Geography 232 (Environmental Studies 232) 1,2

People, Agriculture and the Environment: An Introduction to Nature-Society Geography Fall Semester, 2022

Class Time and Location: 3-4:30, T-R, Carnegie 06A

Instructor: Bill Moseley (he/him/his) **Office**: Rm 104d, Carnegie Hall

Office Hours: 1:30-2:30pm MTWR, or by appointment. Sign-up by cutting/pasting this link into

your browser (https://calendar.app.google/qm2DFq2Lvqrp1oHFA)

Phone: 651-696-6126

Email: moseley@macalester.edu

Class email: <u>fa22-geog-232-01@groups.macalester.edu</u> (for sharing information w/ entire class)

Teaching Assistants:

1) Hugh Gabriel, Email: hgabriel@macalester.edu; Office hours 4:30-6pm TR in Car 104 (Geography Office).

2) Silas Southworth, Email: <u>ssouthwo@macalester.edu</u>; Office hours: 7-8:30pm MW in Car 104 (Geography Office).

Course Description

The investigation of nature-society relationships lies at the heart of geography and has been one of the pillars of the discipline since the late 19th century. This realm of inquiry also has been an important bridge between geography and other fields. This course introduces you to the study of human-environment interactions from a geographic perspective, with a special emphasis on agriculture. We will examine environmental issues in a variety of geographic contexts (Global South and Global North) and the connections between environmental problems in different locations. Beyond agriculture, we will also examine other sectoral issues in relation to agriculture or as stand alone environmental concerns. These themes include: human population growth, consumption, biodiversity, climate change, and environmental health. We will be trying on a number of theoretical lenses from geography's broad human-environment tradition (such as physical geography, cultural ecology, commodity chain analysis, political ecology, resource geography, the human dimensions of global change, hazards geography and environmental justice). In other words, I not only want us to explore a range of environmental issues, but also to grapple with theory and how this informs our understanding of the human-environment interface.

Format

The class will meet twice a week. The class will be conducted with both lectures and in-class discussions. You are expected to have done all assigned reading before coming to class, and be

¹ This course counts toward the geography major & minor, the food systems emphasis in ES, the Food, Agriculture & Society concentration, the international development concentration, the African Studies concentration, the int'l requirement & the social science distribution requirement.

² We acknowledge that Macalester College is located on the traditional, ancestral and contemporary lands of the Wahpékhute band of Dakhóta Oyáte, the Dakota nation. We recognize that this acknowledgment is but a first step in recognizing and dismantling aggressive and persistent policies of settler colonialism that continue to oppress to this day. The work of acknowledgement must be paired with active practices like the amplification of Indigenous voices and land repatriation in order to be substantive and meaningful.

prepared to discuss it. In addition to normal classroom banter, we will have several designated discussion days during the term (see schedule).

This is your class, and I want to know how it's going. Please let me know if you would like to see changes, from lecture topics to grading. You are welcome to speak with me after class or to visit me in my office. The surest way to contact me is to send me e-mail (moseley@macalester.edu), which normally will be responded to promptly during normal business hours.

Texts

Moseley, W.G., E. Perramond and H. Hapke and P. Laris. 2013. <u>An Introduction to Human-Environment Geography: Local Dynamics and Global Processes</u>. Hoboken, NJ: Wiley/Blackwell. (6 copies of the main textbook are available on library reserves)

Pollan, Michael. 2006. <u>The Omnivore's Dilemma: A Natural History of Four Meals</u>. New York: Penguin Press.

A large number of readings are also available on the course Moodle site. Handouts will be distributed from time to time in class. The instructor is not responsible for providing handouts for students who are absent from class.

Assignments/Exams

I deliberately use a mix of assessment tools in this class in order to provide a variety of opportunities for you to express your competence (writing, discussion participation, exams, etc.). Many students find that they tend to do better with some formats (e.g., exams) than others (e.g., writing). I believe it is not only fairest to provide you with a variety of assessment exercises, but more reflective of the mix of challenges you will encounter in life.

<u>Reading</u>: Reading assignments for this course are listed on the outline of lecture topics. Information from the textbook supplements lecture and forms the basis of class discussions.

<u>Participation and Discussion days</u>: Class will be oriented towards discussion roughly one third of the time. The purpose of the discussion classes is to facilitate critical analysis and lively dialog on controversial issues related to human-environment interactions. The majority of class participation points will be derived from your comments in discussion. Participation points are relatively easy to obtain if you keep up with the reading and <u>speak up</u> during discussion. Please see me if you have difficulty speaking in class. Furthermore, some of the participation points will also be derived from: 1) your role as a co-leader for two discussions; and 2) my assessment of your participation in the lecture sessions (based on cogency of comments, questions, and answers to questions).

In my opinion, the best discussions are those in which: 1) students listen (and learn) from one another and build on what each other is saying; 2) the discussion is focused on understanding the main argument of each reading and breaking down and analyzing this argument to see if it makes sense; 3) making connections between readings by identifying where authors agree and disagree; and 4) relating insight gained from reading and discussion to other texts or real life events. In sum, I want you to approach discussion as an on-going scholarly debate in which we (as a

community of scholars and learners) are attempting to advance our collective knowledge. Student discussion leaders will be assigned to facilitate our scholarly debates.

Reaction essays: Reaction essays are brief essays (1-2 page or 500-650 words) in which you respond to two or more assigned readings for a given discussion. Your essays should include a succinct but detailed summary of the argument(s) to which you are responding and develop your reaction, which may be one of skepticism, all out agreement or disagreement, epiphany, or whole-hearted endorsement. Regardless, your essay should exhibit a line of reflective thought in which you explain the logic and rationale that supports your reaction to the reading(s). Your essays must include at least one question, relevant to the readings, which you would like to ask of your classmates. Thus, the reaction essays should help you prepare for participation in class discussion of the readings. Reaction essays must be submitted via Moodle. The essays are due by 11 pm the day before a discussion. You are required to complete seven essays and have 10 opportunities to write them. Each essay is worth .5% of your grade. Proof read your essays so that they are free of grammatical and spelling errors. The essays are marked in a credit/no credit fashion and essays submitted late will receive no credit.

<u>Writing Assignments</u>: You will be required to undertake three assignments that involve writing and analysis. Some of these assignments will initially be submitted as drafts, and then revised and resubmitted following feedback from the teaching assistants or myself.

Alternative Agriculture in context (assign #1): Fieldwork is a mainstay of human-environment geography. This shorter, field-based research paper asks you to explore the possibilities and constraints related to alternative agriculture in the upper Midwest of the United States. We will be visiting a CSA farm (Common Harvest Farm in Osceola, WI) on Sat, Sept 24 to better understand a local farm operation and learn from them about the advantages and challenges of organic farming in the region. The visit will be preceded by an in-class lecture given by the farmer, Dan Guenthner, on Sept 22. The final paper is due on Oct 14. Examples of past papers (compiled in a report) may be found here and here. The class will be divided into six groups to each ponder one of four research questions collaboratively developed with the CSA farmer.

Commodity Chain Analysis Paper (assign #2). Geographers increasingly seek to understand human-environment interactions within the context of a global economy. The problem is that the global nature of our economy often obscures the social and environmental impacts of our consumption decisions. For this paper, you will select a food or other natural resource related product that is available in two (or more) forms. The two forms will differ from each other on at least one important dimension (e.g., locally produced/globally produced, conventional/organic, produced by a big company/produced by a small company, etc.) You will then trace the two versions of the food/product back through the various social and physical transformations they have undergone on the way to you, the consumer. The point of the paper is to explore the range of ways in which the two versions of the product differ, and to understand the origins, transformations, and the environmental impacts that before the product reaches the consumer. This paper should be 10-15 pages in length. Guidelines will be passed out in class. A draft is due on Nov 23, and the final paper on Dec 9. See past examples here.

Class Presentation: The findings from your commodity chain analysis paper will be shared with the class in a group presentation on Dec 6 or 8. The instructor will suggest presentation groups of 4-5 people based on themes.

<u>Midterm and Final</u>: A midterm exam will be given as well as a quasi-cumulative final at the end of the term. The exam format will include a combination of question types such as essay, short answer and multiple choice. Make-up exams will only be given in the event of illness or other verifiable emergency. In the event of an absence during an exam, it is the student's responsibility to contact me no later than one (1) class period after the test date.

Grading and Exams

Grade Components

Midterm (10/18):	20%	Comm Chain Peer Review Exercise (12	/1):1%
Final (12/13):	22%	Comm Chain Group Presentation (12/6)	&8):5%
Alternative Ag Paper (10/15):	15%	Reaction essays:	3.5%
Commodity Chain Paper Draft (11/23):	2%	Discussion (partici & leadership):	9.5%
Commodity Chain Paper (12/9):	22%	Total:	100%

Final grades are based on a weighted average for the term. Grade cutoff points are as follows: A = 93-100%; A-= 90-92%; B+= 87-89%; B= 83-86%; B-= 80-82%; C+= 77-79%; C= 73-76%; C-= 70-72%; D+= 67-69%; D= 63-66%; D-= 60-62%, NC = <60%.

Disabilities

I am committed to providing assistance to help you be successful in this course. Reasonable accommodations are available for students with documented disabilities. Please meet with the Director of Disability Services, Melissa Fletcher, who serves as the coordinator for services for students with disabilities. It is important to meet with her at the beginning of the semester to ensure that your accommodations are approved and in place to begin the semester successfully. The director may be reached in the Kagin Commons, Rm 125, by phone at 651-696-6974, or email disabilityservices@macalester.edu.

Health and Wellness

You are encouraged to make your health and well-being a priority throughout this semester and during your career at Macalester. Taking care of yourself will help you engage more fully in your academic experience. Remember that beyond being a student, you are a human being carrying your own experiences, thoughts, emotions, and identities with you. It is important to acknowledge any stressors you may be facing, which can be mental, emotional, physical, cultural, financial, etc., and how they can have an impact on your academic experience. I encourage you to remember that you have a body with needs. In the classroom, eat when you are hungry, drink water, use the restroom, and step out if you are upset and need some air. Please do what is necessary so long as it does not impede your or others' ability to be mentally and emotionally present in the course. Outside of the classroom, sleeping, moving your body, and connecting with others can be strategies to help you be resilient at Macalester. If you are having difficulties maintaining your well-being, please don't hesitate to contact me and/or find support from Health & Wellness Center. I have included contact information for health and wellness resources on the course moodle page.

Academic Misconduct

Plagiarism and cheating are both academic crimes. Never (1) turn in an assignment that you did not write yourself, (2) turn in an assignment for this class that you previously turned in for another class, or (3) cheat on exam. If you do so, it may result in a failing grade for the class, and possibly even suspension from the college. Please see me if you have any questions about what constitutes plagiarism. Anyone caught cheating on an exam will be reported to the provost in line with recognized university procedures.

Lecture and Discussion Schedule

	PART I: LAYING THE FOUNDATION: INTRODUCTION TO HUMAN-ENVIRONMENT GEOGRAPHY,					
	FOOD SYSTEMS, FOOD POLICY, PHYSICAL GEOGRAPHY, CULTURAL/POLITICAL ECOLOGY &					
_	COMMODITY CHAINS					
W	Dates	Topic	Readings and Assignments (all chapter assignment			
k			are from Moseley et al. 2013)			
1	Thurs, 1 Sept	Course Business, introductions				
2	Tues, 6 Sept	Geography and its Human-	Chap 1, 13			
		Environment Tradition				
		6 Dimensions of Food Security				
	Thurs, 8 Sept	The basics of Env & Agri Policy	Chap 2			
		Int'l Food Security Policy				
3	Tues, 13 Sept	Physical Geography (climate, biomes)	Chap 3, 5			
	Thurs, 15 Sept	Dis 1: Geographic Perspective, Food Politics, Policy & Power	Discussion readings			
4	Tues, 20 Sept	Agricultural Systems around the world	Chap 10; Alt agriculture paper group assignments			
	Thurs, 22 Sept	Guest lecture by Dan Guenther,	Submit alt agriculture paper question by 9/22 at			
		farmer & co-owner of Common	10pm on moodle			
		Harvest Farm. Group work.				
	Sat, 24 Sept	Field trip to Common harvest farm	8am-5pm			
5	Tues, 27 Sept	Agricultural Systems around the world	Discussion Readings			
		Discussion 2: Agriculture Revolutions & Progress				
	Thurs, 29 Sept	No class meeting. Listen to 2 recorded lectures: 1) Cultural Ecology; and 2) Agricultural Change in the Global South.	Chap 4			
6	Tues, 4 Oct	Political Ecology & Political Agronomy	Discussion readings			
		Discussion 3: Debating GMOs & the Future of Agriculture				
	Thurs, 6 Oct	Agricultural problems / challenges				
7	Tues, 11 Oct	Agricultural solutions & alternatives	Discussion readings			
		Dis 4: Omnivore's Dilemma, Part I				
	Thurs, 13 Oct	Commodity chains and fair trade	Discussion readings; Final alt ag paper due Sat,			
		Discussion 5: Omnivore's Dilemma, Part II & critiques	10/15 at 10pm via moodle			
8	Tues, 18 Oct	Midterm Exam	Evening review session prior to exam.			
	Thurs, 20 Oct	Midterm break				

PAR	T II: MAKING CON	NECTIONS: BIODIVERSITY, POPULATION	n, Environmental Hazards, Climate &	
ENVIRONMENTAL JUSTICE				
wk	Dates	Topic	Readings and Assignments	
9	Tues, 25 Oct	Shocks to the System: Global Food Crises in 2007-08 and 2020-22	Brief proposal for commodity chain paper due by Tues, 10/25 at 10pm via moodle	
	Thurs, 27 Oct	Library session, LL Library room		
10	Tues, 1 Nov	Biodiversity	Chap 11	
	Thurs, 3 Nov	Biodiversity	Discussion readings	
		Discussion 6: Nature		
11	Tues, 8 Nov	Biodiversity		
	Thurs, 10 Nov	Disc 7: Biodiversity & Agriculture	Discussion readings.	
		Population and Consumption		
12	Tues, 15 Nov	Population and Consumption	Chap 9, Discussion readings	
		Discussion 8: Food-Population Debates		
	Thurs, 17 Nov	Population and Consumption	Chap 6	
		Hazards		
13	Tues, 22 Nov	Hazards & Drought	Discussion readings, Commodity chain paper draft	
		Discuss 9: Hazards, Climate & Ag	due Wed (11/23) at noon via moodle	
	Thurs, 24 Nov	No class: Thanksgiving		
14	Tues, 29 Nov	Hazards	Chap 8; peer review outside of class	
		Environmental Health]	
	Thurs, 1 Dec	Environmental Health and Justice	Chap 7, Discussion readings	
		Discussion 10: Environmental &		
		Food Justice		
15	Tues, 6 Dec	Presentations		
	Thurs, 8 Dec	Presentations	Commodity Chain Paper due on Fri, Dec 9 @ 11:30pm	
16	Tues, 13 Dec	Final exam (1:30-3:30)		

Discussion Reading Schedule (subject to change)

1. Thursday, September 15: The Geographic Perspective, Food Politics, Policy and Power National Research Council. 2010. "How will we sustainably feed everyone in the coming decade and beyond?" <u>Understanding the Changing Planet: Strategic Directions for the Geographical Sciences</u>. Washington, DC: US National Academy of Science. Pp. 59-66.

Moseley, W.G. 2021. "Political Agronomy 101: An Introduction to the Political Ecology of Industrial Cropping Systems." In: Alexandros Gasparatos and Abubakari Ahmed (eds). <u>The Political Ecology of Industrial Crops</u>. London: Earthscan/Routledge. Pgs 25-44.

Clapp, Jennifer et al. 2021. "An 'IPCC for Food'? How the UN Food Systems Summit is being used to advance a problematic new science-policy agenda." <u>IPES-Food</u>. http://www.ipes-food.org/ img/upload/files/GovBrief.pdf.

Von Braun, Joachim, and Matthias Kalkuhl. 2015. "International science and policy interaction for improved food and nutrition security: Toward an International Panel on Food and Nutrition (IPFN)," No. 142. ZEF Working Paper Series.

2. Tuesday, September 27: Agricultural Revolutions and 'Progress'

Diamond, Jared. 1987. "The worst mistake in the history of the human race." Discover. May.

Moseley, W.G. and J. Morgan. 2018. "Why it's important to recognise multiple food systems in Africa." The Conversation Africa. June 18.

Page, G. 2012. "How to ensure the world's food supply." The Washington Post. August 2.

Moseley, WG. 2022. "Is the global food system on the cusp of a major shift?" <u>High Level Panel of Experts on Food Security and Nutrition</u>. April 6. https://www.fao.org/cfs/cfs-hlpe/insights/news-insights/news-detail/Is-the-global-food-system-on-the-cusp-of-a-major-shift-/en

3. Tuesday, October 4: Debating the Role of GMOs in the Future of Agriculture

Ronald, P.C. 2017. "Plant Genetics, Ecologically Based Farming and the Future of Food." <u>Geographical Review</u>. DOI: 10.1111/gere.12256

Winklerprins, A. 2017. "Genetically Engineered Crops as Necessary Invention." <u>Geographical Review</u>. DOI: 10.1111/gere.12257

Moseley, W.G. 2017. "A Risky Solution for the Wrong Problem: Why GMOs won't Feed the Hungry of the World." <u>Geographical Review</u>. DOI: 10.1111/gere.12259

Naylor, L. 2017. "A Place for GMOs in Food Sovereignty?" <u>Geographical Review</u>. DOI: 10.1111/gere.12258

Stone, G.D. 2017. "Dreading CRISPR: GMOs, Honest Brokers, and Mertonian Transgressions." Geographical Review. DOI: 10.1111/gere.12260

4. Tuesday, October 11: Omnivore's Dilemma Part I

Pollan, Michael. 2006. <u>The Omnivore's Dilemma: A Natural History of Four Meals</u>. New York: Penguin Press. Parts I and II (Pp 1-273).

5. Thursday, October 13: Omnivore's Dilemma Part II and Critique

Pollan, Michael. 2006. <u>The Omnivore's Dilemma: A Natural History of Four Meals</u>. New York: Penguin Press. Pp 277-415.

Guthman. J. 2007. "Can't Stomach It: How Michael Pollan et al. Made Me Want to Eat Cheetos." The Journal of Food and Culture. 7(3): 75-79

Tree. I. 2018. "If you want to save the world, veganism isn't the answer." The Guardian. Aug 25.

6. Thursday, November 5: Wilderness & Humanized Landscapes

Mann, C. 2011. "A View From Above." In <u>1491: New Revelations of the Americas Before Columbus</u>, 2nd ed. New York: Vintage Books. Pgs 1-31.

Cronon, W. 1996. "The Trouble With Nature or, Getting Back to the Wrong Wilderness." <u>Environmental</u> History. 1(1)7-28.

Davison, A. 2008. "The trouble with nature: Ambivalence in the lives of urban Australian environmentalists." Geoforum. 39 (3): 1284–1295.

7. Thursday, November 10: Biodiversity Conservation & Agriculture

Terborgh, J. and C. Van Schaik. 2002. "Why the World Needs Parks." <u>In Making Parks Work: Strategies for Preserving Nature</u>. Washington D.C.: Island Press. pgs 3-14.

Guha, R. 1997. "The Authoritarian Biologist and the Arrogance of Anti-Humanism: Wildlife Conservation in the Third World." <u>The Ecologist</u>. 27(1): 14-20.

Vandermeer, J. and I. Perfecto. 2007. "The Agricultural Matrix and a Future Paradigm for Conservation." <u>Conservation Biology</u>. 21(1): 274-277.

8. Tuesday, November 15: A Very Old Debate: Over-Population, Over-Consumption or Maladapted Technology?

Ehrlich, Paul. 1968. <u>The Population Bomb</u>. New York: Ballantine Books. Pgs 15-45 (Too many people, too little food).

Lohmann, Larry. 2003. "Re-imagining the population debate." The Corner House.

Simon, J.L. 1981. "World population growth: an anti-doomsday view." Atlantic Monthly. 248(2):70-6.

Allitt, P. 2014. "Remember the Future? The population bomb was ticking, and apocalypse was next in line..." The Weekly Standard. Vol. 19, No. 19. For a related (and audio) NPR story, listen to "A Bet, Five Metals And The Future Of The Planet" (http://www.npr.org/blogs/money/2013/12/31/258687278/a-bet-five-metals-and-the-future-of-the-planet)

9. Tuesday, November 22: Hazards, Climate & Agriculture

Wisner, B. 2001. "Risk and the neoliberal state: Why post-Mitch lessons didn't reduce El Salvador's earthquake losses." <u>Disasters</u>. 25(3): 251-269.

Montenegro, M. J. Sbicca, & A. Shattuck. 2019. "Agriculture Needs a 21st-Century New Deal." <u>Dollars and Sense</u>. May/June Issue.

Moseley, W.G. 2022. "The trouble with drought as an explanation for famine in the Horn and Sahel of Africa." <u>The Conversation Africa</u>. February 15.

Taylor, M. 2018. What's Smart about Climate Smart Agriculture? Food First Policy Brief #22.

10. Thursday, December 1: Geographies of Environmental & Food (In)Justice and Racism Kurtz, H.E. 2003. "Scale frames and counter-scale frames: constructing the problem of environmental justice." Political Geography. 22: 887-916.

Pulido, Laura. 2000. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." <u>Annals of the Association of American Geographers</u>. 90(1): 12-40.

Kurtz, Hilda. 2013. "Linking food deserts and racial segregation: challenges and limitations." In Geographies of race and food: fields, bodies, markets. Rachel Slocum and Arun Saldanha (eds).

Welcome to the course! I look forward to working with you this semester.