

**Geography 232 (Environmental Studies 232)<sup>1</sup>**  
**People, Agriculture and the Environment: An Introduction to Nature-Society Geography**  
**Fall Semester, 2018**

**Class Time and Location:** 8-9:30am, T-R, Carnegie 107

**Instructor:** Bill Moseley

**Office:** Rm 104d, Carnegie Hall

**Office Hours:** 1:30-2:30 on MW, 3-4 on Thurs, or by appointment

**Phone:** 651-696-6126

**Email:** [moseley@macalester.edu](mailto:moseley@macalester.edu)

**Teaching Assistants:**

1) Eliza Pessereau, Email: [epessere@macalester.edu](mailto:epessere@macalester.edu); Office hours Sunday from 7-8:30pm and Monday from 8-9:30p in Car 104 (Geography Office).

2) Betsy Schein, Email: [eschein@macalester.edu](mailto:eschein@macalester.edu); Office hours: Tuesday and Wednesday from 8-9:30pm 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 19<sup>th</sup> 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 (developed and developing countries) 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 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](mailto:moseley@macalester.edu)), which normally will be responded to promptly during normal business hours.

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<sup>1</sup> Please note that this is tentative and subject to change. It is your responsibility to keep up with any changes.

## **Texts**

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

Pollan, Michael. 2006. The Omnivore's Dilemma: A Natural History of Four Meals. 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.

Reading: 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.

Participation and Discussion days: 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 speak up 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 10 pm the day before a discussion. You are required to complete nine essays and have ten 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.

Writing Assignments: 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 15 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 Guenther, on Sept 13. A draft of the paper is due on Oct 2 and the final paper on Oct 9. 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 (tentative) research questions collaboratively developed with a CSA farmer. 1) How are contemporary tariff wars impacting farmers in the upper Midwest (and how might we think about this in the context of the policy history of free trade vs protection for agricultural producers in the US)? 2) How do rural labor dynamics (including the current immigration restrictions) impact different types of farmers in the upper Midwest? 3) How can farmers adapt to a changing climate and what new research do we need in order to do this? 4) Despite a history of male dominance, there is some evidence suggesting that more women are becoming principal farm operators in the US. What factors might be driving the change and what are the implications of such a shift?

*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 progress report is due on Nov 6, a draft on Nov 21, and the final paper on Dec 12. Examples of past papers may be found on library website ([http://digitalcommons.macalester.edu/geog\\_consumpt/](http://digitalcommons.macalester.edu/geog_consumpt/)).

*Class Presentation:* The findings from your commodity chain analysis paper will be shared with the class in a group presentation on Dec 6 or 11. The instructor will suggest presentation groups of 4-5 people based on themes.

Midterm and Final: 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%	
Final (12/18):	22%	Comm Chain Peer Review Exercise (11/29):1%
Alternative Ag Paper (10/9):	15%	Comm Chain Group Presentation (12/6&11):5%
Commod Progress Report (11/6):	1%	Reaction essays: 4.5%
Commodity Chain Paper Draft (11/21):	2%	Discussion (partici & leadership): 7.5%
Commodity Chain Paper (12/12):	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 651-696-6874, or email [disabilityservices@macalester.edu](mailto:disabilityservices@macalester.edu).

## **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

<b>PART I: LAYING THE FOUNDATION: INTRODUCTION TO HUMAN-ENVIRONMENT GEOGRAPHY, PHYSICAL GEOGRAPHY, CULTURAL/POLITICAL ECOLOGY, AGRICULTURE &amp; COMMODITY CHAINS</b>			
<b>Wk</b>	<b>Dates</b>	<b>Topic</b>	<b>Readings and Assignments</b> (all chapter assignment are from Moseley et al. 2013)
1	Tues, 4 Sept	Course Business, introductions	
	Thurs, 6 Sept	Geography and its Human-Environment Tradition	Chap 1, 13
2	Tues, 11 Sept	Human-Environment Tradition	Discussion readings, Alt agriculture paper group assignments
		<b>Discussion 1: Geography, Agriculture &amp; Power</b>	
	Thurs, 13 Sept	Guest lecture by Dan Guenther, farmer & co-owner of Common Harvest Farm	<u>Submit alt agriculture paper question by 9/13 at 10pm on moodle</u> , readings for guest lecture (on moodle)
	Sat, 15 Sept	Field trip to Common harvest farm	
3	Tues, 18 Sept	Environmental & Agricultural Policy	Chap 2, 5
		Physical Geography	
	Thurs, 20 Sept	Physical Geography	Chap 3.
4	Tues, 25 Sept	Agricultural Systems around the world	Chap 10
	Thurs, 27 Sept	Agricultural Systems around the world	Discussion Readings, Jane Battersby public talk, 12-1, Fri, 9/28
	<b>Discussion 2: Agriculture Revolutions &amp; Progress</b>		
5	Tues, 2 Oct	Cultural Ecology	Chap 4, draft alt ag paper due 10/2 at 10pm via moodle
		Agricultural Change in the Global South	
	Thurs, 4 Oct	Political Ecology	Discussion readings
		<b>Discussion 3: Debating GMOs &amp; the Future of Agriculture</b>	
6	Tues, 9 Oct	Agricultural problems / challenges	<u>Final alt ag paper due 10/9 at 10pm via moodle</u>
	Thurs, 11 Oct	Agricultural solutions & alternatives	Discussion readings
		<b>Discussion 4: Omnivore's Dilemma, Part I</b>	
7	Tues, 16 Oct	Commodity chains and fair trade	<u>Brief proposal for commodity chain paper due in class</u> , Discussion readings
		<b>Discussion 5: Omnivore's Dilemma, Part II &amp; critiques</b>	
	Thurs, 18 Oct	Midterm exam	Evening review session prior to exam

<b>PART II: MAKING CONNECTIONS: BIODIVERSITY, POPULATION, ENVIRONMENTAL HAZARDS, CLIMATE &amp; ENVIRONMENTAL JUSTICE</b>			
wk	Dates	Topic	Readings and Assignments
8	Tues, 23 Oct	The Global Food Crisis & Local Food Production Library session	
	Thurs, 25 Oct	No class. Midterm break	
9	Tues, 30 Oct	Biodiversity	Chap 11
	Thurs, 1 Nov	Biodiversity <b>Discussion 6: Nature</b>	Discussion readings
10	Tues, 6 Nov	Biodiversity	<u>Commodity chain progress report due in class</u>
	Thurs, 8 Nov	<b>Disc 7: Biodiversity &amp; Agriculture</b> Population and Consumption	Discussion readings.
11	Tues, 13 Nov	Population and Consumption <b>Discussion 8: Population</b>	Chap 9, Discussion readings
	Thurs, 15 Nov	Population and Consumption Hazards	Chap 6
12	Tues, 20 Nov	Hazards <b>Discuss 9: Hazards, Climate &amp; Ag</b>	Discussion readings, <u>Commodity chain paper draft due Wed, 11/21 at noon via moodle</u>
	Thurs, 22 Nov	No class. Thanksgiving break	
13	Tues, 27 Nov	Hazards Environmental Health	Chap 8
	Thurs, 29 Nov	Peer review in class	
14	Tues, 4 Dec	Environmental Health and Justice <b>Discussion 10: Environmental Justice</b>	Chap 7, Discussion readings
	Thurs, 6 Dec	Presentations	
15	Tues, 11 Dec	Presentations	
	Tues, 18 Dec	Final exam (8-10am)	<u>Commodity Chain Paper due on Wed, Dec 12 @ 11:30pm</u>

### Discussion Reading Schedule (subject to change)

#### 1. Tuesday, September 11: Geography, Food Debates and Knowledge Politics

Moseley, W.G. and N. Wilson. 2016. "Agriculture, Food Production, and Rural Land Use in Advanced Placement Human Geography." Journal of Geography. 115: 118-124.

National Research Council. 2010. "How will we sustainably feed everyone in the coming decade and beyond?" Understanding the Changing Planet: Strategic Directions for the Geographical Sciences. Washington, DC: US National Academy of Science. Pp. 59-66.

Anderson, J. and J. Sumberg. 2017. "Knowledge Politics in Development-Oriented Agronomy." In: In: Sumberg, J. (ed). Agronomy for Development: The Politics of Knowledge in Agricultural Research. Abingdon: Routledge. Pp. 1-13.

## **2. Thursday, September 27: Agricultural Revolutions and ‘Progress’**

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

Richards, Paul. 1985. Indigenous Agricultural Revolution: Food and Ecology in West Africa. London: Hutchinson. (Introduction), pp. 9-17.

Page, G. 2012. “How to ensure the world’s food supply.” The Washington Post. August 2.

Moseley, W.G. 2017. “The New Green Revolution for Africa: A Political Ecology Critique.” The Brown Journal of World Affairs. 23(2): 177-190.

## **3. Thursday, 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.” Geographical Review. DOI: 10.1111/gere.12256

Winklerprins, A. 2017. “Genetically Engineered Crops as Necessary Invention.” Geographical Review. 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.” Geographical Review. DOI: 10.1111/gere.12259

Naylor, L. 2017. “A Place for GMOs in Food Sovereignty?” Geographical Review. 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. Thursday, October 11: Omnivore’s Dilemma Part I**

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

## **5. Tuesday, October 16: Omnivore’s Dilemma Part II and Critique**

Pollan, Michael. 2006. The Omnivore’s Dilemma: A Natural History of Four Meals. 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 1: Wilderness & Humanized Landscapes**

Denevan, W. 1992. “The Pristine Myth: The Landscape of the Americas in 1492.” Annals of the Association of American Geographers. 82(3): 369-385.

Cronon, W. 1996. “The Trouble With Nature or, Getting Back to the Wrong Wilderness.” Environmental 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 8: Biodiversity Conservation & Agriculture**

Mittermeier, RA et al. 1998. "Biodiversity Hotspots and Major Tropical Wilderness Areas: Approaches to Setting Conservation Priorities." Conservation Biology. 12(3): 516–520.

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

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

### **8. Tuesday, November 13: A Very Old Debate: Over-Population, Over-Consumption or Maladapted Technology?**

Ehrlich, Paul. 1968. The Population Bomb. 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 20: Hazards & Climate**

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

De Souza, A. 2018. "Why ravaging heatwaves matter to the world's dinner table." The Washington Post. Aug 30.

Kates, Robert. 2000. "Cautionary Tales: Adaptation and the Global Poor." Climate Change. 45(1): 5-17.

Moseley, W.G. 2012. "The Silver Lining Behind the Drought." The New York Times. August 7.

### **10. Tuesday, December 4: Geographies of Environmental (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." Annals of the Association of American Geographers. 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.*