

GGE 344: Environmental Justice – Spring 2019

9:30 a.m.-10:45 a.m. Tuesday and Thursday, Advanced Sci and Tech Hall 311

Prof. Stentor Danielson

Office: Advanced Technology and Science Hall, Room 327 (enter through the Geography main office, Room 319, and go straight back then take a right)

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Office hours: Official office hours are 12-2 p.m. Monday, Wednesday, and Friday. My door is generally always open when I am in the office, and I welcome students anytime I'm in.

About this class

Human interactions with the natural environment always pose questions of justice. How should environmental benefits and harms be distributed? What rights do indigenous people have over their traditional lands? What is a fair allocation of responsibility for responding to global environmental problems? Should decisions about the environment be made by experts, or democratically? What should be the relationship between the environmental movement and other political and social justice movements? This class will explore a variety of such questions and train you to think critically about them.

Outcomes

By the end of this course, a successful student will be able to:

- Identify important issues of environmental justice raised by events in the world.
- Explain why contention arises around a variety of salient environmental justice conflicts.
- Apply theories of justice to a variety of situations, and recognize and critique others' use of such theories.
- Make a well-reasoned case for what a just outcome of an environmental situation would be.

This course addresses the following departmental outcomes:

- Each graduate will demonstrate an understanding of features and patterns of the human environment. (4.2)
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns. (4.8)
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks. (1.5)
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts. (1.1)
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature. (1.2)
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct. (1.4)
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses. (2.1)
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context. (2.2)

- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues. (2.4)

And the following university-wide outcomes:

- Communication: Communicate effectively in speech and in writing, using appropriate information sources, presentation formats, and technologies. (1)
- Critical Thinking and Problem Solving: Locate, analyze, synthesize, and evaluate information and ideas from multiple perspectives--mathematical, scientific, and humanistic. Apply this information literacy to contemporary challenges. (2)
- Values and Ethics: Demonstrate an understanding of how the values of personal integrity, cooperative action, and respect for diversity influence one's own behavior and the individual and group behavior of others. (3)
- Social Awareness and Civic Responsibility: Use knowledge of evolving human institutions and of diverse cultural and historical perspectives to interact effectively in a variety of social and political contexts. (4)
- Global Interdependence: Act with an understanding of the cultural, socio-economic, and biological interdependence of planetary life. (5)
- Personal Development: Demonstrate intellectual curiosity, as well as a commitment to wellness, and to emotional and spiritual growth. (6)
- Professional Proficiency: Apply knowledge and skills to meet professional competencies within a specific discipline. (8)

Assignments

General assignments policies

All written assignments must be submitted by the stated deadline. Assignments will be docked 5% for each 24 hours or part thereof they are late, unless a documented unforeseeable excuse is provided. Since you have the entire semester's schedule now, please plan your time so as to complete all assignments early, so that you are prepared if something unexpected happens.

Word limits are meant to give you a sense of how comprehensive the paper ought to be, not as strict rules. If you have something important to say, say it. If you don't, don't waste your time (and mine) by padding the word count.

All information you acquire from sources other than your own creativity must be appropriately cited. An appropriate citation requires both an in-text reference immediately following the material in question, and a complete description of the source (including author, date, title, and publication information – a URL alone is insufficient) in the Works Cited. I prefer APA style (see the library website for details), but any complete and consistent citation format is acceptable. I expect students to exercise critical judgment in evaluating sources, both from the internet and from the library. Learning about environmental justice will require you to critically engage with sources that have strong political agendas, and both blanket dismissal of sources as “biased” and uncritical acceptance of them will be ruinous. If you have any questions about sources or citations, please talk to me before the due date – I would rather have you ask and do it right than lose points for doing it wrong.

1. Reflection Journals: Due Wednesdays from January 30 to April 24

From week 3 to week 13 (with the exception of week 8, the midterm exam), our normal course rhythm will be to discuss an environmental justice topic in general terms on Tuesday, then dig into a specific

case study on Thursday. In order to ensure that everyone is well-prepared for our case study discussion, you must write a short (~200 words) reflection journal entry each week. Your journal should highlight what you think is most interesting or relevant, from an environmental justice point of view, about the case study. A good way to do this is the “yes, no, hmmm” method:

- One thing you saw in the readings that you thought was a really good point (“yes”)
- One thing you saw in the readings that you think is mistaken or misleading (“no”)
- One thing you saw in the readings that raised new questions in your mind or connected in unexpected ways to other materials or situations (“hmmm”)

Your reflection journal will be posted as a discussion board post on D2L. It must be posted by midnight on Wednesday, to give me the opportunity to skim through your entries on Thursday morning in preparation for our class.

There are 11 weeks for which you can write reflection journals. Your final grade will be based on your best 10 journals (dropping the lowest one).

2. Major paper: Progress reports due March 7 and April 4, oral presentation April 30-May 2, final paper due May 7

This assignment is meant to give you experience analyzing an environmental justice issue in greater detail. Numerous checks will be made throughout the semester to ensure that you are making good progress. At the end of the class, each person will make a 5-minute oral presentation of their research.

Your major paper is your chance to dig deep into one environmental justice issue, and to develop a more coherent theory of justice. The paper should cover the same three basic questions as the Current Events assignments (though obviously in much more depth):

- What is the issue you are dealing with?
- Why is this an example of environmental (in)justice?
- What ought to be done to make the situation more just?

During Week 3 (Feb. 5-7), all students must make an appointment to discuss their paper idea with the professor. You need not have a detailed topic worked out in advance, but if you come to the meeting completely unprepared, it will not be a productive use of your time or mine. You are not limited to the topics covered in this class, but you must be able to justify why the topic you choose is relevant to environmental justice. Most papers will be “case studies” – for example, of the controversy over uranium mining on the Navajo reservation or of the impact of the Three Gorges Dam in China.

On March 7 and again on April 4, you must submit a “progress report.” These progress reports will not be graded on content, so don't be afraid to turn in unpolished ideas or prose. However, 5% of your final class grade will be based on turning each of them in on time. The progress reports are meant to keep you from putting off your paper until the last minute, and to allow me to give you feedback on the development of your ideas before grading time arrives. The first progress report should contain, at minimum, a list of possible sources and the question you intend to address in your paper. The second progress report should contain, at minimum, a more developed list of sources and a full outline of your argument, as well as 1000 words of actual writing.

During Week 14 (April 30-May 2), each student will make a 5-minute presentation on their research. In most cases this will be a traditional oral presentation, but if you have an idea for an alternative, creative way of presenting your research to the class, I'm happy to talk about it. Remember that you only have 5

minutes – so it is important to focus in on the most important aspects of your research and be concise. Questions asked of student presenters will help your classmates to improve their final written paper. If you want to use audiovisual technology (such as PowerPoint), that is fine – but delays for technical difficulties will be counted against your 5 minutes, so make sure you come to class early and test your equipment.

Written papers are due on the day of the final exam, May 7. Your paper should be about 2,000-3,000 words long – but remember that saying everything necessary to make your point without adding extraneous information is more important than stretching or squishing to fit the word count.

The final page of this syllabus contains the rubric that I will use to grade your oral presentations and final paper.

3. Midterm exam: March 14

The midterm will be a combination of short answer and short essay questions covering all reading and class discussion material from the first half of the semester.

4. Final exam: May 7

The final exam will be held from 10:30 a.m. to 12:30 p.m. on Tuesday, May 7. It will be a combination of short answer and short essay questions covering all reading and class discussion material from the semester.

5. Class participation: May 7

Interaction with other students is a vital part of social science study. I hope that our classes will feature substantive, critical discussion of the material in the readings as well as relevant ideas from your other experience and the world around us. On the day of the final exam, you must hand in a report of up to 300 words telling me what grade you believe you deserve for your class participation, and giving a justification for that grade. Your justification should give an overview of what you feel has been your level of participation in class discussions, as well as highlighting at least two specific contributions you made to the class. Your grade will be based both on your report as well as my own notes on students' participation during class, so there is no guarantee you will receive the grade that your report asks for – but I do take your reports seriously.

Grading

The final grade for this class will consist of:

- 20% Reflection Journal (2% each)
- 5% Major paper progress report #1
- 5% Major paper progress report #2
- 25% Major paper written final paper
- 10% Major paper oral presentation
- 10% Midterm exam
- 15% Final exam
- 10% Class participation

Attendance and Preparation

Environmental justice is a complex subject, and no manageable set of readings can cover all of the information that I think is important to highlight on each topic. I expect all students to attend every

class, because class lectures and discussions will be key to learning the material. While attendance is not factored into your grade, priority for outside-of-class help (such as office hours) will be given to those students who attend class regularly. You should come prepared to talk about the readings. I will frequently pose problems for you to investigate between classes. While these problems are not factored into your grade, I expect you to put in substantial time working on them so that we can have a productive class when we reconvene.

I assume that all members of this class are adults who have chosen to take this class because you are interested in learning about environmental justice. Therefore, behavior that is disruptive to your own learning or that of others will not be tolerated, and you will be asked to leave. Such behavior includes: eating, smoking, sleeping, working on work for other classes or personal business, talking about topics other than environmental justice, and the use of non-approved electronic devices (iPods, laptops, cell phones, etc. – all cell phones must be *turned off* when you enter the class and remain off until you leave).

Special Needs

Your ability to master the class material should not be hindered by anything other than your own effort. If you have a disability, health issue, outside responsibility, or other concern that may affect your ability to succeed in this class, do not hesitate to contact me or the university's Office for Students with Disabilities (738-4877, linda.quidone@sru.edu, 122 Bailey Library), and we will work together to find an accommodation for you.

Slippery Rock University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the person designated in the University protection of minors policy. Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: <http://www.sru.edu/offices/diversity-and-equal-opportunity/sexual-misconduct-and-victim-resources>.

Changes

While I do not expect much to change about this syllabus, I reserve the right to make changes and will notify students of them in class and/or by email.

Readings

There are no books to purchase for this class. All readings are available through D2L. You are expected to have thoughtfully read each week's readings by the beginning of the week. Many weeks have fairly large reading loads, so plan ahead and don't wait until the weekend before to start reading.

Desire2Learn

I will use the Desire2Learn system to distribute assignments, to send messages about the class, and to record your grades. Students should make sure that they are able to log in to the class's D2L site as well as the electronic reserves for this class on the library website. It is your responsibility to contact ITS or

the library if you have a problem. You are also responsible for checking your SRU email account daily, as I will be sending class emails through D2L to those addresses.

Academic Honesty

Cheating (any method for getting the correct answers other than knowing the material yourself) and plagiarism (representing others' work as your own) will not be tolerated, and I will be alert for signs of both. In your papers, any idea that you take from any person other than yourself must be properly cited, and any words or phrases that you take from others must be clearly marked as quotations. You may discuss ideas with your classmates, or get help proofreading, but all of the writing must be your own. On the first instance of cheating or plagiarism, you will receive a zero for that assignment. On the second instance, you will receive a zero for the course. Review the section in your Student Handbook on Academic Honesty for a more detailed explanation of the university's procedures for handling cheating and plagiarism.

Schedule of Topics and Readings

Week 1, January 22-24: Introduction

Why should we worry about environmental justice? How did the environmental justice issue get on the agenda?

Agyeman, Julian, David Schlosberg, Luke Craven, and Caitlin Matthews. 2016. Trends and directions in environmental justice: from inequity to everyday life, community, and just sustainabilities. *Annual Review of Environment and Resources*. <https://as.tufts.edu/uep/sites/all/themes/asbase/assets/documents/newsAnnurevEnviron.pdf>

Week 2, January 29-31: What is justice?

How do we decide what counts as justice and injustice? What major theories have addressed this issue?

Stanford Encyclopedia of Philosophy: Distributive Justice.

<https://plato.stanford.edu/entries/justice-distributive/>

Solum, Lawrence B. 2017. Procedural justice. *Legal Theory Lexicon*.

https://lsolum.typepad.com/legal_theory_lexicon/2004/02/legal_theory_le_2.html

Case study: Fracking for natural gas

Sisk, Amy. 2019. Pittsburgh suburb says no to drilling under park. *State Impact Pennsylvania*.

<https://stateimpact.npr.org/pennsylvania/2019/01/17/pittsburgh-suburb-rejects-proposal-to-drill-under-local-park/>

Morgan-Besecker, Terrie 2018. In landmark ruling, Pennsylvania Superior Court opens door to trespass claims against fracking companies. *The Morning Call*.

<https://www.mcall.com/news/nationworld/pennsylvania/mc-nws-fracking-pennsylvania-court-ruling-trespass-20180404-story.html>

Kelly, Darrin and Mike Butler. 2018 Natural gas helping Pa. flourish. *TribLive*.

<https://triblive.com/opinion/featuredcommentary/14351881-74/darrin-kelly-mike-butler-natural-gas-helping-pa-flourish>

Lindstrom, Natasha. 2018. Fracking riles residents in Pittsburgh's northeastern suburbs.

TribLive. <https://triblive.com/local/allegheeny/13629224-74/fracking-riles-residents-in-pittsburghs-northeastern-suburbs>

Week 3, February 5-7: Decision-making

What procedures should be followed to make decisions that raise environmental justice concerns?
What tactics should be used by people who feel they are victims of environmental injustice?

Renn, O., Webler, T., & Kastenholz, H. 1998. Procedural and substantive fairness in landfill siting: a Swiss case study. In R. Löfstedt and L. Frewer (Eds.), *The Earthscan reader in risk and modern society* (pp. 253-270). London: Earthscan Publications.

Danielson, Stentor. 2016. Participatory approaches in environmental management. In D. Sarkar, R. Datta, A. Mukherjee, & R. Hannigan (Eds.), *An integrated approach to environmental management* (pp. 363–380). Hoboken, NJ: John Wiley and Sons.

Case study: Wind energy in the Midwest

Rood, Lee. 2018. Utility's push for more wind turbines is blowing up trouble with Madison County residents. *Des Moines Register*.

<https://www.desmoinesregister.com/story/news/investigations/readers-watchdog/2018/08/01/iowa-wind-turbines-energy-neighbors-midamerican-energy-bridges-madison-county-dexter-adair/809981002/>

Hadachek, Amy G. 2018. Nebraska wind farm projects cause controversy and heartache. *The Fence Post*. <https://www.thefencepost.com/news/nebraska-wind-farm-projects-cause-controversy-and-heartache/>

AP. 2018. New rebellion against wind energy stalls projects. *Associated Press*. <https://finance-commerce.com/2018/02/new-rebellion-against-wind-energy-stalls-projects/>

Week 4, February 12-14: Environmental racism: The experiences and the movement

How are inequalities in people's environments created? What is the experience of environmental inequality like? What kind of inequalities qualify as injustice?

Bolin, B., S. Grineski, and T. W. Collins. 2005. The geography of despair: environmental racism and the making of South Phoenix, Arizona, USA. *Human Ecology Review* 12 (2):156–168. <http://tinyurl.com/yjfyep5>

Pulido, Laura. 2000. Rethinking environmental racism: white privilege and urban development. *Annals of the Association of American Geographers* 90 (1): 12-40.

Case study: Lead in the water, Flint MI

Egan, Paul. 2017. Civil rights panel: Flint water crisis linked to “systemic racism” *Detroit Free Press*. <https://www.freep.com/story/news/local/michigan/flint-water-crisis/2017/02/17/civil-rights-flint-water-racism/98035564/>

Baptiste, Nathalie. 2018. Officials say Flint's water is safe. Residents say it's not. Scientists say it's complicated. *Mother Jones*. <https://www.motherjones.com/environment/2018/04/officials-say-flints-water-is-safe-residents-say-its-not-scientists-say-its-complicated/>

Guyette, Curt. 2017. A deep dive into the source of Flint's water crisis. *Detroit Metro Times*. <https://www.metrotimes.com/detroit/a-deep-dive-into-the-source-of-flints-water-crisis/Content?oid=3399011>

Pell, M.B. and Joshua Schneyer. 2017. Thousands of U.S. areas afflicted with lead poisoning beyond Flint's. *Scientific American*. <https://www.scientificamerican.com/article/thousands-of-u-s-areas-afflicted-with-lead-poisoning-beyond-flints/>

Week 5, February 19-21: Environmental racism: The evidence and the research

What is the evidence that environmental inequalities are pervasive? How should we measure environmental inequalities? How should we explain the results?

Bullard, R. D., P. Mohai, R. Saha, and B. Wright. 2007. Executive summary. *Toxic wastes and race at twenty: 1987-2007: grassroots struggles to dismantle environmental racism in the United States*. Cleveland: United Church of Christ Justice and Witness Ministries . <http://tinyurl.com/kqpdhy>
Case study: Studying toxic waste distribution

Week 6, February 26-28: Indigenous people: Environmental inequality

What kind of environmental inequalities do indigenous people face? How is their situation unique?

Jacobs, J. M. 1993. "Shake "im this country": the mapping of the Aboriginal sacred in Australia -- the case of Coronation Hill." In *Constructions of race, place and nation*, eds. P. Jackson and J. Penrose, 100–118. London: University College London Press.

Argyle Mine: Diamonds in the Rough: <https://www.youtube.com/watch?v=6IqRiHzNaHQ>

Case study: The Dakota Access Pipeline

Faith, Mike. 2018. Federal permit process for the Dakota Access Pipeline was illegal and flawed. *Indian Country Today*. <https://newsmaven.io/indiancountrytoday/opinion/federal-permit-process-for-the-dakota-access-pipeline-was-illegal-and-flawed-YR8j6cVz0ku3yU1dQAxWZQ/>

Wiles, Tay. 2017. What Standing Rock meant for those who took part. *High Country News*. <https://www.hcn.org/issues/49.1/whats-next-after-standing-rock>

McCorm, Brigham A. 2018. What ever happened to the Dakota Access Pipeline? *Forbes*. <https://www.forbes.com/sites/brighammccorm/2018/06/04/what-ever-happened-to-the-dakota-access-pipeline/#2b0fb0784055>

Week 7, March 5-7: Indigenous people: Sovereignty and Paternalism

Shrader-Frechette, Kristin. 2006. *Environmental Justice*. Ch. 6. Native peoples and the problem of paternalism, pp. 117-133.

Grijalva, James M. 2011. Self-determining environmental justice for Native America. *Environmental Justice*, 4(4), 187–192.

Case study: Coal and the Navajo and Hopi Nations

Randazzo, Ryan. 2018. Out of options, the Navajo Nation seeks to take over troubled NGS coal plant. *Arizona Republic*.

<https://www.azcentral.com/story/money/business/energy/2018/11/02/navajo-generating-station-navajo-nation-seeks-take-over-coal-plant/1861342002/>

Rainey, James. 2017. Lighting the west, dividing a tribe. NBC News.

<https://www.nbcnews.com/specials/navajo-coal>

Lee, Stephen. 2018. Navajo leadership being lobbied to reject coal power plant.

Bloomberg.

<https://news.bloombergenvironment.com/environment-and-energy/navajo-leadership-being-lobbied-to-reject-coal-power-plant>

Final paper progress report #1 due Thursday

Spring Break March 12-14 – No Class

Week 8, March 19-21: Mainstream environmentalism: The EJ critique

How have mainstream environmental groups promoted or undermined environmental justice? What charges have EJ activists made against other environmental groups, and how have they responded?

Southwest Organizing Project's letter to the Group of 10 major environmental organizations, 1990. <http://www.ejnet.org/ej/swop.pdf>

Green 2.0 NGO diversity report card for 2018.

<https://www.diversegreen.org/wp-content/uploads/2019/01/NGOsReport2018.pdf>

Midterm exam on Thursday

Week 9, March 26-28: Gender

Do environmental concerns affect people differently on the basis of their gender? What role does gender play in environmental justice activism?

Miller, V., M. Hallstein, and S. Quass. 1996. Feminist politics and environmental justice: women's community activism in West Harlem, New York. In *Feminist political ecology: global issues and local experiences*, eds. D. Rocheleau, B. Thomas-Slayter, and E. Wangari, 62–85. London: Routledge.

Hawkins, Roberta. 2012. Shopping to save lives: gender and environment theories meet ethical consumption. *Geoforum*, 43, 750–759.

Case Study: Gender and disasters

Enarson, Elaine. 2005. Women hard-hit by Hurricane Katrina disaster. *Denver Post*.

<https://www.denverpost.com/2005/09/22/women-hard-hit-by-hurricane-katrina-disaster/>

Whittaker, Joshua, Christine Eriksen, and Katharine Haynes. 2015. More men die in bushfires: how gender affects how we plan and respond. *The Conversation*.

<https://theconversation.com/more-men-die-in-bushfires-how-gender-affects-how-we-plan-and-respond-51124>

Week 10, April 2-4: Humans and animals

Do animals have rights, and can they be the victims of environmental injustices? Are human rights and animal rights in competition, or complementary? Do our current ways of using and conserving animal life create environmental injustices for people?

Singer, P. 1993. Equality for animals? In *Practical ethics*, 48-70. Cambridge: Cambridge University Press.

Ilea, R. C. 2009. Intensive livestock farming: global trends, increased environmental concerns, and ethical solutions. *Journal of Agricultural and Environmental Ethics*, 22, 153-167.

Case study: Japan, the Makah tribe, and the International Whaling Commission

Johnson, Keith A. The Makah manifesto. *The Seattle Times*, Sunday August 23.

<http://tinyurl.com/y9dxdfn>

Sea Shepherd Conservation Society. 2009. Makah tribe – fighting to kill more whales.

<http://tinyurl.com/y9u4o8u>

Wagner, Eric. 2009. Savage disobedience: a renegade whaler rocks the boat in the Makah struggle for cultural identity. *Orion Magazine*, November/December.

<http://tinyurl.com/y87xcev>

BBC. 2018. Japan whale hunting: commercial whaling to restart in July. *BBC News*.

<https://www.bbc.com/news/world-asia-46682976>

Final paper progress report #2 due Thursday

Week 11, April 9-11: Wilderness

Is preserving wilderness an important goal of environmental justice? How might our approach to wilderness create injustices?

- DeLuca, K. M. 2007. A wilderness environmentalism manifesto: contesting the infinite self-absorption of humans. In *Environmental justice and environmentalism: the social justice challenge to the environmental movement*, eds. R. Sandler and P. C. Pezzullo, 27-55. Cambridge, MA: MIT Press.
- Taylor, S. W. 2006. Citizens against wilderness: Environmentalism and the politics of marginalization in the Great Smoky Mountains. In S. H. Washington, P. C. Rosier, & H. Goodall (Eds.), *Echoes from the poisoned well: global memories of environmental injustice* (pp. 157–169). Lanham, MD: Lexington Books.

Case study: Malheur Wildlife Refuge Occupation

- The Oregonian. 2017. Oregon standoff timeline: 41 days of the Malheur refuge occupation and the aftermath. *OregonLive*.
https://www.oregonlive.com/portland/index.ssf/2017/02/oregon_standoff_timeline_41_da.html
- OPB. 2018. An occupation in eastern Oregon. *Oregon Public Broadcasting*.
<https://www.opb.org/news/series/burns-oregon-standoff-bundy-militia-news-updates/>

Week 12, April 16-18: Development and Environmental Justice

How have imperialism and colonialism created environmental injustices? How can poorer countries develop in ways that are environmentally just?

- Temudo, Marina Padrão. 2012. “The white men bought the forests”: conservation and contestation in Guinea-Bissau, Western Africa. *Conservation and Society*, 10(4), 354–366. <http://www.conservationandsociety.org/article.asp?issn=0972-4923;year=2012;volume=10;issue=4;spage=354;epage=366;aulast=Temudo>
- Louis, Elizabeth. 2015. “We plant only cotton to maximize our earnings”: the paradox of food sovereignty in rural Telengana, India. *Professional Geographer*, 67(4), 586–594.

Case study: GMOs in developing countries

- Bagla, Pallava. 2018. India nears approval of first GM food crop. *Science*.
<https://www.sciencemag.org/news/2017/05/india-nears-approval-first-gm-food-crop>
- Moudgil, Manu. 2017. Why we should be worried about GM mustard. *Your Story*.
<https://yourstory.com/2017/07/gm-mustard-india-genetically-modified-agriculture/>
- Pal Singh Pangli, Pavitar. 2017. India will benefit from commercialization of GM mustard. *Global Farmer Network*. <https://globalfarmernetwork.org/2017/07/india-will-benefit-commercialization-gm-mustard/>
- Shiva, Vandana. 2016. Why the government is right in controlling the price of Monsanto's Bt cotton seeds. *Scroll.in*. <https://scroll.in/article/814476/why-the-government-is-right-in-controlling-the-price-of-monsantos-bt-cotton-seeds>
- Shahane, Girish. 2016. Counterview: In GMO debate, Vandana Shiva has chosen fear-mongering and denialism. *Scroll.in*. <https://scroll.in/article/814756/counterview-in-gmo-debate-vandana-shiva-has-chosen-fear-mongering-and-denialism>

Week 13, April 23-25: Global Environmental Justice

How should principles of environmental justice apply at the global scale? What is a fair way of distributing the costs of dealing with global environmental issues? How should the interests of future generations be considered?

Takei, Milton. 2012. Racism and global warming: the need for the richer countries to make concessions to China and India. *Race, Gender & Class*, 19(1–2), 131–149.

Schuppert, Fabian. 2011. Climate change mitigation and intergenerational justice. *Environmental Politics*, 20(3), 303–321.

Case study: UNFCCC COP 24

Ellsmoor, James. 2018. Ten things the world learned at the COP24 climate change negotiations. Forbes. <https://www.forbes.com/sites/jamesellsmoor/2018/12/13/ten-things-the-world-learned-at-the-cop24-climate-change-negotiations/#7e0029271cd2>

Batchelor, Tom. 2018. COP24: Environmental groups criticize 'morally unacceptable' climate deal reached after major Poland summit. *The Independent*. <https://www.independent.co.uk/environment/cop24-climate-change-deal-poland-emissions-global-warming-katowice-paris-agreement-a8685411.html>

Handley, Erin. 2018. COP24 president defends participation of coal companies at climate talks. ABC. <https://www.abc.net.au/news/2018-12-07/coal-company-participation-at-climate-talks-defended/10592146>

Week 14, April 30-May 2: Oral presentations

Final Exam: Tuesday, May 7, 10:30 a.m.-12:30 p.m.

Final paper and presentation grading rubric:

Item	A	B	C	D	F
Completeness 20%	Gives a complete, thoughtful, and integrated answer to all questions in the assignment	Addresses all questions, but gives insufficient depth to some, fails to link them together	Addresses all questions in a perfunctory way, omits some questions or adds irrelevant digressions	Veers significantly from the assigned topic	Essay is on a completely irrelevant topic
Argument 20%	Makes a strong argument, with a clearly stated thesis and demonstration of all key points.	Main argument is apparent but some points weakly argued	Argument is confused or central thesis not clear	Argument difficult to identify, or may contradict itself or leave large gaps	Absence of an argument
Sources 20%	All arguments fully supported by information that is relevant and obtained from reliable sources	Adequate use of information and sources relevant to the argument	Signs of inattention to source quality, some information presented irrelevant or missing but necessary	Failure to distinguish reliable and unreliable sources, “kitchen sink” approach to research results	Large gaps in research and irrelevant digressions, use of manifestly unreliable sources
Citations 10%	All information cited in a clear and consistent manner	Citations may be partially incomplete	Significant inconsistencies in citation style, important points not cited	Pervasive failure to cite sources or to cite them in an understandable way	Citations absent or impossible to follow
Writing 10%	Impeccable grammar and writing style that is enjoyable to read and appropriate to the subject matter	Generally consistent grammar and an easy to understand writing style	Significant grammar mistakes and writing style that is stilted or inappropriate	Rampant grammar mistakes and awkward writing that make it difficult to follow the argument	Pervasive grammar mistakes and clear lack of care about the readability of the text
Insight 20%	Raises new ideas that enter new ground in cultural geography and/or strongly stimulate my own thinking	Reaches deep and substantive conclusions that go beyond the class material	Draws conclusions consistent with the class material, or further insights which are significantly flawed	Contains original ideas that are shallow or clearly incorrect	Lacks any original ideas

