ENVIRONMENT 577 / PUBLIC POLICY 577 / ICS 577

GLOBAL ENVIRONMENTAL POLICY

Spring 2025

Course meeting time: Monday and Wednesday, 1:25-2:40pm, January 8-April 16
Course format: Lecture + Discussion + Debate + Classroom Exercises
Course Location: Grainger Hall, Room 1112 (Field Auditorium)

Instructor's information

Jackson Ewing | Director, Energy and Climate Policy, Nicholas Institute for Energy, Environment & Sustainability, Adjunct Associate Professor, Nicholas School of the Environment | Office: Nicholas Institute, Gross Hall, Suite 101, 140 Science Drive | P: +1.919.681.7193 | E: Jackson.ewing@duke.edu
Office Hours: Monday 11:00-12:00pm or by appointment.

Dr. Jackson Ewing's work seeks to help facilitate energy transitions and environmental policy progress internationally and in the United States. His ongoing projects focus on international climate finance and just energy transition partnerships, climate change diplomacy, systems-level decarbonization policy in the United States, and carbon pricing policy development internationally. He leads educational exchanges between Asia and the United States through a leadership role with Duke Kunshan University. Dr. Ewing has worked in more than twenty countries, and collaborates closely with actors in government, the private sector, civil society, and international organizations. He publishes widely through a range of mediums and contribute to radio, television and print media. Prior to joining Duke, Dr. Ewing served as Director of Sustainability at the Asia Society Policy Institute and led the Environment, Climate Change and Food Security Programme at Singapore's S. Rajaratnam School of International Studies (RSIS).

Teaching Assistant: Savannah Carr-Wilson savannah.carr-wilson@duke.edu

Course Focus

Both the sources and consequences of environmental change span national boundaries. This class will focus primarily on the nature of political efforts to address environmental issues, especially those that require international cooperation. The course will analyze the interplay between local, national and international political regimes impacting the natural environment. We will focus on the types of key actors and institutions active in environmental governance, and the various tools and mechanisms that these actors utilize to deal with environmental concerns.

Several themes will be present across a number of issue areas and case studies, such as:

- How different actors view & act on environmental issues given differing social, political and economic systems and philosophies;
- Tradeoffs between sovereignty, global commons, and the need for collective action;
- Institutions, levels of policymaking, and varying instruments for environmental governance;
- The role and [in]effectiveness of international diplomacy, agreements, and law;
- Synergies and conflicts between economic growth and environmental protection, and distributive equity and justice concerns in managing natural resources.

The instructor will introduce contemporary environmental policy issues during class discussions to illuminate some of the concepts under review during a given week.

Structure

The class is structured around environmental policy issues present in specific to ecological systems, and around intersections connecting these issues and systems. Some fundamental concepts – such as environmental and distributional justice, political economy, ecological communication, natural resource management, and the like – will be integrated throughout the course rather than points of focus during a given week. The Course Schedule section below provides further details.

Class sessions will contain relatively small amounts of lecture material. Lectures will rarely, if ever, exceed half of a given class period and some class sessions will have no lecture material at all. Rather, the instructor will deploy a mix of Socratic methods, classroom exercises, peer discussions, debate, video, and other interactive tools to achieve learning outcomes. Students *will* be called on without warning to discuss readings and issue areas during a given week.

Assessment

Class participation (20%)

Students are required to read assigned materials before class and actively engage in discussions during class sessions. Effective participation in class will reveal a strong understanding of course content, and critical thinking about its arguments and implications for environmental policymaking. Attendance is also taken into account. The participation grade will consider student performance when called upon by the instructor to discuss the subject matter for a given week.

Policy Briefs (2 x 20% = 40%)

Students will write two policy briefs addressing specific environmental policy issues. Brief #1 (the 'analytical brief') will explore an international environmental agreement or environmental issue that has been or is being negotiated internationally, and provide analysis to help a hypothetical policymaker understand the major objectives, stakeholders, actors, and interests involved in the issue. This brief will not take a specific position on what should be done. Brief #2 (the 'advocacy brief') will likewise explore an international environmental agreement or environmental issue that has been or is being negotiated internationally, and provide target analysis that promotes the adoption of a specific policy agenda.

Both briefs must be between 1,400-1,600 words (excluding references). Further instructions on the structure and expectations for the briefs will be provided. The International Environmental Agreement Database Project provides a useful collection of potential issue areas/agreements to explore.

Case Study Analyses (2 x 20% = 40%)

Weeks 2-14 of this course will introduce case studies across a range of environmental policy issues. This assignment requires students to deepen their understanding and critical evaluation of two of these case study areas. Case analysis #1 (the 'review case') tasks students with conducting additional research (i.e. beyond the materials listed in the syllabus) on a case in question and critically assessing the causes that drove the environmental policy challenge, the interests of key stakeholders, and the forces that led to specific outcomes and/or the absence thereof. Case analysis #2 (the 'foresight case') will take a similar

approach but be more forward-looking. Students are tasked with researching developments in a case area up to the current period (which will necessarily extend beyond the materials that guide class sessions), critically assess the shifting conditions and forces that drive changes for the case area in question, and – based on this trajectory – offering plausible future environmental policy developments.

Both case analyses will be between 1,800-2,000 words (excluding references), and contain no less than one figure or image created by the student. Students can address case studies already covered in class or those yet to come in the semester. Case studies can be selected from outside of course materials subject to instructor approval. Further instructions on the structure and expectations for the briefs will be provided.

Assessment Schedule

Policy Brief #1	**Friday, February 7**
Case Analysis #1	**Friday, February 28**
Policy Brief #2	**Friday, March 21**
Case Analysis #2	**Friday, April 11**

Requests for extensions must be made in advance for valid reasons and are subject to approval by the instructor. Late submissions will incur a 10% penalty per day up to 50%, at which point students must submit the assignment by the end of the semester for half credit.

Academic Integrity

Students are expected to abide by Duke University's code of conduct and rules for academic honesty. These standards can be found at: https://students.duke.edu/a-z-policies/.

Any form of plagiarism or academic dishonesty will not be tolerated and students suspected of doing so will be reported to the Director of Graduate Studies and/or the Office of Student Conduct. The instructor and teaching assistants may utilize anti-plagiarism software to ensure academic honesty. In order to avoid any issues, all materials (quotes, figures, statistics, ideas) should be cited appropriately. All students should submit original work.

Use of Artificial Intelligence (AI) (such as ChatGPT, ERNIE, Claude, etc.) to write submitted work will be considered a violation of the course rules and will result in a rejection of the work and a referral to the University Office of Student Conduct. Any materials for which AI was used should be noted as such. Make every effort to ensure the integrity, validity and reliability of the sources you cite. Students should avoid sources that are known to be unreliable. These included the AI software mentioned, as well as sources such Wikipedia. They may be decent places to gather initial information, but original sources should be cited, rather than these generic ones.

Course Schedule

WK	Date	Focus and Materials
1	January 8	Course Introduction
2	January 13	Air Part I: Carbon Emissions and Climate Mitigation (concepts) 1. Stewart M. Patrick, "The International Order Isn't Ready for the Climate Crisis: The Case for a New Planetary Politics", Foreign Affairs, November/December 2021.

		2. Paula Castro, "National interests and coalition positions on climate change: A text-based analysis", *International Political Science Review*, Volume 42, Issue 1, January 2021, Pages 95-113.
2	January 15	Air Part I: Carbon Emissions and Climate Mitigation (cases) 1. Case: Fossil Fuel Phasedown Debate of COP28. Saha, C.K. Least developed countries versus fossil fuel incumbents: strategies, divisions, and barriers at the United Nations climate negotiations. *International Environ Agreements* **24**, 91–120 (2024). 2. Case: US-China Climate Diplomacy. Jeff D. Colgan and Nicholas L. Miller, "The Rewards of Rivalry: U.S.-Chinese Competition Can Spur Climate Progress". Foreign Affairs, November/December 2022.
3	January 20	No Class: Martin Luther King Jr. Day
3	January 22	Air Part II: Particulates and Health (concepts and cases) 1. Concept: Zusman et. al., "One Atmosphere: Integrating Air Pollution and Climate Policy and Governance", *Atmosphere* 2021, 12(12), 1570. 2. Case: LRTAP. Moses et. al., "The Most Successful Air Pollution Treaty You've Never Heard Of", WRI 2020. 3. Case: Transboundary Haze. Lee et. al., "Toward clearer skies: Challenges in regulating transboundary haze in Southeast Asia", *Environmental Science & Policy*, Volume 55, Part 1, January 2016, Pages 87-95.
4	January 27	Water Part I: Access and Health (concepts) 1. UNICEF 2021, *Progress on household drinking water, sanitation and hygiene, 2000-2020: Five years into the SDGs* **(Highlights and Introduction sections)** 2. Guy Howard, "The future of water and sanitation: global challenges and the need for greater ambition", AQUA - Water Infrastructure, Ecosystems and Society (2021) 70 (4): 438–448.
4	January 29	Water Part I: Access and Health (cases) 1. UNECE Protocol on Water and Health, **(Introduction and Protocol text)** 2. Sanitation and Water for All Partnership, 2020-2030 Strategic Plan.
5	February 3	Water Part II: Transboundary Management and Conflict (concepts) 1. Zeitoun and Mirumachi 2008, "Transboundary water interaction I: reconsidering conflict and cooperation", International Environmental Agreements: Politics, Law and Economics. 2. Camelia Adriana Bucatariu, "The concept of (virtual) water in the food industry", The Interaction of Food Industry and Environment, 2020, Pages 223-243.
5	February 5	Water Part II: Transboundary Management and Conflict (cases)

		1. Case: Mekong River Commission. Marlen Rein, "Power Asymmetry in the Mekong River Basin: The Impact of Hydro-Hegemony on Sharing Transboundary Water", *Vienna Journal of East Asian Studies*, Volume 8 (2016): Issue 1 (December 2016). 2. Case: The Politics of Water: Water and Conflict in the Middle East. **(Choose one case)**.
6	February 10	Oceans Part I: Global Climate Management (concepts) 1. Ocean Vision 2023, A Comprehensive Program to Prove or Disprove Marine Carbon Dioxide Removal Technologies by 2030. 2. Kari De Pryck and Miranda Boettcher, The rise, fall and rebirth of ocean carbon sequestration as a climate 'solution', *Global Environmental Change*, Volume 85, March 2024.
6	February 12	Oceans Part I: Global Climate Management (cases) 1. Case: Oceans and EU/German Climate Policy. Miranda Böttcher et. al. 2023, "Into the Blue: The Role of the Ocean in Climate Policy", SWP. 2. Case: Iron and mCDR. Woods Hole Oceanographic Institution 2023, "The case for adding iron to the ocean for carbon dioxide removal".
7	February 17	Oceans Part II: Territory, Ecosystems, and Food (concepts) 1. Haas et. al., "The future of ocean governance", *Reviews in Fish Biology and Fisheries*, Volume 32, pages 253–270, (2022). 2. FAO. 2024. *The State of World Fisheries and Aquaculture 2024 – Blue Transformation in action – in Brief*. Rome. **(pp 4-12)**
7	February 19	Oceans Part II: Territory, Ecosystems, and Food (cases) 1. Case: Transformational Ocean Governance examples. Blythe et. al., "The Politics of Ocean Governance Transformations", Frontiers in Marine Science, Volume 8 – 2021. **(Article explores three cases – choose 1).**
8	February 24	Land Part I: Forests and Offsets (concepts) 1. Patrick Greenfield, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows" *The Guardian*, 18 Jan 2023. 2. Nina Lakhani, "Revealed: top carbon offset projects may not cut planet-heating emissions", *The Guardian*, 19 Sep 2023. 3. Carbon Market Now, "Carbon Markets are Nuanced: What the Guardian Article Missed", February 3, 2023. 4. Verra, Response to Guardian Article on Carbon Offsets, 18 January 2023.
8	February 26	Land Part I: Forests and Offsets (cases)

		1. Case: The Kariba project. Heidi Blake, "The Great Cash-for-Carbon Hustle", *The New Yorker*, October 16, 2023. 2. Choose a REDD+ Project.
9	March 3	Land Part II: Agriculture, Urbanization, and Land-use Competition (concepts) 1. Christian Dorninger, "The effect of industrialization and globalization on domestic land-use: A global resource footprint perspective", *Global Environmental Change* Volume 69, July 2021 2. King et al 2023, "The emerging global crisis of land use: How rising competition for land threatens international and environmental stability, and how the risks can be mitigated", Chatham House (London). (Report Summary)
9	March 5	Land Part II: Agriculture, Urbanization, and Land-use Competition (cases) 1. Deng et al, "Land-Use Competition between Food Production and Urban Expansion in China" in Seto (ed.), *Rethinking Global Land Use in an Urban Era*. Oxford 2014. 2. Mijailoff et. al., "Local to global escalation of land use conflicts: Long-term dynamics on social movements protests against pulp mills and plantation forests in Argentina and Uruguay" *Land Use Policy*, Volume 134, November 2023. **Choose Argentina or Uruguay**.
10	March 17	Intersection I: Environmental Agreements and Institutions (concepts) 1. Mitchell, et. al. (2020). "What we know (and could know) about international environmental agreements", *Global Environmental Politics*, 20(1), 103-121. 2. Brandi, Blümer, & Morin, (2019). "When do international treaties matter for domestic environmental legislation?", *Global Environmental Politics*, 19(4), 14-44.
10	March 19	Intersection I: Environmental Institutions (cases) 1. Case: UNFCCC and international climate diplomacy. Copenhagen Accord (2015). 2. Intergovernmental Negotiating Committee (INC) on plastic pollution. Aanesen et. al., "Insights from international environmental legislation and protocols for the global plastic treaty", *Nature Scientific Reports* volume 14, Article number: 2750 (2024).
11	March 24	Intersection II: Environmental and Development Finance (concepts) 1. Philipps et. al., *Climate Finance for Just Transitions Building Low-Carbon Development Pathways in an Age of US-China Rivalry*, Duke Energy Access Project 2022. 2. GCA/CPI, *State and Trends in Climate Adaptation Finance 2023*. **PP. 3-15, 29-34.**
11	March 26	Intersection II: Environmental and Development Finance (cases)

		1. Case: GCF Projects – Choose One and review documents (list) 2. Case: Alterra – Private Capital Investment Fund.
12	March 31	Intersection III: Critical Minerals, Supply Chains and Trade (concepts) 1. Savannah Carr-Wilson, Subhrendu K. Pattanayak, Erika Weinthal, "Critical mineral mining in the energy transition: A systematic review of environmental, social, and governance risks and opportunities." Energy Research & Social Science, Volume 116, October 2024. 2. Brenton, Paul; Chemutai, Vicky. 2021. *The Trade and Climate Change Nexus: The Urgency and Opportunities for Developing Countries*, Washington, DC: World Bank. **(Chapter 2)**
12	April 2	Intersection III: Critical Minerals, Supply Chains and Trade (cases) 1. Case: US-China trade and supply chain competition. Anika Patel, "What could a US-China trade war mean for the energy transition?", *Carbon Brief*, December 2024. 2. Case: CBAM. Gracia Marín Durán, "Securing compatibility of carbon border adjustments with the multilateral climate and trade regimes", *International & Comparative Law Quarterly*, Volume 72 , Issue 1 , January 2023 , pp. 73 – 103.
13	April 7	Intersection IV: Environmental Security (concepts) 1. Thomas F. Homer-Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict", *International Security*, Vol. 16, No. 2 (Fall, 1991), pp. 76-116. 2. Simon Dalby, "Climate Change: New Dimensions of Environmental Security", The RUSI Journal, Volume 158, 2013 - Issue 3. 3. Lorraine Elliot, "Human Security/Environmental Security", *Contemporary Politics*, Volume 21, 2015.
13	April 9	Attend some part (or all) of the 'Billions-to-Trillions' event at Duke Fuqua Auditorium (virtual or in-person)
14	April 14	Intersection V: Environmental Security (cases) 1. Ashok Swain, "Displacing the Conflict: Environmental Destruction in Bangladesh and Ethnic Conflict in India" *Journal of Peace Research*, Vol. 33, No. 2 (May, 1996), pp. 189-204. 2. Ewing, J. J. (2009). Converging Peril: Climate Change and Conflict in the Southern Philippines. (RSIS Working Paper, No. 187). Singapore: Nanyang Technological University.
14	April 16	Synopsis Discussion