

## The Unsolved Politics of Climate Change

POLS 60476  
Spring 2022

M 12:30-3:15PM  
Jenkins and Nanovic Hall 2060B

### Instructor

- Debra Javeline, Political Science, 2052 Jenkins Nanovic Halls, [javeline@nd.edu](mailto:javeline@nd.edu), office hours: M 10:30AM-12:30PM and as needed, Zoom preferred, appointments preferred

### Objectives

This graduate seminar is designed for rigorous study of cutting-edge political science research on the global climate crisis. It aims to use the tools of political science to contribute to climate solutions. Each class session, students will read articles and books written by the world's leading experts on the politics of climate change, identify the main contributions, and most importantly, discuss the remaining gaps in knowledge. The course will focus on determining which knowledge gaps represent the most urgent obstacles for addressing the climate crisis and how to fill those gaps through original research. Graduate students and advanced undergraduates will be expected to produce a draft of a publishable research paper that begins to fill a specific knowledge gap, either solo-authored or co-authored. Undergraduates will also have the option to submit as their main course paper a literature review that draws attention to a specific knowledge gap and explains its urgency. Undergraduates seeking to enroll require permission of the instructor and will be expected to have completed prior coursework or equivalent practical work related to climate change or other environmental issues.

### Readings

Given the explosion of literature in climate change politics and the quickly evolving physical and political changes in the global environment, the vast majority of assigned readings are from those published in the last five years, often in the last one to two years. All readings are available online through Hesburgh libraries, and some are also available via links in the syllabus.

Students who have limited familiarity with climate change will benefit from reading the following prior to our course start date:

- Romm, Joseph. 2016. *Climate Change: What Everyone Needs to Know*. New York: Oxford University Press.
- Australian Academy of Sciences. 2015. "[The Science of Climate Change: Questions and Answers](#)," February.
- Some other primer in consultation with the instructor.

### Schedule

#### **Overview of the course**

January 10, 2022

#### **Student contributions to solutions**

January 17, 2022 – NO CLASS: MLK DAY

Students will meet individually with the instructor by appointment sometime this week to discuss goals for the course, potential final projects, and which readings are most relevant to those goals

and projects. Please contact the instructor to schedule.

### **How should we frame the problem?**

January 24, 2022

#### **Primary sources**

- IPCC. 2018. "[Summary for Policymakers](#)," in *Global Warming of 1.5°*, pp. 3-26.
- Climate Action Tracker. 2020. [Paris Agreement turning point](#). December, pp.1-8 and skim Technical Annex.
- UN Environment Programme. 2020. "[Emissions Gap Report 2020 - Executive Summary](#)," Nairobi. pp. IV-XV.

#### **Analysis**

- Orr, David W. 2007. "Hope and Optimism in a Hotter Time." *Conservation Biology* 21: 6, 1392-1395.
- McKibben, Bill. 2016. "[Recalculating the Math](#)." *The New Republic* 247, 11: 16-17.
- Fong, Benjamin. 2017. [The Climate Crisis? It's Capitalism, Stupid](#). *The New York Times* 20 November.
- Tollefson, Jeff. 2018. "[Can the world kick its fossil-fuel addiction fast enough?](#)" *Nature* 556: 422-425.
- Xu, Yangyang, Veerabhadran Ramanathan, and David Victor. 2018. "[Global warming will happen faster than we think](#)." *Nature* 564: 30-32.
- Brown, Katrina, and W. Neil Adger. 2019. "Moving climate change beyond the tragedy of the commons." *Global Environmental Change*. 54: 61-63.
- Aklin, Michäel, and Matto Mildemberger. 2020. "Prisoners of the Wrong Dilemma: Why Distributive Conflict, Not Collective Action, Characterizes the Politics of Climate Change." *Global Environmental Politics* 20: 4-27.
- Dodson, Jenna C., Patricia Dérer, Philip Cafaro, Frank Götmark. 2020. "Population growth and climate change: Addressing the overlooked threat multiplier." *Science of the Total Environment* 748: 1-10.
- Green, Jessica F. 2020. "[Why Climate Change Demands Activism in the Academy](#)," *Daedalus* 149, 4: 151-162.
- Gard-Murray, Alexander, and Jeff Colgan. 2021. "[Is the United States Underplaying the Threat of Climate Change? Reevaluating the National Climate Assessment](#)." Climate Solutions Lab White Paper, Brown University, October. 16 pp.
- Oreskes, Naomi. 2021. "[IPCC, You've Made Your Point: Humans Are a Primary Cause of Climate Change](#)." *Scientific American* 1 November.
- Harris, Paul G. 2021. "[COP26 climate pact: kicking the can down the road, with help from China](#)." *Hong Kong Free Press* 20 November.

### **Can post-Paris global environmental governance work?**

January 31, 2022

#### **Overview of international climate agreements**

- Keohane, Robert O., and David Victor. 2011. "The Regime Complex for Climate Change." *Perspectives on Politics* 9, 1:7-23.

#### **Will the Paris Agreement succeed?**

- Keohane, Robert O., and David Victor. 2016. "Cooperation and discord in global climate

policy.” *Nature Climate Change* 6: 570-575.

- Kuyper, Jonathan W., Björn-Ola Linnér, and Heike Schroeder. 2018. “Non-state actors in hybrid global climate governance: justice, legitimacy, and effectiveness in a post-Paris era.” *WIREs Climate Change* 9, 1: e497, pp. 1-14.
- Rajamani, Lavanya, and Jacob Werksman. 2018. “The legal character and operational relevance of the Paris Agreement’s temperature goal.” *Philosophical Transactions A* 376: 20160458, pp. 1-12.
- Milkoreit, Manjana. 2019. “The Paris Agreement on Climate Change – Made in the USA?” *Perspectives on Politics* 17, 4: 1019-1037.
- Allan, Jen Iris. 2019. “Dangerous Incrementalism of the Paris Agreement.” *Global Environmental Politics* 19, 1: 4-11.
- Sachs, Noah M. 2019. “The Paris Agreement in the 2020s: Breakdown or Breakup?” *Ecology Law Quarterly* 46: 865-909.
- Green, Jessica F. 2021. “Follow the Money: How Reforming Tax and Trade Rules Can Fight Climate Change.” *Foreign Affairs* 12 November.

#### ***How is the Paris Agreement affecting domestic laws and politics?***

- Hunter, David, Wenhui Ji, and Jenna Ruddock. 2020. “The Paris Agreement and Global Climate Litigation after the Trump Withdrawal.” *Maryland Journal of International Law* 34, 1: 224-248.
- Wegener, Lennart. 2020. “Can the Paris Agreement Help Climate Change Litigation and Vice Versa?” *Transnational Environmental Law* 9, 1: 17-36.
- Peel, Jacqueline, and Hari M. Osofsky. 2020. “[Climate Change Litigation](#),” *Annual Review of Law and Social Science* 16: 21-38.
- Setzer, Joana, and Catherine Higham. 2021. “[Global trends in climate change litigation: 2021 snapshot](#).” London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, pp. 4-37.
- Tingley, Dustin, and Michael Tomz. forthcoming. “[The Effects of Naming and Shaming on Public Support for Compliance with International Agreements: An Experimental Analysis of the Paris Agreement](#).” *International Organization*. 20 pp.

#### **How do political institutions affect climate?**

February 7, 2022

##### ***Overview***

- Lachapelle, Erick, and Matthew Paterson. 2013. “Drivers of national climate policy.” *Climate Policy* 13, 5: 547-571.
- Tørstad, Vegard, Håkon Sælen, and Live Standal Bøyum. 2020. “The domestic politics of international climate commitments: which factors explain cross-country variation in NDC ambition?” *Environmental Research Letters* 15, 024021. 9 pp.
- Dubash, Navroz, et al. 2021. “[National climate institutions complement targets and policies](#).” *Science* 374, 6568: 690-693.

##### ***Does regime type matter?***

- Gilley, Bruce. 2012. “Authoritarian environmentalism and China's response to climate change.” *Environmental Politics* 2, 2: 287-307.
- Povitkina, Marina. 2018. “The limits of democracy in tackling climate change.”

*Environmental Politics*, 27, 3: 411-432.

- Chesler, Angela, Debra Javeline, Kimberly Peh, and Shana Scogin. “Is democracy the answer to intractable climate change?” unpublished manuscript, 17 pp.

#### ***Which domestic institutions matter, and why?***

- Bayer, Patrick and Johannes Urpelainen. 2016. “It Is All about Political Incentives: Democracy and the Renewable Feed-in Tariff.” *Journal of Politics* 78, 2: 603-619.
- Tooze, Adam. 2019. “[Why Central Banks Need to Step Up on Global Warming.](#)” *Foreign Policy*. 233: 16-23.
- Mildenerger, Matto. 2020. *Carbon Captured: How Business and Labor Control Climate Politics*. Cambridge: MIT Press, chapters 1, 2, and 8, pp.1-64, 235-251.
- Meckling, Jonas, and Jonas Nahm. 2021. “Strategic State Capacity: How States Counter Opposition to Climate Policy.” *Comparative Political Studies* pp. 1-24.
- Nahm, Jonas. 2021. “The Energy Policy of China.” In Kathleen Hancock and Juliann Allison, eds. *The Oxford Handbook of Energy Politics*. Oxford University Press, pp.1-19.
- Finnegan, Jared J. 2022. “Institutions, Climate Change, and the Foundations of Long-Term Policymaking.” *Comparative Political Studies* 38 pp.

#### **What constrains climate policy?**

February 14, 2022

##### ***Overview***

- Seto, Karen C., Steven J. Davis, Ronald B. Mitchell, Eleanor C. Stokes, Gregory Unruh, and Diana Urge-Vorsatz. 2016. “Carbon Lock-In: Types, Causes, and Policy Implications.” *Annual Review of Environmental Resources* 41: 425-452.

##### ***Is it people and their psychology and behavior?***

- Gifford, Robert. 2011. “[The Dragons of Inaction: Psychological Barriers That Limit Climate Change Mitigation and Adaptation.](#)” *American Psychologist* 66, 4: 290-302.
- Clayton, Susan, et al. 2015. “[Psychological research and global climate change.](#)” *Nature climate change* 5, 7: 640-646.
- Victor, David G., Nick Obradovich, and Dillon Amaya. 2017. “[Op-Ed: Why the wiring of our brains makes it hard to stop climate change.](#)” *Los Angeles Times* 17 September.
- Maniates, Michael. 2020. “Beyond Magical Thinking.” In Agni Kalfagianni, Doris Fuchs, and Anders Hayden, eds. *Routledge Handbook of Global Sustainability Governance*. Routledge, pp. 269-281.

##### ***Is it the macroeconomy?***

- Mercure, J.-F., et al. 2018. “Macroeconomic impact of stranded fossil fuel assets.” *Nature Climate Change* 8: 588-593.
- Bos, Kyra, and Joyeeta Gupta. 2018. “Climate change: the risks of stranded fossil fuel assets and resources to the developing world.” *Third World Quarterly* 39, 3: 436-453.

##### ***Is it elections, interest groups, or other political factors?***

- Stokes, Leah C. 2016. “Electoral Backlash against Climate Policy: A Natural Experiment on Retrospective Voting and Local Resistance to Public Policy.” *American Journal of Political Science* 60, 4: 958-974.
- Carlitz, Ruth D., and Marina Povitkina. 2021. “Local interest group activity and environmental degradation in authoritarian regimes.” *World Development* 142, 105425. 10pp.

- Cory, Jared, Michael Lerner, and Iain Osgood. 2021. “Supply Chain Linkages and the Extended Carbon Coalition.” *American Journal of Political Science* 65, 1: 69-87.

### ***Is it subsidies, trade, asset value, or other political economy factors?***

- Coady, David, Ian Parry, Nghia-Piotr Le, and Baoping Shang. 2019. “[Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates](#).” International Monetary Fund Working Paper, May, pp. 1-39.
- Kono, Daniel Yuichi. 2019. “[The Politics of Trade and Climate Change](#).” *Oxford Research Encyclopedia of Politics*. pp. 1-19.
- Lamb, William F. and Jan C. Minx. 2020. “The political economy of national climate policy: Architectures of constraint and a typology of countries.” *Energy Research & Social Science* 64, 101429. 13 pp.
- Colgan, Jeff, Jessica Green, and Thomas Hale. 2021. “Asset Revaluation and the Existential Politics of Climate Change.” *International Organization* 75: 586-610.

### **What is the specific role of business in climate policy?**

February 21, 2022

- Meckling, Jonas. 2011. *Carbon Coalitions: Business, Climate Politics, and the Rise of Emissions Trading*. Cambridge: MIT Press, chapters 1 “Introduction” and 2 “Business Coalitions in Global Environmental Politics,” pp. 1-46.
- Meng, Kyle C. and Ashwin Rode. 2019. “The social cost of lobbying over climate policy.” *Nature Climate Change* 9, 472-476.
- Stokes, Leah Cardamore. 2020. *Short Circuiting Policy: Interest Groups and the Battle Over Clean Energy and Climate Policy in the American States*. Oxford University Press, chapters 1 “Introduction,” 2 “When New Policies Fail to Create a New Politics,” 9 “Conclusion,” pp. 1-67, 224-257.
- Kennard, Amanda. 2020. “The Enemy of My Enemy: When Firms Support Climate Change Regulation.” *International Organization* 74, 2: 187-221.
- Vormedal, Irja, Lars H. Gulbrandsen, and Jon Birger Skjærseth. 2020. “Big Oil and Climate Regulation: Business as Usual or a Changing Business?” *Global Environmental Politics* 20, 4: 143-166.

### **How can the world transition to clean energy?**

February 28, 2022

- Aklin, Michaël and Johannes Urpelainen. 2018. *Renewables: The Politics of a Global Energy Transition*. Cambridge: MIT Press, chapters 1 “Introduction,” 2 “Renewable Energy: Past, Present, and Future,” 3 “Policy Responses to External Shocks: A Theory,” 6 “Lock-In: An Era of Rapid Growth,” pp. 3-88, 173-215.
- Breetz, Hannah, Matto Mildenerger, and Leah Stokes. 2018. “The political logics of clean energy transitions.” *Business and Politics* 20, 4: 492-522.
- Hochstetler, Kathryn. 2020. *Political Economies of Energy Transition: Wind and Solar Power in Brazil and South Africa*. Cambridge University Press, chapters 1 “Political Economies of Energy Transition in Brazil and South Africa,” 2 “Wind and Solar Power in the Transition to a Low-Carbon Economy,” 6 “Political Economies of Energy Transition,” pp. 1-78, 221-235.
- Sunter, Deborah A. Sergio Castellanos, and Daniel M. Kammen. 2019. “Disparities in rooftop photovoltaics deployment in the United States by race and ethnicity.” *Nature*

*Sustainability* 2: 71-76.

- Carley, Sanya, and David M. Konisky. 2020. “The justice and equity implications of the clean energy transition.” *Nature Energy* 5: 569-577.
- Seibert, Megan K., and William E. Rees. 2021. “Through the Eye of a Needle: An Eco-Heterodox Perspective on the Renewable Energy Transition.” *Energies* 14: 4508. 19 pp.

March 7, 2022 – MID-TERM BREAK

### **Student paper proposals**

March 14, 2022

Students will briefly present their works-in-progress. Each presentation should include clear and concise identification of the knowledge gap that the research will fill and why that knowledge gap is among the most urgent obstacles for addressing the climate crisis. For graduate students and undergraduates planning publishable papers, presentations should include planned research designs. All students should use the allotted time to solicit feedback.

### **How can countries achieve effective climate policy?**

March 21, 2022

#### ***Through carbon pricing?***

- Metcalf, Gilbert E. 2020. “[How to set a price on carbon pollution.](#)” *Scientific American* 322, 6: 62-69.
- Stokes, Leah C., and Matto Mildenerger. 2020. “[The Trouble with Carbon Pricing.](#)” *Boston Review* September 24. 11 pp.
- Green, Jessica F. 2021. “[Beyond Carbon Pricing: Tax Reform is Climate Policy.](#)” *Global Policy* 12, 3: 372-379.

#### ***Through coalition building?***

- Meckling, Jonas, Nina Kelsey, Eric Biber, and John Zysman. 2015. “Winning coalitions for climate policy.” *Science* 349, 6253: 1170-1171.
- Cullenward, Danny, and David G. Victor. 2020. *Making Climate Policy Work*. Polity, chapter 1 “A Turn toward markets,” pp. 1-30.

#### ***Through other policy strategies?***

- Meckling, Jonas, Thomas Sterner, and Gernot Wagner. 2017. “Policy sequencing toward decarbonization.” *Nature Energy* 2: 918-922.
- Afionis, Stavros, Marco Sakai, Kate Scott, John Barrett, and Andy Gouldson. 2017. “[Consumption-based carbon accounting: does it have a future?](#)” *WIREs Climate Change* 8:e438: 1-15.
- Aklin, Michaël and Johannes Urpelainen. 2018. *Renewables: The Politics of a Global Energy Transition*. Cambridge: MIT Press, chapter 7 “Improving National Policy,” pp. 219-248.

#### ***Through institutional change?***

- Finnegan, Jared, Phillip Y. Lipsy, Jonas O. Meckling, and Florence Metz. unpublished ms. “[The Institutional Sources of Economic Transformation: Energy Policy from the Oil Crises to Climate Change.](#)” pp. 1-28.

#### ***Through divestment from fossil fuels?***

- Bergman, Noam. 2018. “Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse.” *Sustainability* 10, 7: 1-18.

- Meyer, Robinson. 2019. "[Investment Bankers Are Now Waging the War on Coal.](#)" *The Atlantic* 17 December.

### ***Through a Green New Deal?***

- Ocasio-Cortez, Alexandria, et al. 2019. [H. Res. 109, Recognizing the Duty of the Federal Government to Create a Green New Deal.](#) 116th Congress. 14 pp.
- Aronoff, Kate, Alyssa Battistoni, Daniel Aldana Cohen, and Thea Riofrancos. 2019. *A Planet to Win*. London: Verso, chapter 1 "[Introduction: Bad Weather, Good Politics,](#)" pp. 1-34.

### ***Through tipping points?***

- Sharpe, Simon, and Timothy M. Lenton. 2021. "Upward-scaling tipping cascades to meet climate goals: plausible grounds for hope." *Climate Policy* 21, 4: 421-433.
- Monbiot, George. 2021. "[After the failure of Cop26, there's only one last hope for our survival.](#)" *The Guardian*. 14 November.

## **How is climate change reshaping the world and its politics?**

March 28, 2022

### ***Overview***

- Javeline, Debra. 2014. "The Most Important Topic Political Scientists are Not Studying: Adapting to Climate Change." *Perspectives on Politics*. 12, 2: 420-434.

### ***Is it increasing conflict?***

- Gleick, Peter. 2014. "Water, drought, climate change, and conflict in Syria." *Weather, Climate and Society* 6, 3: 331-340.
- Hendrix, Cullen S., and Stephan Haggard. 2015. "Global food prices, regime type, and urban unrest in the developing world." *Journal of Peace Research* 52, 2: 143-157.
- Selby, Jan, Omar S. Dahi, Christiane Fröhlich, and Mike Hulme. 2017. "Climate change and the Syrian civil war revisited." *Political Geography* 60: 232-244.
- Hendrix, Cullen S. 2017. "A comment on 'climate change and the Syrian civil war revisited.'" *Political Geography* 60: 251-252.
- Koubi, Vally. 2019. "Climate change and conflict." *Annual Review of Political Science* 22, 1: 343-360.
- Mach, Katharine J., et al. 2019. "Climate as a Risk Factor for Armed Conflict." *Nature* 571, 7764: 193-197.

### ***Is it changing political institutions?***

- Aklin, Michael, and Johannes Urpelainen. 2014. "The Global Spread of Environmental Ministries: Domestic-International Interactions." *International Studies Quarterly* 58: 764-780.
- Huitema, Dave, et al. 2016. "The governance of adaptation: choices, reasons, and effects. Introduction to the Special Feature." *Ecology and Society* 21, 3. 16 pp.
- Di Paola, Marcello, and Dale Jamieson. 2018. "Climate Change and the Challenges to Democracy." *University of Miami Law Review* 72, 2: 369-424.
- Mildemberger, Matto. 2021. "The development of climate institutions in the United States," *Environmental Politics* 30, S1: S71-S92.

### ***Is it encouraging adaptations to the public health impacts of climate change?***

- Watts, Nick, et al. 2015. "[Health and climate change: policy responses to protect public health.](#)" *The Lancet* 386: 1161-1180 (executive summary, introduction, and sections 1

and 2).

### ***Is it compelling individuals and communities to adapt to other impacts?***

- Adger, W. Neil, Terry P. Hughes, Carl Folke, Stephen R. Carpenter, and Johan Rockstrom. 2005. "Social-Ecological resilience to Coastal Disasters." *Science* 309: 1036-1039.
- Missirian, Anouch, and Wolfram Schlenker. 2017. "[Asylum applications respond to temperature fluctuations](#)." *Science* 358, 6370: 1610-1614.
- Schoennagel, Tania, et al. 2017. "Adapt to more wildfire in western North American forests as climate changes." *PNAS* 114, 18: 4582-4590.
- Cinner, Joshua E., et al. 2018. "Building adaptive capacity to climate change in tropical coastal communities." *Nature Climate Change* 8: 117-123.
- Fedele, Giacomo, Camila I. Donatti, Celia A. Harvey, Lee Hannah, and David G. Hole. 2020. "Limited use of transformative adaptation in response to social-ecological shifts driven by climate change." *Ecology and Society* 25, 1. 14 pp.

### **Where will people live?**

April 4, 2022

#### ***Where can people live?***

- Xu, Chi, Timothy A. Kohler, Timothy M. Lenton, Jens-Christian Svenning, and Marten Scheffer. 2020. "Future of the human climate niche." *PNAS* 117, 21: 11350-11355.

#### ***How are housing markets and homeowners responding?***

- Keenan, Jesse M., Thomas Hill, and Anurag Gumber. 2018. "Climate gentrification: from theory to empiricism in Miami-Dade County, Florida." *Environmental Research Letters* 13: 1-11.
- Javeline, Debra, and Tracy Kijewski-Correa. 2019. "Coastal Homeowners in a Changing Climate," *Climatic Change*, 152, 2: 259-274.
- Greenberg, Paul. 2021. "[Shopping for the Apocalypse](#)." *Adirondack Life*. pp. 48-69.

#### ***What are the consequences of voluntary migration, involuntary displacement, and immobility?***

- Hauer, Matthew E. 2017. "Migration induced by sea-level rise could reshape the US population landscape." *Nature Climate Change* 7: 321-325.
- Geisler, Charles, and Ben Currens. 2017. "Impediments to inland resettlement under conditions of accelerated sea level rise." *Land Use Policy* 66:322-330.
- Adger, W. Neil, Ricardo Safra de Campos, and Colette Mortreux. 2018. "Mobility, displacement and migration, and their interactions with vulnerability and adaptation to environmental risks." In Robert A. McLeman and François Gemenne, eds. *Routledge Handbook of Environmental Displacement and Migration*. New York: Routledge, chapter 3, pp. 29-41.
- Boas, Ingrid, et al. 2019. "Climate Migration Myths," *Nature Climate Change* 9: 898-903.
- McLeman, Robert. 2019. "International migration and climate adaptation in an era of hardening borders." *Nature Climate Change* 9: 911-918.
- Adger, W. Neil, et al. 2021. "Human security of urban migrant populations affected by length of residence and environmental hazards." *Journal of Peace Research* 58, 1: 50-66.
- Cundill et al. 2021. "Toward a climate mobilities research agenda: Intersectionality, immobility, and policy responses." *Global Environmental Change* 69: 1-7.



### ***Are we managing the retreat?***

- McAdam, Jane. 2015. "Lessons from planned relocation and resettlement in the past." *Forced Migration Review* 49: 30-32.
- Hino, Miyuki, Christopher B. Field, and Katharine J. Mach. 2017. "Managed retreat as a response to natural hazard risk." *Nature Climate Change* 7, 5: 364-370.
- Mortreux, Colette, Ricardo Safrá de Campos, W. Neil Adger, Tuhin Ghosh, Shouvik Das, Helen Adams, and Sugata Hazra. 2018. "Political economy of planned relocation: A model of action and inaction in government responses." *Global Environmental Change* 50: 123-132.
- Siders, A.R. 2019. "Social justice implications of US managed retreat buyout programs." *Climatic Change* 152: 239-257.
- Dannenberg, Andrew L., Howard Frumkin, Jeremy J. Hess, and Kristie L. Ebi. 2019. "Managed retreat as a strategy for climate change adaptation in small communities: public health implications." *Climatic Change* 153: 1-14.
- Siders, A.R., Miyuki Hino, and Katharine J. Mach. 2019. "[The Case for Strategic and Managed Climate Retreat](#)." *Science* 365: 761-763.
- Siders, A.R., and Jesse M. Keenan. 2020. "Variables shaping coastal adaptation decisions to armor, nourish, and retreat in North Carolina." *Ocean and Coastal Management* 183: 1-11.
- Mach, Katharine J., and A.R. Siders. 2021. "[Reframing strategic, managed retreat for transformative climate adaptation](#)." *Science* 372: 1294-1299.

### **Student choice**

April 11, 2022

At least a week before, each student should select and circulate a single article to the rest of the class. This article should relate to the student's research for the course and be selected because its strengths, weaknesses, or gaps served as inspiration or motivated the student's research in some way. We will jointly read our classmates' selections and contribute to weekly reflections as usual. Students will lead discussions on their selected articles.

April 18, 2022 – NO CLASS: EASTER BREAK

Students and instructor will decide collectively on the best use of the last two weeks of class for final projects. Options for this week include meeting as a group at some alternate time for status updates and feedback, meeting individually with the instructor, or using the holiday break entirely for writing.

### **Final project and wrap-up discussions**

April 25, 2022

Similar to the preceding week, students and instructor will decide collectively how to optimize this class time.

### Requirements

#### **Participation**

Students are expected to do all the assigned reading for each week and come to class prepared to discuss it. Attendance and participation are mandatory. Students experiencing illness or personal tragedy should email the instructor in advance for an excused absence and plan to make

up missed work.

With the advent of smartphones, some students have taken to leaving class frequently and for long stretches of time. Please use the restroom before class, turn off phones during class, and stay for the entire class time! If you leave the class for extended periods, you are not attending class and will not receive full credit for your attendance/participation that day.

### **Weekly reflections**

One day prior to class each week (no later than Sunday at 7:00PM), students will respond to the readings in a shared Google folder that will allow us to process some of our reactions in advance of our group discussions. Students are welcome to reflect on each reading separately or jointly to the readings as a whole, but reflections should involve most if not all readings in some way.

Reflections should be no more than 2 pages and include thoughts on some or all of the following:

- What is the state of knowledge?
  - Which research questions have been addressed thoroughly?
  - Which hypotheses have abundant empirical support?
  - Have the employed methodologies been the most appropriate for the questions?
  - Are there questions worth retiring, because there is only marginal utility in devoting additional research time to their study?
- What are the most important unsolved questions in the research agenda for the week?
  - Are we asking the right questions?
  - What theories are still lacking?
  - What empirical evidence is still lacking?
  - If we were assigned to contribute to the week's research agenda, what original research would we propose, and why?

### **Research paper**

Students are expected to write one draft of a publishable research paper that begins to fill a specific knowledge gap, either solo-authored or co-authored. There is no minimum or maximum number of pages, but by submission, students should know where they plan to submit the article and adhere to the submission guidelines of the publication, including word limits.

Undergraduates writing a literature review that draws attention to a specific knowledge gap and explains its urgency should write concisely, as if that literature review was the starting point for original research.

The final paper is due on Wednesday, May 4, by 8AM. This is the registrar-assigned deadline, and as such, no extensions are allowed, so please plan accordingly. Earlier papers are welcome in order to give the instructor time to provide thorough feedback on next steps, as students plan for journal submission. (Final grades are due on May 9.)

### Evaluation

Attendance/participation, weekly reflections, and research paper will each count for one third of the final grade.

### Health and Safety Protocols

According to the Provost's and College guidelines, "Every member of the Notre Dame community is expected to carry a mask at all times. Faculty may require students to wear masks in their classes, studios, or laboratories. We expect students to be respectful of these arrangements." Given the alarming ravages of Delta and Omicron, including breakthrough cases among vaccinated people and transmission by/between fully vaccinated people, and the fact that some in our community remain especially vulnerable and/or unvaccinated, in this class we will be masking so that we take care of one another.

#### Disability accommodation

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with one of the instructors during the first two weeks of class. All discussions will remain confidential.

#### Academic code of honor

All submitted work must be a student's own. You are expected to abide by the Notre Dame Academic Code of Honor. This class in particular requires a commitment to independent thinking on issues of global importance. The world is desperate for novel ideas. Plagiarism does not help us solve global problems!