

University of Toronto Scarborough
Department of Physical and Environmental Sciences

EES1134HS Climate Change Policy
Winter 2022

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1. COURSE DETAILS

Course Description:

All policy is climate change policy. The challenges and solutions for climate change span across society and the economy, which means that addressing the climate crisis requires transformative change to both eliminate greenhouse gas emissions and adapt to the impacts of climate change. Global greenhouse gas emissions need to reduce rapidly in the next ten years and reach net zero around mid-century in order to have a chance of avoiding dangerous climate change. At the same time, climate change is exacerbating existing societal vulnerabilities and is having deep impacts across natural and social systems. This course focuses on the governance of the transformation necessary to address this crisis and covers theories behind and practical approaches to the multilevel governance of climate change. The course covers a range of public policy areas related to climate change mitigation and adaptation, including energy supply, energy use and demand, carbon markets and economic tools, food and agriculture, and transportation. In this course, students will learn about dealing with complexity in climate policy-making and the range of actors involved in climate change policy spanning multiple levels of government as well as non-state actors. The primary focus is on policy-making in Canada, but the course also incorporates international policy and global North case studies.

Course Objectives

Upon completion of this course, students should be able to

- Demonstrate understanding of current issues and key policy instruments in climate policy
- Understand the evolution of Canadian climate policy, including the role of ideas and actors in the policy process
- Understand how to respond to challenges related to the design, implementation, and evaluation of climate policies
- Conduct a literature review and policy scan, as well as write a research paper and succinct policy analysis and recommendations
- Practice complexity thinking skills

2. ASSIGNMENTS

1. Weekly Reading and Class Participation (5%)

Learning in this course requires completing the readings, attending lectures, and engaging in class discussion and exercises. You must complete the readings each week before class.

In class, students are expected to contribute to in-class discussions and activities about challenges related to the design, implementation, and evaluation of climate policies with an emphasis on understanding the dimensions of effective and equitable climate action. You will be called on from time to time to contribute your thoughts on a reading to the group discussion. You are expected to contribute in thoughtful and constructive ways.

2. Discussion Posting (10%)

Students are required to **Post on the Discussion Board** (1%/week for 10 weeks) for each week before class. Discussion questions based on the weekly readings will be posted for students to respond to.

3. Reflective Responses (25%)

Students are required to submit five **Reflective Responses** (5% each) (due dates in course schedule below) to class discussions and readings. This is an opportunity to practice complexity thinking skills by reflecting on what you are learning about the challenges related to the design, implementation, and evaluation of climate policies with an emphasis on understanding the dimensions of effective and equitable climate action.

4. Policy Case Study Presentation (10%)

This assignment is intended to help you learn about the design of various climate policies and develop your skills in policy analysis and evaluation. In small groups, you will deliver a 10 presentation to the class about an assigned climate change policy. Groups and specific climate change policies will be assigned during the first week of class.

The presentation must include an overview of the policy, including who are the key actors or institutions, which policy mechanisms are used, and what are the goals of the policy. It must also include an evaluative component related to the outcomes achieved by the policy, the strengths and limitations of the policy, and/or critiques that have been raised about the policy.

5. Collaborative assignment (50%)

This assignment is designed to provide students with a professional working experience. Focusing on a complex policy problem, this assignment will develop your skills in collaborative research and writing. The first part of the assignment consists of a literature review and policy scan, and the second part consists of a case study and a policy brief.

Assessment	Grade	Due Date
Weekly Reading and Class Participation	5%	Throughout course
Discussion Posting	10%	Throughout course
Reflective Responses	25%	See due dates
Policy Case Study Presentation	10%	As assigned
Collaborative assignment part 1: Literature review and policy scan	30%	March 3
Collaborative assignment part 2: Case study or policy brief Presentation	20%	April 7

Handing in Your Assignments:

All assignments for this course must be submitted through **Quercus**. Paper copies of the assignments will not be accepted.

Extensions

Students must request an extension in ADVANCE of the deadline in order to receive a decision. Extensions beyond the examination period must be submitted via petition through the Office of the Registrar.

Please follow the University of Toronto procedure to be completed in order to be considered for academic accommodation for any course work such as missed tests or late assignments.

Illness

Students who are absent from academic participation for **any reason** (e.g., COVID, cold, flu and other illness or injury, family situation) and who require consideration for missed academic work should report their absence using the online absence declaration on **ACORN** and on the **DPES** online form. The declaration is available on **ACORN under the Profile and Settings menu**. Students should also advise their instructor *of* their absence via the **DPES** online form. Visit [COVID-19 Information for University of Toronto Students](#) page on the Vice-Provost, Students website for information on this and other frequently asked questions.

Visit the UTSC [COVID-19 Absence Declaration in ACORN](#) website for more information.

Missed Term Work

Late assignments will be **subject to a late penalty of 2% per day (including weekends) of the total marks for the assignment**. Late assignments will only be accepted for one week after the deadline. The only exemption from these penalties will be for work that is late for health reasons, as long as students submit proper documentation by way of the Absence Declaration Tool on ACORN.

3. PLAGIARISM AND ACADEMIC INTEGRITY

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The [University of Toronto's Code of Behaviour on Academic Matters](#) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor in all relevant courses
- Making up sources or facts
- Obtaining or providing unauthorized assistance on any assignment

On tests and exams:

- Using or possessing unauthorized aids
- Looking at someone else's answers during an exam or test
- Misrepresenting your identity

In academic work:

- Falsifying institutional documents or grades
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes

All suspected cases of academic dishonesty will be investigated following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources (for example, the [University of Toronto website on Academic Integrity](#)).

4. EQUITY, DIVERSITY, AND INCLUSION

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

5. ACCESSIBILITY AND COMMUNICATION POLICIES

Accommodation

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible.

AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability.utsc@utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Writing Support

Please see English Language and writing support at University of Toronto:
<http://www.sgs.utoronto.ca/currentstudents/Pages/English-Language-and-Writing-Support.aspx>

Communication Policy

The best way to communicate with me is by attending virtual office hours. I aim to respond to student emails within 2 business days Monday-Friday 9am-5pm. Emails sent over the weekend will be responded to on Monday.

6. COURSE SCHEDULE

Check Quercus for updates to the reading list

Date	Topic	Readings	Assignments/Notes
Week 1 Jan 13	Course overview Context and introduction to climate policies Introduction to assignments	Olive (2019) Chapter 1	
Week 2 Jan 20	What kind of problem is climate change? Introduction to policy and political institutions in Canada	Hulme (2019) Chapter 1 Olive (2019) Chapter 2 and 3	
Week 3 Jan 27	Climate change governance	MacArthur et al. (2020) Hulme (2019) Chapter 12	Case Study Presentation: Paris active transportation policies

	Canadian climate change policies Denial and delay by fossil fuel industry		**Reflective response 1 due
Week 4 Feb 3	Cross-cutting themes: Decolonization, equity and decarbonization	Reed et al. (2021) Bernstein and Hoffmann (2019) Hughes and Hoffmann (2020)	Case Study Presentation: UK coal phaseout **Reflective response 2 due
Week 5 Feb 10	Energy supply	International Energy Agency (2021) Hulme (2019) Chapter 7 Green and Denniss (2018)	Case Study Presentation: Germany Energiewende **Collaborative Assignment part 1 draft sent for peer review
Week 6 Feb 17	Energy use and demand	Hoicka and Das (2020) Haley and Torrie (2021)	Case Study Presentation: Norway electric vehicle enabling policies **Reflective Response 3 due **Peer Review of Collaborative Assignment part 1 due
Feb 24	Reading Week		
Week 7 Mar 3	Carbon markets and economic tools	Green (2021) Hulme (2019) Chapter 6 Campney (2021)	Case Study Presentation: BC Carbon Price **Collaborative Assignment part 1 due
Week 8 Mar 10	Food and agriculture	Rivera-Ferre et al. (2016) Fletcher and Knuttila. (2016)	Case Study Presentation: University divestment **Reflective Response 4 due
Week 9 Mar 17	Industry decarbonization Consumption	Nilsson et al. (2021) Bauer and Fontenit (2021)	Case Study Presentation: New York City building decarbonization policies
Week 10 Mar 24	Negative emissions Modelling, scenarios, and targets	Lenzi (2018) Rogelj, J. et al. (2021)	Case Study Presentation: UK Citizen's Assembly **Reflective Response 5 due

Week 11 Mar 31	Rapid transitions to zero emissions Living in a climate changed world	O'Brien (2018) Hilton (2021) Canadian Institute for Climate Choices (2021)	Case Study Presentation: Toronto climate action plan TransformTO
Week 12 Apr 7	Group presentations	None	**Collaborative Assignment part 2 due

READING LIST

Bauer, & Fontenit, G. (2021). Plastic dinosaurs – Digging deep into the accelerating carbon lock-in of plastics. *Energy Policy*, 156, 112418–. <https://doi.org/10.1016/j.enpol.2021.112418>

Bernstein, S., & Hoffmann, M. (2019). Climate politics, metaphors and the fractal carbon trap. *Nature Climate Change*. <https://doi.org/10.1038/s41558-019-0618-2>

Campney (2021). How the Supreme Court’s carbon price review intersects with Indigenous rights and reconciliation. *Canadian Institute for Climate Choices*. Available at: <https://climatechoices.ca/how-the-supreme-courts-carbon-price-review-intersects-with-indigenous-rights-and-reconciliation/>

Canadian Institute for Climate choices (2021). *The Health Costs of Climate Change (Executive Summary)*. Available at: https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices_Health-Report_-Summary_June2021.pdf

Fletcher, Amber J., and Erin Knuttila. (2016). Gendering Change: Canadian Farm Women Respond to Drought. In (eds) Diaz, H., Hurlbert, M. and Warren, J. *Vulnerability and Adaptation to Drought: The Canadian Prairies and South America*. University of Calgary Press.

Green, J. F. (2021). Does carbon pricing reduce emissions? A review of ex-post analyses. *Environmental Research Letters: ERL [Web Site]*, 16(4), 043004.

Green, & Denniss, R. (2018). Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies. *Climatic Change*, 150(1-2), 73–87. <https://doi.org/10.1007/s10584-018-2162-x>

Haley, B., & Torrie, R. (2021). *Canada’s Climate Retrofit Mission*. Efficiency Canada. <https://www.energycanada.org/wp-content/uploads/2021/06/Retrofit-Mission-FINAL-2021-06-16.pdf>

Hilton, C.A. (2021). Indigenomics: Our Eyes on the Land. *Canadian Institute for Climate Choices*. Available at: <https://climatechoices.ca/publications/indigenomics/>

Hoicka, C. E., & Das, R. (2020). Ambitious deep energy retrofits of buildings to accelerate the 1.5°C energy transition in Canada: Deep energy retrofits in Canada. *The Canadian Geographer. Geographe Canadien*, cag.12637. <https://doi.org/10.1111/cag.12637>

Hughes, S., & Hoffmann, M. (2020). Just urban transitions: Toward a research agenda. *Wiley Interdisciplinary Reviews. Climate Change*, 11(3), e640

Hulme. (2019). *Contemporary climate change debates: A student primer*. Routledge.

International Energy Agency (2021). *World Energy Outlook (Executive Summary)*. Available at: <https://www.iea.org/reports/world-energy-outlook-2021/executive-summary>

Lenzi, D. (2018). The ethics of negative emissions. *Global Sustainability, 1*.
<https://doi.org/10.1017/sus.2018.5>

MacArthur, J. L., Hoicka, C. E., Castleden, H., Das, R., & Lieu, J. (2020). Canada's Green New Deal: Forging the socio-political foundations of climate resilient infrastructure? *Energy Research & Social Science, 65*, 101442.

Nilsson, L. J., Bauer, F., Åhman, M., Andersson, F. N. G., Bataille, C., de la Rue du Can, S., Ericsson, K., Hansen, T., Johansson, B., Lechtenböhmer, S., van Sluisveld, M., & Vogl, V. (2021). An industrial policy framework for transforming energy and emissions intensive industries towards zero emissions. *Climate Policy, 21*(8), 1053–1065.

O'Brien, K. (2018). Is the 1.5°C Target Possible? Exploring the Three Spheres of Transformation. *Current Opinion in Environmental Sustainability, 31*, 153–160.

Olive, A. (2016). *The Canadian Environment in Political Context*. University of Toronto Press.

Reed, G., Gobby, J., Sinclair, R., Ivey, R., & Matthews, H. D. (2021). Indigenizing Climate Policy in Canada: A Critical Examination of the Pan-Canadian Framework and the ZÉN RoadMap. *Frontiers in Sustainable Cities, 3*, 78.

Rivera-Ferre, López-i-Gelats, F., Howden, M., Smith, P., Morton, J. & Herrero, M. (2016). Re-framing the climate change debate in the livestock sector: mitigation and adaptation options. *Wiley Interdisciplinary Reviews. Climate Change, 7*(6), 869–892.
<https://doi.org/10.1002/wcc.421>

Rogelj, J., Geden, O., Cowie, A., & Reisinger, A. (2021). Net-zero emissions targets are vague: three ways to fix. *Nature, 591*(7850), 365–368.