ENV 350H Energy Policy and Environment Fall 2020 Course Syllabus University of Toronto, School of the Environment

Time: Monday, 6-8 p.m.

Location: Online, via Quercus. Lectures will be done live, with an opportunity for questions and discussion. Recordings of the lectures will be posted online, as will additional video materials.

Office Hours: Friday, 10 – 11 a.m. or by appointment

Instructor: Keith Stewart <<u>climatekeith@gmail.com</u>>

T.A.: Joaquin Bardallo Bandera <<u>joaquin.bardallobandera@mail.utoronto.ca</u>> Ryan Nash <<u>ryan.nash@mail.utoronto.ca</u>>

Pre-requisite: (ENV221H1,ENV222H1) or permission of Academic Associate Director

Description

This course explores the connections between energy and environment policy and politics, including the connections with climate change.

The patterns of energy use of individual countries and of the global system as a whole reflect the accumulation of policy choices and have significant impacts on the environment, locally and globally. Not the least of these impacts is the potential to disrupt the global climate system. Decisions about energy technologies are strongly influenced by social organization, economics and politics.

The first part of the course provides a historical context for the physical, environmental, technological, economic and political aspects of energy systems and energy transitions before exploring the principal policy tools available to decision-makers. This includes both a more traditional academic approach to energy and environmental policy-making found in the textbook written by Andrea Olive, as well as a more radical critique found in Naomi Klein's *On Fire: The Burning Case for a Green New Deal.*

The objective of this course is that students should be able to understand the social, political, economic and technological context for energy transitions, and be apply the theoretical concepts learned in the course to current policy-making processes. Therefore students should follow the public and media debates on the case studies in addition to the required readings.

For 2020, this is an online-only course. Lectures will be delivered synchronously between 6 and 8 pm on Monday evenings, with portions dedicated for participation and discussion. Recordings of the lectures and lecture slides and other materials, will be made available within 2 days for those unable to attend during class time. Students need to be able to prepare and submit short essays in PDF, word or equivalent format onto Quercus and have the ability to use Blackboard Collaborate (Ultra).

Assignments

All assignments must be submitted via Quercus. Additional detail on each of the assignments will provided in class.

Commentary (20%): Write a commentary on a news story related to Canadian energy and environmental policy (maximum 800 works). The commentary should incorporate concepts from the course materials (i.e. you must reference at least one of the required readings) in a

way that demonstrates your grasp of the concept and ability to apply it to current events and debates. You should advance a point of view backed by evidence (i.e. it is not simply your opinion) while maintaining a thoughtful and respectful tone.

This assignment is due **October 19.**

Policy simulator (5%): Use the online <u>energy policy simulator</u> developed by the Pembina Institute to generate a scenario where Canada achieves its 2030 Paris Agreement targets. Identify 3 key policies for achieving medium-term reductions (i.e. by 2030) and 3 that achieve significant longer-term reductions (i.e. by 2050). Are they demand-side, supply-side or carbon priding policies? Due **November 2**.

Comparing policy approaches (25%): Use the concepts and historical material from this course to identify the strengths and weaknesses of one of the following approaches: carbon pricing, demand-side policies or supply-side policies. You should include specific references to their use in Canada. This assignment should be no more than 1800 words and is due **November 16**.

Major paper (40%): For the major paper, you will take on the role of an academic consultant hired to advise a high-level decision-maker from a corporation, industry association, government ministry, government agency or non-profit organization. Your task is to brief them on policy issues related to the energy transition, and more specifically Canada's target of reaching net-zero carbon emissions by 2050.

You must identify the specific person and company/ministry/group you are providing advice to (and they should be a real person). Your advice should be tailored to their organization. This doesn't mean that you should simply tell them what you think they want to hear, but in making the case you should ensure that your advice is relevant to their situation and role within the policy community (e.g. the CEO of an oil company can't pass legislation, but can advocate for certain policies).

It can be written either in essay format or as a briefing note and should be no more than 3000 words. You will be expected to demonstrate an understanding of the concepts studied in the course and an ability to apply them to this topic, as well as an ability to identify and include other relevant research.

The TAs and professor will have extra office hours in the weeks of November 23rd and 30th to discuss essay outlines.

The final essay is due on **December 9** (i.e. two days after the last class).

Discussion (10%): This will be a group grade, based on participation in the online discussion forum. It is expected that all students will participate in a constructive and thoughtful manner.

Evaluation criteria:

The primary criteria used in evaluating written work are the following:

1) **Mechanics**: Your work must be completely free of grammatical errors, spelling errors or major factual errors. References can be in any style but the same format must be used consistently and they must be accurate.

2) **Writing style**: Your papers should be written in a clear and unambiguous style which assists, rather than impedes, communication with the reader.

3) **Structure**: Your written work should have a clear focus, provided by the research question, and a structure which logically flows from that focus.

4) **Precision and accuracy**: Precision means saying exactly and specifically what you mean, avoiding ambiguity and vague generalities. Accuracy refers to absence of major factual errors.

5) **Analysis**: Your analysis should display understanding of the topic and, based on that understanding, originality of thought.

Late assignments

Late assignments will be penalized at a rate of 2.5%/day (i.e. an assignment 10 days late will lose 25% off of the assigned grade, so a grade of 7.5/10 would become 5/10). If you wish to be granted an extension, you must provide a note from a doctor or your college.

Required readings

The two textbooks (*The Canadian Environment in Political Context* and *On Fire: The Burning Case for a Green New Deal*) are available at the bookstore. All of the other required readings are available electronically via Quercus or via the links in the course syllabus.

Students are expected to follow the public and media debates on energy and environmental politics and policy in addition to the readings identified below. The course instructor will share relevant news stories and analyses via Quercus.

September 14: Introduction to Environmental Policy and Politics

Required Reading:

Andrea Olive (2016). *The Canadian Environment in Political Context*. University of Toronto Press. Chapter One: The Canadian Environment, pp. 1 – 26.

Naomi Klein (2019). "Introduction: We are the Wildfire." On Fire: The Burning Case for a Green New Deal. Toronto: Alfred A. Knopf Canada, pp. 1-53.

September 21: Energy Transitions

Required:

Bruce Podobnik (2006). Chapter 1: "Global Energy Shifts in World Historical Perspective." *Global Energy Shifts: Fostering Sustainability in a Turbulent Age*. (Philadelphia: Temple University Press). pp. 1-17.

National Energy Board (2019). "<u>Canada's Energy Transition: Historical and Future Changes to</u> <u>Energy Systems – Update - An Energy Market Assessment</u>".

Suncor (2020). Climate Risk and Resilience Report 2020. Pages 16 – 22.

Mark Carney (29 September 2015). "<u>Breaking the Tragedy of the Horizon – climate change</u> and financial stability." Speech given by Mark Carney, Governor of the Bank of England and Chairman of the Financial Stability Board to Lloyd's of London.

Recommended:

International Energy Agency (2017). "Executive Summary." <u>Energy Technology Perspectives</u> <u>2017: Catalysing Energy Technology Transformations</u>. International Energy Agency.

September 28: Politics and Institutions

Required:

Andrea Olive (2016). *The Canadian Environment in Political Context*. University of Toronto Press. Chapter 2: Canadian Politics and Institutions, pp. 27 – 52.

Monica Gattinger (2009). "Multi-level Energy Regulatory Governance in the Canadian Federation: Institutions, Regimes and Coordination" in Burkard Eberlein and G. Bruce Doern (eds.), *Governing the Energy Challenge: Canada and Germany in a Multilevel Regional and Global Context*. (Toronto: University of Toronto Press).

Recommended:

Environment and Climate Change Canada (November 2015). <u>Environment Canada Briefing</u> <u>Book</u>. Parts 1 – 4.

Kathryn Harrison (2013). "Federalism and Climate Policy Innovation: A Critical Reassessment". *Canadian Public Policy*. Vol. 39.

October 5: Policy-making

Required:

Andrea Olive (2016). *The Canadian Environment in Political Context*. University of Toronto Press. Chapters 3 and 4, pp. 53 – 98.

Naomi Klein (2019). "The Leap Years: Ending the Story of Endlessness." On Fire: The Burning Case for a Green New Deal. Toronto: Alfred A. Knopf Canada, pp. 169-190.

Recommended:

Naomi Oreskes and Erik Conway (2010). *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming.* Bloomsbury Press. Introduction and Chapter 6, pp. 1-9 and 169-215.

Provincial case studies from "<u>The evolution of carbon pricing in the provinces</u>" in *Policy Options*.

October 12: No Class due to Thanksgiving

October 19: Policy Options - Carbon Prices

Required:

Working Group on Carbon Pricing Mechanisms (2016). <u>Working Group on Carbon Pricing</u> <u>Mechanisms: Final Report</u>. Environment and Climate Change Canada, pp. 1 – 50.

Chris Ragan et al (April 2015). <u>The Way Forward: A Practical Approach to Reducing Canada's</u> <u>Greenhouse Gas Emissions</u>. EcoFiscal Commission, pp. i – iv.

Kathryn Harrison (July 8, 2019). "<u>The fleeting Canadian harmony over carbon pricing</u>". *Policy Options*.

Mark Jaccard (February 2, 2016). "Want an effective climate policy? Heed the evidence". *Policy Options*.

Recommended

Remainder of EcoFiscal Commission report.

October 26: Policy Options – Demand-side Regulations

Andrea Olive (2016). *The Canadian Environment in Political Context*. University of Toronto Press. Chapter 8, pp. 177 – 202.

Specific Mitigation Opportunities Working Group (2016). <u>Specific Mitigation Opportunities</u> <u>Working Group Final Report</u>. Environment and Climate Change Canada, pp. 5 - 38, 48 – 84.

November 2: Policy Options – Supply-side regulations

Michael Lazarus and Harro van Asselt (2 August 8, 2018). "Fossil fuel supply and climate policy: exploring the road less taken". *Climatic Change.* Vol. 150, pp. 1-13. https://doi.org/10.1007/s10584-018-2266-3

Mark Jaccard, James Hoffele and Torsten Jaccard. "Global carbon budgets and the viability of new fossil fuel projects". *Climatic Change*. Vol. 150, pp. 15-28.

Bill McKibben (August 3, 2012). "Global Warming's Terrifying New Math". Rolling Stone Magazine.

Recommended:

Fergus Green and Richard Denniss (2018). "Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies". *Climatic Change*. Vol. 150 pp. 73-87.

November 9: Reading week so no class

November 16: Policy Options – Change the system, not the climate?

Naomi Klein (2019). "Epilogue: The Capsule Case for a Green New Deal." On Fire: The Burning Case for a Green New Deal. Toronto: Alfred A. Knopf Canada, pp. 280-291.

Mary Annaise Heglar (June 4, 2019). "<u>I work in the environmental movement. I don't care if</u> you recycle." Vox.

The Pact for a Green New Deal. URL: https://act.greennewdealcanada.ca/the-text/

November 23: Indigenous People, Environment and Energy

Andrea Olive (2016). *The Canadian Environment in Political Context*. University of Toronto Press. Chapter 9, pp. 203 - 230.

JFK Law Corporation (2012). Beaver Lake Cree Nation Amended Statement of Claim.

November 30: Case Study of Pipelines Politics

George Hoberg (2016). "<u>Pipelines and the Politics of Structure: A Case Study of the Trans</u> <u>Mountain Pipeline</u>." Paper prepared for delivery at the Annual Meeting of the Canadian Political Science Association, May 31-June 2, 2016 Calgary, AB

December 7: Policy Analysis and Advocacy in an Era of Climate Disruption

Mary Annaise Heglar (February 18, 2019). "<u>Climate Change Isn't the First Existential Threat</u>." Zora.

Kate Marvel (March 1, 2018). "<u>We Need Courage, Not Hope, to Face Climate Change</u>." On Being.

Keith Stewart (2020). "Trump: Climate Denial on Steroids" in Cynthia Levine-Rasky and Lisa Kowalchuk (eds.) *We Resist: Defending the Common Good in Hostile Times*. (Montreal: McGill-Queens University Press).

Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: <u>accessibility.services@utoronto.ca</u> or <u>https://www.studentlife.utoronto.ca/as</u>

Plagiarism and Academic Integrity

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves.

Familiarize yourself with the University of Toronto's *Code of Behaviour on Academic Matters* (<u>http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</u>). It is the rule book for academic behaviour at the U of T, and you are expected to know the rules. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Copying material word-for-word from a source (including lecture and study group notes) and not placing the words within quotation marks.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Including references to sources that you did not use.
- Obtaining or providing unauthorized assistance on any assignment including
 - working in groups on assignments that are supposed to be individual work,
 - having someone rewrite or add material to your work while "editing".
- Lending your work to a classmate who submits it as his/her own without your permission.

On tests and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Letting someone else look at your answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying or altering any documentation required by the University, including doctor's notes.
- Falsifying institutional documents or grades.

You can get further guidance on academic integrity at:

www.artsci.utoronto.ca/osai/students

Cases of suspected plagiarism will be addressed in accordance with the procedure established by the Code of Behaviour on Academic Matters.