berkel, D. (2017). Hot-tub cabin rentals and forest tourism in Hocking County, Ohio. *Revue économique*, 68(3), 491-510.
- Radel, C., Jokisch, B. D., Schmook, B., Carte, L., Aguilar-Støen, M., Hermans, K., ... & Aldrich, S. (2019). Migration as a feature of land system transitions. *Current Opinion in Environmental Sustainability*, 38, 103-110.
- Sikor, T., Auld, G., Bebbington, A. J., Benjaminsen, T. A., Gentry, B. S., Hunsberger, C., . . . Schroeder, H. (2013). Global land governance: from territory to flow? *Current Opinion in Environmental Sustainability*, 5(5), 522-527.

**Schedule** (subject to change)

Week	Date	Day	Topic	Reading	Due
1	20-Aug	Tue	Introduction		
	22-Aug	Thurs	Land-use trends	Foley et al.	
2	27-Aug	Tue	Globalization of land use	Lambin and Meyfroidt	
	29-Aug	Thurs	Cash crops		ICA 1, Alpha
3	3-Sep	Tue	Remittances	Radel et al.	
	5-Sep	Thurs	Flows of land investments		ICA 2, Beta
4	10-Sep	Tue	Boom-bust landscapes	Hayter et al.	
	12-Sep	Thurs	Resource peripheries		ICA 3, Gamma
5	17-Sep	Tue	Malheur background	Gallaher	
	19-Sep	Thurs	Role-playing exercise		ICA 4, NO GROUPS
6	24-Sep	Tue	Land grabs	Investing in land in Ethiopia	Sign up for Project topic
	26-Sep	Thurs	Land Matrix		ICA 5, Project
7	1-Oct	Tue	Governance	Sikor et al.	
	3-Oct	Thurs	Leapfrogging		ICA 6, Alpha
8	8-Oct	Tue	Agents of change	Liverman et al.	
	<b>10-Oct</b>	<b>Thurs</b>	<b>No class fall break</b>		
9	15-Oct	Tue	Transnational corporations		ICA 7, Beta
	<b>17-Oct</b>	<b>Thurs</b>	<b>Midterm</b>		
10	22-Oct	Tue	<i>King Corn</i>		
	24-Oct	Thurs	No class		King Corn writeup, Pecha Kucha proposal
11	29-Oct	Tue	Spatial externalities	Munroe et al.	
	31-Oct	Thurs	NIMBY		ICA 8, Gamma
12	5-Nov	Tue	Accessibility	Irwin 2002	
	7-Nov	Thurs	Bid-rent		ICA 9, Alpha
13	12-Nov	Tue	Fertility gradients	Alonso 1960	
	14-Nov	Thurs	Green Revolution		ICA 10, Projects
14	19-Nov	Tue	Protected areas	Ellis and Porter	
	21-Nov	Thurs	PechaKucha due (no class)		
15	26-Nov	Tue	PechaKucha reviews (no class)		
	<b>28-Nov</b>	<b>Thurs</b>	<b>Thanksgiving</b>		
	3-Dec	Tue	<i>A Forest Returns</i>		ICA 11, Beta
	<b>10-Dec</b>	<b>Tue</b>	<b>Final exam</b>	2-3:45 pm	

## Arts and Sciences Distance Learning Course Component Technical Review Checklist

**Course: Geog 5402**

**Instructor: Darla Munroe**

**Summary: Land Use Geography**

Standard - Course Technology	Yes	Yes with Revisions	No	Feedback/ Recomm.
6.1 The tools used in the course support the learning objectives and competencies.	X			<ul style="list-style-type: none"> <li>• Office 365</li> <li>• Carmen</li> <li>• DocuSeek</li> <li>• Kanopy</li> </ul>
6.2 Course tools promote learner engagement and active learning.	X			<ul style="list-style-type: none"> <li>• CarmenZoom</li> <li>• CarmenWiki</li> <li>• Carmen Discussion Boards</li> </ul>
6.3 Technologies required in the course are readily obtainable.	X			All tools are available via OSU site license free of charge.
6.4 The course technologies are current.	X			All are updated regularly.
6.5 Links are provided to privacy policies for all external tools required in the course.	X			Privacy policy for 3 <sup>rd</sup> party tools are included
Standard - Learner Support				
7.1 The course instructions articulate or link to a clear description of the technical support offered and how to access it.	X			Links to 8HELP are provided
7.2 Course instructions articulate or link to the institution's accessibility policies and services.	X			a
7.3 Course instructions articulate or link to an explanation of how the institution's academic support services and resources can help learners succeed in the course and how learners can obtain them.	X			b
7.4 Course instructions articulate or link to an explanation of how the institution's student services and resources can help learners succeed and how learners can obtain them.	X			c
Standard – Accessibility and Usability				
8.1 Course navigation facilitates ease of use.	X			Recommend using the Carmen Distance Learning "Master Course" template developed by ODEE and available in the Canvas Commons to provide student-users with a consistent user experience in terms of navigation and access to course content.
8.2 Information is provided about the accessibility of all technologies required in the course.	X			Accessibility policies for all 3 <sup>rd</sup> party tools are included
8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.	X			Instructions are provided to obtain materials in another format.
8.4 The course design facilitates readability	X			
8.5 Course multimedia facilitate ease of use.	X			All assignments and activities that use the Carmen LMS with embedded multimedia facilitates ease of use. All other multimedia resources facilitate ease of use by being available through a standard web browser

**Reviewer Information**

- Date reviewed: 9/3/20
- Reviewed by: Ian Anderson

**Notes: Good to go!**

<sup>a</sup>The following statement about disability services (recommended 16 point font):  
Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, [slds@osu.edu](mailto:slds@osu.edu); [slds.osu.edu](http://slds.osu.edu).

<sup>b</sup>Add to the syllabus this link with an overview and contact information for the student academic services offered on the OSU main campus.  
<http://advising.osu.edu/welcome.shtml>

<sup>c</sup>Add to the syllabus this link with an overview and contact information for student services offered on the OSU main campus. <http://ssc.osu.edu>. Also, consider including this link in the “Other Course Policies” section of the syllabus.