SISU-419.004 TACKLING CLIMATE CHANGE (Fall 2020)

Dr. Simon Nicholson simon.nicholson@american.edu

Class Meetings: Wednesdays 11:20am – 2:10pm Zoom link for online sessions: <u>https://zoom.us/j/99266122031</u>

Office Hours: Virtual, by appointment

"One of the penalties of an ecological education is that one lives alone in a world of wounds... An ecologist must either harden his [sic] shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the mark of death in a community that believes itself to be well and does not want to be told otherwise."

Aldo Leopold, Round River, 1953.

"You cannot affirm the power plant and condemn the smokestack, or affirm the smoke and condemn the cough."

Wendell Berry, The Gift of the Good Land, 1981.

"Don't blow it—good planets are hard to find."

Bumper Sticker, T-shirt decal, and song lyric.

Course Description

Climate change is the most profound challenge facing humanity. Tackling climate change will test the limits of our collective ingenuity and grit. This course uses insights from environmental studies, international development, and the study and practice of global governance to determine avenues for response. The class works together across fields and disciplines to comprehend the nature of climate change and uncover effective entry-points for action.

This is a capstone course for students in the School of International Service. Our work together will range through foundational literatures and contemporary debates, and through our conversations we will take on a set of urgent and pressing questions: What is the nature of climate change? Along what paths lie the most effective responses to the world's environmental dilemmas?

For the Fall 2020 semester this course will be fully online. The format will involve a mix of asynchronous materials for you to work through each week coupled with a weekly synchronous (face-to-face) session at our scheduled class meeting time. Most weeks the synchronous session will run for 75 minutes. The exceptions will be:

- 1) weeks when we have guest speakers will run 90-100 minutes to allow adequate time for class discussion (I'll flag those weeks for you in advance);
- 2) our major simulation week, 10/21, will use up to 120 minutes;
- 3) final presentation days for your term papers, 12/2 and 12/9, when we'll need extra time to accommodate all presentations.

Learning Outcomes

Those who participate fully in this course should by its end:

- 1. Have a working understanding of the causes and implications of global anthropogenic climate change and of different forms of response;
- 2. Comprehend the architecture of the global environmental governance system, and appreciate the promises and shortcomings of the system for addressing complex environmental challenges;
- 3. Appreciate the major ethical dimensions of climate change;
- 4. Differentiate among the perspectives and approaches of key social scientific traditions as they apply to environmental studies.

Expectations and Requirements

In class participation (15% of grade): This course will be conducted as a seminar. A high-quality classroom experience requires the active, informed participation of all members of the class. You are expected to attend our class meetings, to read all assigned material before each class session, and to participate in a committed manner to discussions. Note that you will not be assessed on the *quantity* of your interactions in the classroom, but rather their *quality*. This means that attentive listening and respectful engagement with views expressed by others are more important and valuable forms of classroom involvement than domination of classroom interactions. If you find participation challenging, let's talk about it early in the semester and work together to develop a strategy for your success. There are many techniques for overcoming barriers to participation and I am happy to work together with you to help you become a more effective participant, but to do so we have to talk first.

<u>Weekly postings to Group Blog (20% of grade)</u>: Each week I will ask you to post your reactions to the week's reading material PRIOR to our class discussion. This will help us take the class's temperature on the material and have a better discussion. You will post to a blog site that you set up and manage as part of a group. *The expectation is that you will post at least once each week*. While I encourage you to comment on the blog posts of others in your group, please be sure you post your response to the main blog page rather than as a comment to someone else's post.

Your regular contributions to the course blogs are worth a significant portion of your final grade, so this means that while your blog posts can be informal in tone, they should be substantive. You must post by 5 PM on Tuesday, the day before class, so that everyone will have time to read and reflect on the postings prior to our in-person meetings. You may pass twice during the semester (but of course are expected to come to class those weeks fully prepared for discussion). Please save at least one of your passes against unexpected developments such as illness! Note, too, that blogging platforms can be quirky, so please craft your responses first in word processing software rather than directly into the blog. Because of the availability of passes, late postings (after 5 PM each Tuesday) will not be counted and there will be no extensions.

<u>UNFCCC COP Simulation (25% of grade)</u>: The class will be simulating a UNFCCC Conference of the Parties (COP) negotiation in the year 2023. The focus of the simulation will be the Global Stocktake as defined in the Paris Agreement, in which countries will be expected to report back on progress towards mitigation and finance commitments and lay out conditional plans for ratcheting up their ambition in the period between 2023-2028. Parties will also initiate discussions surrounding the potential role of climate engineering in future mitigation and adaptation plans.

You will each represent a country. You will spend several weeks independently researching your country's national circumstances, laws, and politics to inform your country's positions on various climate change issues.

Further instructions will be given closer to the assignment date.

<u>Research Paper (35% of grade)</u>: Over the course of the semester, you will be researching and writing a paper on some aspect of climate change and efforts to respond. You will need to a) define a particular climate change-related subject matter, b) outline the subject matter and describe its importance, c) situate your own analysis in contemporary academic and/or policy debates and writings, and d) make a clear and forceful case for understanding or acting in a particular fashion. We will have time to discuss the paper in general—and your topics in particular—throughout the semester. Interim deliverables are due throughout the semester: topic statement (September 23), abstract and outline (October 7), and uploaded copy of the final paper [20 pages, 12 pt. font, double-spaced] (December 9, 5:30pm).

Final Presentation (5% of grade): You will give a brief presentation at the end of the semester

Policy on Late Work

Things happen. I realize that on occasion circumstances beyond your control may lead you to ask for an extension. If you have a real need and can demonstrate that need, I'm happy to grant extensions for reasonable periods of time. However, I will NOT in general grant an extension if it is requested within 24 hours of an assignment falling due or if it is requested after the deadline has passed. I expect you to take responsibility for staying on top of looming deadlines and planning accordingly. Work that is late will be penalized at the rate of 1/3 of a letter grade each day (e.g. an A will become an A-), beginning immediately after the assignment's due date has passed.

Email Policy

Please try to ask questions regarding class logistics in class, well ahead of deadlines. If you have additional questions, please email me, and I will try to reply within two days.

GRADING SCALE:

Α	93-100	B+	87-89	C+	77-79	D+	67-69	F ≤ 59
A-	90-92	В	83-86	С	73-76	D	63-66	
		B-	80-82	C-	70-72	D-	60-62	

An "A" grade is awarded for excellent or superior work; a "B" grade for work that is above average; a "C" grade for work that is average; a "D" for below average work; and an "F" for work that is incomplete or exceptionally poor.

Academic Integrity: All students are expected to abide by the Academic Integrity Code of American University (available online at <u>http://www.american.edu/academics/integrity/code.htm</u>). Note that I take plagiarism, whether deliberate or unintentional, very seriously. Please take care with your work.

Books

David Keith, "A Case for Climate Engineering" (MIT Press: 2013) REQUIRED

Simon Nicholson and Paul Wapner, *Global Environmental Politics: From Person to Planet* (Routledge, 2015) (Book will be made available for Blackboard for your class-related use).

Version 2 – 9/23/2020

CLASS SCHEDULE

8/26 Course introduction

9/2 Climate change as scientific arena

- Explore <u>http://whatweknow.aaas.org/</u>
- IPCC (2018) "Special Report: Global Warming of 1.5C" Read the Summary for Policymakers available at https://report.ipcc.ch/sr15/pdf/sr15 spm_final.pdf
- David Wallace Wells, "The Uninhabitable Earth," (2017) <u>New Yorker</u>, available at <u>http://nymag.com/daily/intelligencer/2017/07/climate-change-earth-too-hot-for-humans.html</u>
- Ibram Kendi, "What the Believers are Denying," (2019) <u>The Atlantic</u>, available at <u>https://www.theatlantic.com/ideas/archive/2019/01/what-deniers-climate-change-and-racism-share/579190/</u>

<u>To View</u>

Nicholson: "Climate Science: The Basics" (Blackboard)

Bill Nye: "Climate Change 101" https://climaterealityproject.org/video/climate-101-bill-nye

Katherine Hayhoe: "I live in the Eastern US – Does Climate Change Matter to Me?" <u>https://www.youtube.com/watch?v=reryJb1ro2I</u> and "Climate Models" <u>https://www.youtube.com/watch?v=dGF4-JyHh_8</u>

9/9 Climate change as technological puzzle I: past, present, and future energy regimes

- Bill McKibben, "Global Warming's Terrifying New Math," (2012) <u>Rolling Stone</u> available at <u>https://www.rollingstone.com/politics/politics-news/global-warmings-terrifying-new-math-188550/</u>
- Luke Sussams, Carbon Budgets Explained (2018), available at https://www.carbontracker.org/carbon-budgets-explained/
- J R McNeill, *Something New Under the Sun*, (Norton: 2000) Ch. 1 ("Prologue") and Ch. 10 ("Fuels, Tools, and Economics").
- Langdon Winner, *The Whale and the Reactor*, (University of Chicago Press: 1986), Chapter 2 "Do Artifacts Have Politics?"
- The White House, "United States Mid-Century Strategy for Deep Decarbonization," (November 2016), available at https://unfccc.int/files/focus/long-term_strategies/application/pdf/mid_century_strategy_report-final_red.pdf (read Executive Summary and skim remainder).

<u>To View</u>

Chad Frischmann, "100 solutions to reverse global warming" https://www.ted.com/talks/chad frischmann 100 solutions to reverse global warming#t-705068

Vox, "The Green New Deal, Explained" https://www.youtube.com/watch?v=GxIDJWCbk6I

Nicholson: "Technological Fixes" (Blackboard)

In-class Exercise

En-ROADS climate simulation

9/16 Climate change as market failure

- Simon Nicholson and Paul Wapner, *Global Environmental Politics: From Person to Planet* (Routledge, 2015) pp. 151-172; 215-227.
- Neil Irwin, "How to Think About the Costs of Climate Change, (2019) <u>New York Times</u> available at <u>https://www.nytimes.com/2019/01/17/upshot/how-to-think-about-the-costs-of-climatechange.html</u>
- Naomi Klein, *This Changes Everything*, (Simon & Schuster: 2014) "Introduction" and "Chapter Two: Hot Money, How Free Market Fundamentalism Helped Overheat the Planet."

<u>To View</u>

Interview with Peter Dauvergne, "Big Business and Environmentalism" (Blackboard)

Nicholson "A System Transforming Approach to the Market" (Blackboard)

Interview with Erik Assadourian, "The Case for Degrowth" (Blackboard)

Naomi Klein, "Is Capitalism Driving Climate Change?" <u>https://www.youtube.com/watch?v=bCi3Xt0udzw</u>

9/23 Climate change as domestic policy and international governance challenge (Final Paper Topic Statement) (Time for UNFCCC mock prep)

Invited Guest speakers: Joe Thwaites and Cynthia Elliott (World Resources Institute)

- Michele Betsill, "International Climate Change Policy: Complex Multilevel Governance" in Regina Axelrod et al. (eds.) *The Global Environment: Institutions, Law, and Policy*, (4th ed.) (CQ Press: 2015) pp. 234-258.
- Maria Ivanova, "Good COP, Bad COP: Climate change after Paris, Future United Nations Development System" (April 2016) <u>Newsletter of the Future United Nations Development</u>

System available at

https://www.futureun.org/media/archive1/briefings/FUNDS_Brief40_Paris_Climate_April2016. pdf

• The Text of the Paris Agreement on Climate Change, <u>https://unfccc.int/sites/default/files/english_paris_agreement.pdf</u>

<u>To View</u>

Nicholson: "Long History of the International Climate Change Negotiations" (Blackboard)

Nicholson: "The International Regime I"

Nicholson: "The International Regime II"

Nicholson: "Disaggregating Climate Governance"

Explore the resources, including videos, at https://www.climateworks.org/independent-global-stocktake/

9/30 Climate change as arena for civil society action

Invited Guest speakers: Sasanka Thilikasiri (Oxfam), Shannon Hilsey (World Resources Institute), Ryan Hodum (Energy Foundation), Deirdre Shelly (Sunrise)

- Bill McKibben, *Deep Economy: The Wealth of Communities and the Durable Future*, (St Martin's Griffin: 2008) Chapter 1
- Chloe Maxmin, "Why the Climate Movement is Historically Unique," (2013) <u>The Nation</u> available at <u>https://www.thenation.com/article/why-climate-movement-historically-unique/</u>
- Michael Maniates, "Individualization: Plant a Tree, Ride a Bike, Save the World?" (2001) <u>Global</u> <u>Environmental Politics</u> 1(3) pp. 31-52.
- James M. Inhofe, "The Science of Climate Change: Senate Floor Statement," in Bill McKibben (ed.) *Global Warming Reader* (Penguin: 2011) pp. 165-192.
- Matthew Nisbet, "Communicating Climate Change: Why Frames Matters for Public Engagement," (2009) Environment 51(2) pp. 12-23.

<u>To View</u>

Lanie Thomas, "What are CSOs and NGOs?" https://www.youtube.com/watch?v=s820GJyBEzQ

Sarika Tandon, "Race and the Environmental Movement: History and Legacies" <u>https://www.youtube.com/watch?v=L8PIQVbJBE8&feature=youtu.be</u> (watch 25 mins to Q+A).

Xiuhtezcatl Martinez and Vandana Shiva: "Climate change, Indigenous activism and the fight for justice" <u>https://www.aljazeera.com/programmes/upfront/2019/12/climate-change-indigenous-activism-fight-justice-191210001830786.html</u>

Lecture from Matthew Nisbet, "Communicating Climate Change" (Blackboard)

<u>EXERCISE to complete before class</u> – explore the websites of 2-3 different environmental NGOs. Gather information on: 1) the organization's mission; 2) the organization's approach to social change; and 3) the organization's work on climate change. Be ready to discuss your organizations when we come together in our class ession.

10/7 Climate change as ethical puzzle (Final Paper Abstract and Outline)

Invited guest speaker: David Morrow (Institute for Carbon Removal Law and Policy)

- Simon Nicholson and Paul Wapner, *Global Environmental Politics: From Person to Planet* (Routledge, 2015) pp. 228-232.
- David Morrow, *Values in Climate Policy* (Rowman & Littlefield, 2020) Introduction and chaps 3+4.

<u>To View</u>

Greta Thunberg, "September 23 UN Speech" https://youtu.be/DYqtXR8iPIE

Mary Robinson, "Why Climate Change is a Threat to Human Rights" <u>https://www.youtube.com/watch?v=7JVTirBEfho</u>

10/14 Climate change as a problem of injustice (UNFCCC opening statements)

Invited guest speaker: Olúfémi O. Táíwò (Georgetown University – joining at noon ET)

- Simon Nicholson and Paul Wapner, *Global Environmental Politics: From Person to Planet* (Routledge, 2015) pp. 211-214; 233-245.
- Olúfémi O. Táíwò, "Climate Apartheid is the Coming Police Violence Crisis," Dissent [August 12, 2020] <u>https://www.dissentmagazine.org/online_articles/climate-apartheid-is-the-coming-police-violence-crisis</u>
- Siri Erikson et al, "Reframing adaptation: The political nature of climate change adaptation" (2015) <u>Global Environmental Change</u> 35 pp. 523-533.

<u>To View</u>

Interview with Paul Wapner (Blackboard)

Grist: "What is Environmental Justice?" https://www.youtube.com/watch?v=dREtXUij6_c

Hot Mess: "Why Climate Change is Anti-Justice" https://www.youtube.com/watch?v=Q5KjpYK12_c

10/21 International negotiations exercise

10/28 Climate change as a security challenge (UNFCCC debrief)

- Joe Thwaites, "Environmental Security since 9/11." Available on Blackboard.
- IPCC 5AR WGII chapter 12, "Human Security" available at <u>https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap12_FINAL.pdf</u>
- United States Department of Defense, National Security Implications of Climate-Related Risks and a Changing Climate (July 2015), available at <u>http://archive.defense.gov/pubs/150724-</u> <u>congressional-report-on-national-implications-of-climate-change.pdf?source=govdelivery</u>

<u>To View</u>

Geoff Dabelko et al.: "Climate Change and Conflict" <u>https://climateandsecurity.org/2018/03/the-state-of-the-field-in-climate-and-conflict/</u> (Watch first 56 minutes to Q+A)

11/4 Climate change as technological puzzle II: carbon removal

- David Morrow et al. "Why Talk About Carbon Removal?" (2018) available on the website of the Institute for Carbon Removal Law and Policy (also see fact sheets and other resources): https://www.american.edu/sis/centers/carbon-removal/research.cfm
- National Academy of Sciences, "Negative Emissions Technologies and Reliable Sequestration" (2018) available at http://nas-sites.org/dels/studies/cdr/. Read the "Summary," "Introduction," and "Synthesis" sections (and other parts of the report as you're interested).

<u>To View</u>

FCEA: "Assessing Carbon Dioxide Removal" https://www.youtube.com/watch?time_continue=1&v=GG6vEzDXD5M&feature=emb_logo

11/11 Climate change as technological puzzle III: debating solar radiation management

- David Keith, A Case for Climate Engineering (MIT Press: 2013).
- Mike Hulme, "Climate change: Climate engineering through stratospheric aerosol injection" (2012) <u>Progress in Physical Geography</u> 36(5) pp. 694-705.

<u>To View</u>

Harvard's Solar Geoengineering Research Program: "What is Solar Geoengineering?" View video halfway down page at <u>https://geoengineering.environment.harvard.edu/</u>

Seeker: "Why the World's First Geoengineering Test is So Controversial" <u>https://www.youtube.com/watch?v=ReBPqguolu8</u>

Intelligence Squared Debate: "Opening Remarks" <u>https://www.youtube.com/watch?v=BedBf-ayLms</u>

- 11/18 Conclusions
- 11/25 THANKSGIVING BREAK NO CLASS
- 12/2 Presentations I
- 12/9 Presentations II [Examination Period No exam; final papers due 5:30pm]