

R SOC 597A: Population and Environment
Penn State University
Wed. 9:45 AM-12:45 PM
105 Ag Sciences & Ind. Building

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Office hours: Wed. 1:00-4:00 PM

Course Overview

This graduate-level seminar will cover a wide range of research topics and theoretical frameworks at the intersection of population dynamics and environmental change. How does the human population – its size, growth rate, age composition, and geographic distribution – influence problems of resources, environment, development and the prospects for solving them? How many people can the world support? How do structures of inequality influence which groups of people are most vulnerable to the harms associated with environmental change? Population variables interact with economic and technological ones in generating pressures on resources and environment. How do social, political and economic forces shape all of these variables and their interactions? This course explores what is known, supposed, contended, and contested about the relationship between population and the environment, bringing to bear historical data, scenarios of future possibilities, and a variety of disciplinary and interdisciplinary perspectives. Given practical limitations, it is impossible to examine the breadth and depth of work in the area of population and environment, so the goal is to provide an overview of the most foundational and trailblazing social science theory and research relating human population to environmental context. The readings represent classic and recent academic research from multiple social science disciplines including sociology, geography, economics, and political science.

Course Objectives

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

1. Summarize and critically evaluate alternate theoretical social science perspectives that are used to examine interactions between population and the environment.
2. Provide specific examples of recent social science research on the social dimensions of environmental context, including the social distribution (inequality) of risk.
3. Provide specific examples of recent social science research on the environmental implications of population dynamics.
4. Articulate specific examples of the reciprocal effect of environmental factors on demographic processes.

5. Discuss the role of mediating factors (e.g., technology, policy, culture) in shaping the relationship between population and the environment.
6. Identify the many resources available to researchers examining human-environment interaction.

Course Format

The class meets in a seminar format once per week. The majority of class time will be spent considering and critically examining the assigned readings. Students will prepare written reactions to the readings each week, and students will be assigned to lead discussion during one or more weeks, depending on course enrollment.

Course Expectations

This will be a highly interactive course, emphasizing discussion and engaged student feedback. It is therefore essential that you prepare for each class meeting by reading the required materials and making your own notes summarizing the main arguments contained in the readings to ready you for classroom interaction. In addition to completing the required readings and discussion activities, please note the following expectations for this class:

1. Attend all class sessions: I do not take attendance, but part of your final grade is based on class participation. Missing class will negatively affect your grade.
2. Arrive on time: Arriving to class late is inconsiderate and distracting to your instructors and classmates. Therefore, plan to arrive early so that you can ensure you are in your seat at the time the class begins. Plan for extra time to get to class during the first couple of weeks when traffic is heavy and parking on campus is difficult.
3. No cell phone use: Do not text, check your email, use social networking sites, or take phone calls during class. If it is absolutely essential that you take a phone call (an emergency), please be respectful and leave the room before answering the call.
4. Maintain classroom decorum: We will be discussing complex issues in this class. As such, they often touch on strongly held beliefs and emotions. It is imperative that we maintain an attitude of cooperation, constructive criticism and politeness in our dealings with other seminar participants.
5. You earn your own grade: I do not “give” you a grade. You earn your grade by successfully completing the course requirements. I will provide in depth feedback on all assignments and return grades to you in a timely matter. I will be available during office hours to help you with class materials and discuss assignments with you. You should keep track of your grade throughout the semester so that you know where you stand. I do not curve, and I will not provide extra credit. Simply showing up for class and doing the work does not automatically equate to an ‘A’. Before you submit an assignment, ask yourself: “Is this the best I can possibly do?” If the answer is no, then do not expect me to award that work with the best grade.

Requirements and Evaluation

Discussion “Guide”:	15%
Weekly Article Reactions and Class Participation:	25%
Midterm Exam	20%
Research Project Concept Paper	10%
Research Project Final Draft:	20%
Research Project Presentation:	<u>10%</u>
	100%

Discussion “Guide”

At least two students will be responsible for guiding discussion each week. The two (or more) students assigned for each week will work together to determine how to split up the assigned readings. The students will *briefly* summarize the readings for the week and lead discussion on the topic of the week by preparing questions for the class. The summaries should include an overview of the primary arguments and key research findings (if applicable), your reactions to the arguments made, including strengths and limitations of the readings, a discussion of what you think the readings add to our understanding of the topic, how they complement or diverge from each other, what they neglect, and how they can be applied to what we have already covered in the course. The questions that you prepare to guide the class discussion should illicit responses that stimulate engagement among the other students in the class. The guide may post discussion questions in advance of the class on Angel if desired. Due to the class size, you will likely be assigned as a discussion guide for three (or more) weeks. This is worth 15% of your grade.

Weekly Article Reactions and Class Participation

Each student will be responsible for a *brief* (e.g., one page, single spaced) weekly summary of and reaction to the assigned readings beginning in week 2. These reactions should synthesize the arguments, concepts, and research findings from all of the assigned readings for the week *and* identify the things you found to be most compelling, convincing, confusing, or debatable from one or more of the readings. Your reactions should be posted in the discussion board in Angel on the Tuesday night before the Wednesday class when the readings will be discussed. The discussion leader may wish to use these reactions to stimulate ideas about the questions to ask during the class. Accordingly, be sure to post promptly so that the discussion leader has time to read the posts. I recommend composing your posts in MS Word and running a spelling and grammar check prior to posting. Prepare these with the same rigor as you would a paper. You should write professionally, and proof read your post. You are also expected to contribute in meaningful ways to class discussion. This is worth 25% of your grade.

Midterm Exam

You will complete a midterm and final exam with short answer/essay format questions that are similar to those you might see on a comprehensive exam. This exam will be take-home, and you will have approximately one week to complete it. The exam is

worth 20% of your grade. The midterm will be passed on during Week 7 and will be due during Week 8. Late exams will not be accepted.

Research Project

You will complete a research paper on the topic of your choosing within the broad areas of population and environment. Papers can be either empirical research papers (in which you have conducted data analysis) or a paper proposal (similar to what you might complete for a master's thesis or shortened version of a dissertation proposal). The paper must meet the following standards:

- 15-20 (double-spaced) pages in length, excluding references, tables, and figures
- Incorporate a considerable number of course readings and current articles from the top journals in demography and population studies
- Appropriate professional reference formatting (e.g., ASA)

The final paper is due during final exam week and is worth 20% of your grade. You will submit a 2 page "concept paper" with your final paper idea by Week 7 of the course. Your concept paper should identify your research question(s), motivation for and significance of this research, and proposed data and potential methods. I will provide feedback related to feasibility of your proposed topic and methods. This concept paper is due by Week 7 and will be worth 10% of your final grade.

Presentation: You will present your final project during the last week of class. You can present using the traditional PowerPoint/prezi method, or you can develop a professional poster and present that way instead. Your presentation should last 10-15 minutes, including 2-3 minutes for questions from the audience. The presentation is worth 10% of your final grade.

Grading Scale

A = 100-94	B = 85-83	C = 75-70
A- = 93-90	B- = 82-80	D = 60-69
B+ = 89-86	C+ = 79-76	F = less than 60

DETAILED TOPIC AND READING SCHEDULE

Week 1 **Course Introduction and Overview**
August 27 **Review of Demographic Concepts and Trends**
 Introduction to Data Resources

1. McFalls Jr., Joseph A. 2007. [Population: A Lively Introduction, 5th edition](#). *Population Bulletin* 62(1).
 2. Population Reference Bureau. 2014. [Population Data Sheet](#).
 3. Terra Populus: Integrated Data on Population and Environment: <http://www.terrapop.org/>
 4. Center for International Earth Science Information Network: <http://www.ciesin.org/>
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Week 2 **Overview of Population and Environment Intersections**
Sept. 3

1. Pebley, Anne R. 1998. "[Demography and the Environment](#)." *Demography* 35(4):377-389.
2. Sherbinin, Alex de, David Carr, Susan Cassels, and Leiwen Jiang. 2007. "[Population and Environment](#)." *Annual Review of Environment and Resources* 32:345-373.
3. Harden, Carol P. 2012. "[Framing and Reframing Questions of Human-Environment Interaction](#)." *Annals of the Association of American Geographers* 102(4):737-747.
4. Jolly, Carole L. 1994. "[Four Theories of Population Change and the Environment](#)." *Population and Environment* 16(1):61-89.
5. Matthews, Stephen A., Ganesh P. Shivakoti, and Netra Chhertri. 2000. "[Population Forces and Environmental Change: Observations from Western Chitwan, Nepal](#)." *Society and Natural Resources* 13:763-775.

Recommended Reading:

- Hunter, Lori. 2000. [The Environmental Implications of Population Dynamics](#). RAND Corporation.
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Week 3 **Malthusian, Neo-Malthusian, Boserupian, and other Perspectives**
Sept. 10

1. Ehrlich, P., A. Ehrlich, and G. Daily. 1993. "[Food Security, Population and Environment](#)." *Population and Development Review* 19(1):1-32.

2. Poleman, Thomas T. 1995. "[Population: Past Growth and Future Control.](#)" *Population and Environment* 17(1):19-40.
3. Leach, M. and J. Fairhead. 2000. "[Challenging Neo-Malthusian Deforestation Analyses in West Africa's Dynamic Forest Landscapes.](#)" *Population and Development Review* 26(1):17-43.
4. Boserup, E. 1976. "[Environment, Population, and Technology in Primitive Societies.](#)" *Population and Development Review* 2(1):21-36.
5. York, Richard, Eugene A. Rosa, and Thomas Dietz. 2003. "[Footprints on the Earth: The Environmental Consequences of Modernity.](#)" *American Sociological Review* 68(2):279-300.
6. Fernihough, Alan. 2013. "[Malthusian Dynamics in a Diverging Europe: Northern Italy, 1650-1881.](#)" *Demography* 50(1):311-332.

Recommended Readings:

- Najam, A. 1996. "[A Developing Country's Perspective on Population, Environment, and Development.](#)" *Population Research and Policy Review* 15(1):1-19.
- Carr, D., A. Lopez, and R. Bilborrow. 2009. "[The Population, Agriculture, and Environment Nexus in Latin America: Country-Level Evidence from the Latter Half of the Twentieth Century.](#)" *Population and Environment* 30:222-246.
- M. Mortimore and M. Tiffen. 1994. "[Population Growth and a Sustainable Environment: The Machakos Story.](#)" *Environment* 36(8):10-20.

Week 4 Limits to Growth
Sept. 17

1. Lee, Ronald. 2011. "[The Outlook for Population Growth.](#)" *Science* 333(6042):569-573.
2. Rees, William E. 1996. "[Revisiting Carrying Capacity: Area-Based Indicators of Sustainability.](#)" *Population and Environment* 17(3):195-215.
3. Pimentel, D et al. 2010. "[Will Limited Land, Water, and Energy Control Human Population Numbers in the Future?](#)" *Human Ecology* 38: 599-611.
4. Sayre, N. 2008. "[The Genesis, History, and Limits of Carrying Capacity.](#)" *Annals of the Association of American Geographers* 98(1): 120-134.
5. Lam, David. 2011. "[How the World Survived the Population Bomb: Lessons from 50 Years of Extraordinary Demographic History.](#)" *Demography* 48(4):1231-1262.
6. Bradbury, Mason, N. Nils Peterson, and Jianguo Liu. 2014. "[Long-term Dynamics of Household Size and their Environmental Implications.](#)" *Population and Environment* 36(1):73-84.

Week 5 **Common Property/Pool Resources**
Sept. 24

1. Hardin, Garrett. 1968. "[The Tragedy of the Commons.](#)" *Science* 162(13):1243-1248.
2. Ostrom, Elinor, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky. 1999. "[Revisiting the Commons: Local Lessons, Global Challenges.](#)" *Science* 284:278-282.
3. Acheson, James. 2000. "[Clearcutting Maine: Implications for the Theory of Common Property Resources.](#)" *Human Ecology* 28(2):145-169.
4. Chomitz, Kenneth M. and David A. Gray. "[Roads, Land Use, and Deforestation: A Spatial Model Applied to Belize.](#)" *The World Bank Economic Review* 10(3):487-512.

Recommended Reading:

- Nelson, Gerald C. and Daniel Hellerstein. 1997. Do Roads Cause Deforestation? Using Satellite Images in Econometric Analysis of Land Use. *American Journal of Agricultural Economics* 79, 80-88.

Week 6 **Natural Resource Dependence: Opportunities and Risks**
Oct. 1

1. Flint, Courtney G. and A.E. Luloff. 2005. "[Natural Resource-Based Communities, Risk, and Disaster: An Intersection of Theories.](#)" *Society & Natural Resources* 18:399-412.
2. Leyk, Stefan, Galen J. Maclaurin, Lori M. Hunter, Raphael Nawrotzki, Wayne Twine, Mark Cillinson, and Barend Erasmus. 2012. "[Spatially and Temporally Varying Associations between Outmigration and Natural Resource Availability in Resource-Dependent Rural Communities: A Modeling Framework.](#)" *Journal of Applied Geography* 34:559-568.
3. Jensen, Leif, Tse-Chuan Yang, and Patricia Munoz. 2012. "[Natural Resource Dependence: Implications for Children's Schooling and Work in Chile.](#)" *Society & Natural Resources* 25(1):3-21.
4. Hunter, Lori M., Wayne Twine, and Aaron Johnson. 2011. "[Adult Mortality and Natural Resource Use in Rural South Africa: Evidence from the Agincourt Health and Demographic Surveillance Site.](#)" *Society & Natural Resources* 24(3):256-275.
5. Brown, Jason P. 2014. "[Production of Natural Gas from Shale in Local Economies: A Resource Blessing or Curse?](#)" *Federal Reserve Bank of Kansas City.*

Week 7 **Urbanization and the Environment**
Oct. 8 **(Concept Papers Due)**

1. Massey, Douglas S. 2005. *Strangers in a Strange Land: Humans in an Urbanizing World*. W.W. Norton and Co. Introduction and Conclusion.
2. Liddle, Brantley. 2014. "[Impact of Population, Age Structure, and Urbanization on Carbon Emissions/Energy Consumption: Evidence from Macro-Level, Cross-Country Analyses.](#)" *Population and Environment* 35:286-304.
3. Redman, Charles L. and Nancy S. Jones. 2005. "[The Environmental, Social, and Health Dimensions of Urban Expansion.](#)" *Population and Environment* 26(6):505-520.
4. Klinenberg, Eric. 1999. "[Denaturalizing Disaster: A Social Autopsy of the 1995 Chicago Heat Wave.](#)" *Theory and Society* 28(2):239-295.

Recommended Reading:

- Entwisle, Barbara, Stephen J. Walsh, Ronald R. Rindfuss, and Leah K. VanWey. 2005. "[Population and Upland Crop Production in Nang Rong, Thailand.](#)" *Population and Environment* 26(6):449-470.
- Egan, Andrew and A.E. Luloff. 2000. "[The Exurbanization of America's Forests: Research in Rural Social Science.](#)" *Journal of Forestry* 98(3):26-30.

Week 8 **Migration and the Environment**
Oct. 15 **(Midterm Exam Due)**

1. Hunter, Lori M. 2005. "[Migration and Environmental Hazards.](#)" *Population and Environment* 26(4):273-302.
2. Black, Richard. et al. 2011. "[The Effect of Environmental Change on Human Migration.](#)" *Global Environmental Change* 21S:S3-S11.
3. Greiner, Clemens and Patrick Sakdapolrak. 2012. "[Rural-urban Migration, Agrarian Change, and the Environment in Kenya: A Critical Review of the Literature.](#)" *Population and Environment* 34(4):524-553.
4. Myers, Candice, Tim Slack, and Joachim Singelmann. 2008. "[Social Vulnerability and Migration in the Wake of Disaster: the Case of Hurricanes Katrina and Rita.](#)" *Population and Environment* 29:271-291.
5. Fussell, Elizabeth, Katherine J. Curtis, and Jack DeWaard. 2014. "[Recovery Migration to the City of New Orleans after Hurricane Katrina: A Migration Systems Approach.](#)" *Population and Environment* 35(3):305-322.

Recommend Reading:

- Saint Onge, Jarron M., Lori M. Hunter, and Jason D. Boardman. 2007. "[Population Growth in High-Amenity Rural Areas: Does it Bring Socioeconomic Benefits for Long-Term Residents?](#)" *Social Science Quarterly* 88(2):366-381.
 - Kalipeni, Ezekiel. 1996. "[Demographic Response to Environmental Pressure in Malawi.](#)" *Population and Environment* 17(4):285-308.
 - Hunter, Lori M. 1998. "[The Association between Environmental Risk and Internal Migration Flows.](#)" *Population and Environment* 19(3):247-277.
 - Hunter, Lori, et al. 2014. "[Rural Outmigration, Natural Capital, and Livelihoods in South Africa.](#)" *Population, Space and Place* 20(5):402-420.
 - Carr, David. 2009. "[Population and Deforestation: Why Rural Migration Matters.](#)" *Progress in Human Geography* 33(3):355-378.
 - Boncour, Philippe and Bruce Burson. 2009. "[Climate Change and Migration in the South Pacific Region: Policy Perspectives.](#)" *Policy Quarterly* 5(4):13-20.
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Weeks 9-12 Environment and Population Health: Inequality and Vulnerability

Week 9 Overview of Environment and Health Pathways Oct. 22

1. Entwisle, Barbara. 2007. "[Putting People into Place.](#)" *Demography* 44(4):687-703.
 2. Haines, A., R.S. Kovats, D. Campbell-Lendrum, and C. Corvalan. 2006. "[Climate Change and Human Health: Impacts, Vulnerability, and Mitigation.](#)" *The Lancet* 367(9528):2101-2109.
 3. Bezirtoglou, Christos, Konstantinos Dekas, and Ekatherina Charvalos. 2011. "[Climate Changes, Environment and Infection: Facts, Scenarios and Growing Awareness from the Public Health Community within Europe.](#)" *Anaerobe* 17(6):337-340.
 4. Shortt, Niamh, Elizabeth A. Richardson, Richard Mitchell, and Jamie Pearce. 2011. "[Re-engaging with the Physical Environment: A Health-Related Environmental Classification of the UK.](#)" *Area* 43(1):76-87.
 5. Jankowska, Marta M., John R. Weeks, and Ryan Engstrom. 2012. "[Do the Most Vulnerable People Live in the Worst Slums? A Spatial Analysis of Accra, Ghana.](#)" *Ann GIS* 17(4):221-235.
 6. Rainham, Daniel G.C. and Ian McDowell. 2005. "[The Sustainability of Population Health.](#)" *Population and Environment* 26(4):303-324.
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Week 10 Disease
Oct. 29

1. Castro, Marcia Caldas, Roberto L. Monte-Mor, Diana O. Sawyer, and Burton H. Singer. 2006. "[Malaria Risk on the Amazon Frontier.](#)" *Proceedings of the National Academy of Sciences of the United States of America* 103(7):2452-2457.
 2. Austin, Kelly F. 2013. "[Export Agriculture is Feeding Malaria: A Cross-National Examination of the Environmental and Social Causes of Malaria Prevalence.](#)" *Population and Environment* 35(2):133-158.
 3. Harling, Guy and Marcia C. Castro. 2014. "A Spatial Analysis of Social and Economic Determinants of Tuberculosis in Brazil." *Health & Place* 25:56-67.
 4. Hunter, Lori M., John Reid-Hresko, and Tom Dickinson. 2012. "[Environmental Change, Risky Sexual Behavior, and the HIV/AIDS Pandemic: Linkages through Livelihoods in Rural Haiti.](#)" *Population Research and Policy Review* 30(5):729-750.
 5. Tatem et al. 2012. "[Mapping Populations at Risk: Improving Spatial Demographic Data for Infectious Disease Modeling and Metric Derivation.](#)" *Population and Health Metrics* 10(8):1-14.
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Week 11 Disasters and Weather Shocks
Nov. 5

1. Neumayer, Eric and Thomas Plumper. 2007. "[The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002.](#)" *Annals of the Association of American Geographers* 97(3):551-566.
 2. Finch, Christina, Christopher T. Emrich, and Susan L. Cutter. 2010. "[Disaster Disparities and Differential Recovery in New Orleans.](#)" *Population and Environment* 31:179-202.
 3. Elliott, James R. and Jeremy Pais. 2010. "[When Nature Pushes Back: Environmental Impact and the Spatial Redistribution of Socially Vulnerable Populations.](#)" *Social Science Quarterly* 91(5):1187-1202.
 4. Schultz, Jessica and James R. Elliott. 2013. "[Natural Disasters and Local Demographic Change in the United States.](#)" *Population and Environment* 34(3):293-312.
 5. Skoufias, Emmanuel and Katja Vinha. 2012. "[The Impacts of Climate Variability on Household Welfare in Rural Mexico.](#)" *Population and Environment* 34(3):370-399.
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Week 12 Environmental Quality and In(equity)
Nov. 12

1. Anderton, Douglas L, Andy B. Anderson, John Michael Oakes, and Michael R. Fraser. 1994. "[Environmental Equity: The Demographics of Dumping.](#)" *Demography* 31(2):229-248.
2. Davidson, Pamela and Douglas L. Anderton. 2000. "[Demographics of Dumping II: a National Environmental Equity Survey and the Distribution of Hazardous Materials Handlers.](#)" *Demography* 37:461-466.
3. Boon, Christopher G. and Ali Modarres. 1999. "[Creating a Toxic Neighborhood in Los Angeles County: An Historical Examination of Environmental Inequity.](#)" *Urban Affairs Review* 35(2):163-187.
4. Hunter, Lori M., Michael J. White, Jani S. Little, and Jeannette Sutton. 2003. "[Environmental Hazards, Migration, and Race.](#)" *Population and Environment* 25(1):23-39.
5. Pais, Jeremy, Kyle Crowder, and Liam Downey. Forthcoming. "[Unequal Trajectories: Racial and Class Differences in Residential Exposure to Industrial Hazard.](#)" *Social Forces*. Doi: 10.1093/sf/sot099.
6. Hunter, Lori M. and Jeannette Sutton. 2004. "[Examining the Association between Hazardous Waste Facilities and Rural 'Brain Drain'.](#)" *Rural Sociology* 69(2):197-212.

Recommended Reading:

- Hird, John A. and Michael Reese. 1998. "The Distribution of Environmental Quality: An Empirical Analysis." *Social Science Quarterly* 79(4):693-716.
 - Mitchell, Jerry T., Deborah S.K. Thomas, and Susan L. Cutter. 1999. "Dumping in Dixie Revisited: The Evolution of Environmental Injustices in South Carolina." *Social Science Quarterly* 80(2):229-243.
 - Hunter, Lori M. 2000. "[The Spatial Association between U.S. Immigrant Residential Concentration and Environmental Hazards.](#)" *International Migration Review* 34(2):460-488.
 - Grineski, Sara E., Timothy W. Collins, and Jayajit Chakraborty. 2013. "[Hispanic Heterogeneity and Environmental Injustice: Intra-Ethnic Patterns of Exposure to Cancer Risks from Traffic-Related Air Pollution in Miami.](#)" *Population and Environment* 35(1):26-44.
 - Vivier, Patrick M., et al. 2011. "[The Important Health Impact of Where a Child Lives: Neighborhood Characteristics and the Burden of Lead Poisoning.](#)" *Maternal and Child Health Journal* 15:1195-1202.
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Week 13 Adaptation
Nov. 19

1. O'Brien, Karen, Siri Eriksen, Linda Synga, and Lars Otto Naess. 2006. "[Questioning Complacency: Climate Change Impacts, Vulnerability and Adaptation in Norway.](#)" *Ambio* 35(2):50-56.
 2. McLeman, Robert. 2010. "[Impacts of Population Change on Vulnerability and the Capacity to Adapt to Climate Change and Variability: A Typology Based on Lessons from 'a Hard Country'.](#)" *Population and Environment* 31(5):286-316.
 3. Black, Richard, Stephen R. G. Bennett, Sandy M. Thomas, and John R. Beddington. 2011. "[Climate Change: Migration as Adaptation.](#)" *Nature* 478:447-449.
 4. Umezaki, Masahiro, Yukio Kuchikura, Taro Yamauchi, and Ryutaro Ohtsuka. 2000. "[Impacts of Population Pressure on Food Production: An Analysis of Land Use Change and Subsistence Patterns in the Tari Basin in Papua New Guinea Highlands.](#)" *Human Ecology* 28(3):359-381.
 5. McLeman, Robert A., et al. 2014. "[What we Learned from the Dust Bowl: Lessons in Science, Policy, and Adaptation.](#)" *Population and Environment* 35:417-440.
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Week 14 Policy, Sustainability, and Future Directions for Research
Dec. 3

1. Lorah, Paul and Rob Southwick. 2003. "[Environmental Protection, Population Change, and Economic Development in the Rural Western United States.](#)" *Population and Environment* 24(3):255-272.
 2. Daly, Herman E. 2002. "[Reconciling the Economics of Social Equity and Environmental Sustainability.](#)" *Population and Environment* 24(1):47-53.
 3. Glenna, Leland, David Ader, Wenda Bauchspies, Abou Traore, Rita Afiavi, and Agboh-Noamershi. 2012. "[The Efficacy of a Program Promoting Rice Self-Sufficiency in Ghana during a Period of Neoliberalism.](#)" *Rural Sociology* 77(4):520-546.
 4. Hunter, Lori and Brian C. O'Neill. 2014. "[Enhancing Engagement between the Population, Environment, and Climate Research Communities: The Shared Socioeconomic Pathway Process.](#)" *Population and Environment* 35(3):231-242.
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Week 15 Wrapping Up and Final Project Presentations
Dec. 10

University Policies

Statement of Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. All Penn State University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For any material or ideas obtained from other sources, such as the text or things you see on the web, in the library, etc., a source reference must be given. Direct quotes from any source must be identified as such. All exam answers must be your own, and you must not provide any assistance to other students during exams. Any instances of academic dishonesty WILL be pursued under the University regulations concerning academic integrity.

Statement of Nondiscrimination

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status.

Direct all inquiries regarding the nondiscrimination policy to:

Affirmative Action Director
The Pennsylvania State University
201 Willard Building
University Park, PA 16802-2801
Telephone: (814) 863-0471

Disability Access Statement:

If you have a documented disability and wish to receive academic accommodations, please contact the campus disability liaison as soon as possible: (name, office, telephone, email). For additional information, check the university web site:

<http://www.equity.psu.edu/ods/>

NOTE: Accommodations require documentation.