

ENV 221H1-S Multidisciplinary Perspectives on the Environment
School of the Environment
University of Toronto
Summer 2023

First lecture: July 5th, 2023
Lectures: Mondays & Wednesdays
Location: online/synchronous
Time: 10 am - 12 pm (Eastern Standard Time)
Instructor: Dr. Erich Vogt - erich.vogt@utoronto.ca
Student Hours: by appointment
Lead TA: Rebecca McMillan rebecca.mcmillan@mail.utoronto.ca
TA: Lois Boody lois.boody@mail.utoronto.ca

The course

Global environmental dangers are among the most profound challenges facing humanity. They fundamentally undermine the quality of life and threaten the organic infrastructure that supports all life on earth. No single academic discipline, country, corporation, government, or organization can fully illuminate alone the fabric of, or fashion solutions to environmental problems, both locally and globally, and achieve sustainability. Multidisciplinarity and cooperation across sectors, institutions and countries are critical when carving out sustainable answers and solutions to a multitude of both global and local environmental challenges.

At the outset of the course, we will review some of the fundamental concepts and themes in how the academic universe understands and interprets the environment. We then explore four themes in more depth by drawing on a number of thematic case studies (energy, climate change, water, agriculture/food). Each case study will be approached from a variety of disciplinary perspectives: the physical nature of the issue; the action addressing the issue by governments and others; and the cultural, ethical and philosophical dimensions of the issue. We will do so with the assistance of academics, policy makers, and practitioners.

By the end of this course, students should have a sound understanding and appreciation of the multidisciplinary nature of environmental studies, and an initial

sense of the urgency to address and attack environmental threats with a multidisciplinary lens and approach in both research and teaching.

Course format

The course will be delivered by way of Quercus and Zoom. While there is no in-person scheduled classroom time in a fully online course, the delivery of the lectures will take place ‘live’ at designated times (Mondays and Wednesdays, 10 am – 12 pm, Eastern Standard Time). Attendance and participation in the lectures is expected. They will also be recorded for later (re)viewing, as will be the accompanying slides. You can find them in the weekly Modules on Quercus. The tutorials will also be delivered ‘live’ at the designated times and every effort will be made to also make them available for students’ (re)view on Quercus.

The syllabus, course videos and related materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and they are thus protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you are not permitted to copy, share, or use them for any other purpose without the explicit consent of your course instructor. Because recordings will be provided for all lectures and tutorials, students may not create additional audio or video recordings without written permission from the instructor and/or teaching assistants. Permission for such recordings will not be withheld for students with accommodation needs.

Course framework

The course material is presented in three ways: course readings, bi-weekly lectures, and discussions in four tutorials. Students will be asked to write three papers (critical review, memorandum to political decision makers, research/policy paper). Despite the class size, every effort will be made to make the course as interactive and participatory as possible. This, however, requires that students come well prepared to both the lectures and tutorials.

Technology requirements for online learning

This course requires the use of computers, and, as we all have found out on occasion, the technology at times doesn’t perform as expected. Because ‘what can go wrong will go wrong’, you should plan ahead and ensure that you maintain regular backup copies of your files, use antivirus software and schedule enough time when completing assignments to allow for delays due to technical glitches. Computer viruses, crashed hard drives, broken printers, lost or corrupted files,

incompatible file formats, and similar mishaps are common issues when using technology, they are not acceptable grounds for asking for deadline extensions.

That said, UofT has identified the following minimum technical requirements needed to access remote/online learning courses such as ENV 221:

	Windows-based PC	AppleMac/macOS-based PC
Operating Systems:	Windows 10	macOs X
Web Browser:	Firefox/Google Chrome	Firefox/Google Chrome
Processor:	Intel Core i5 based model	Intel Core i5 based model
RAM/Memory:	4 GB	4 GB
Storage:	5 GB of available space	5 GB of available space
Screen Resolution:	1024 x 768	1024 x 768
Connectivity:	Ethernet/WiFi	Ethernet/WiFi

Learning environment

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 celebrate and respect one another's differences. The University does NOT condone discrimination or harassment against any persons or communities.

Learning objectives

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

- have improved their critical thinking capacity;
- have both a well-rounded and balanced understanding of the multiple causes and implications of a range of global and local environmental challenges;
- have a more grounded appreciation of the options a multidisciplinary body of knowledge provides to tackle them;
- demonstrate a more sophisticated understanding value-added multidisciplinary approaches can bring across all the disciplines in the university universe;
- demonstrate proficiency in framing more effectively research questions and approaches, analysis, verbal presentation, and writing skills.

Tutorials

Each student will attend four tutorials. The educational objective of the tutorials is to give students an opportunity to both deepen and broaden their understanding and appreciation of the themes addressed and discussed in the bi-weekly lectures

through further discussion in smaller group settings. Each Tutorial will be led by highly-experienced and competent teaching assistants. The topics to be discussed will be announced via e-mail and Quercus in advance of the tutorial date.

Attendance and active participation in the tutorials is expected, as both build the bedrock of your participation mark. If you missed a tutorial for what you believe is a legitimate reason (such as a documented medical or family issue), please bring this to the attention of your designated TA as soon as possible. The TAs reserve the right to determine what are legitimate reasons for missing tutorials.

Students' tutorial mark will be calculated according to this formula: 40% for attendance and 60% for participation.

While we encourage live (synchronous) attendance and participation in tutorials, asynchronous tutorial options will be made available to students for limited, specified circumstances (e.g., significant time zone impediments). In each case prior TA approval must be obtained. Last but not least, students should check and confirm their respective tutorial group as well as the time of the tutorial.

The tutorials will be held on the following dates and times (Eastern Standard Time) in a live/synchronous online manner:

TUT 0101 – Mondays, 9 am – 10 am: July 10; July 24; August 7; August 14

TUT 0102 – Mondays, 9 am - 10 am: July 10; July 24; August 7; August 14

TUT 0201 – Mondays, 4 pm – 5 pm: July 10; July 24; August 7; August 14

TUT 0301 – Wednesdays, 9 am – 10 am: July 12; July 26; August 2; August 9

TUT 0401 – Wednesdays, 4 pm – 5 pm: July 12; July 26; August 2; August 9

Readings

Readings for each class are listed in the Lecture Topics section below. We have made every attempt to make all of them available electronically, and in some cases also in printed format. You can find them on Quercus in the Library Resources file. If you are a citizen of another country, and/or accessing your courses at the University of Toronto from a jurisdiction outside of Canada, you may be subject to the laws of the country in which you are residing, or any country of which you have citizenship. As you know, the University of Toronto has a long-established commitment to human rights, freedom of expression, and it provides an environment which values respect, diversity, and inclusion. Against this backdrop, in this class you may be assigned readings, or discuss topics that are against the law in other jurisdictions. I encourage you to become familiar with your appropriate local laws that may apply to you and any potential impact on you if course content and information could be considered illegal, controversial, or

politically sensitive. If you have any concerns about these issues, please contact me directly for further clarification.

Communication

Emails are normally responded to within 48 hours, but not during weekends or on public holidays. All official communications and announcements from the instructor and TAs will be sent to either the ‘Announcement’ file on Quercus, or to students’ official UofT-issued e-mail addresses.

Course Assignments and distribution of marks:

1) Critical review - 25 Percent

Based on the information and insights gained in the course thus far, you will be asked to critically review a contemporary environmental essay as written by a designated author. More specific instructions will be given in both the lectures and tutorials.

Three (3) pages, 1.5 spacing, TNR 12 font, no footnotes/endnotes, no bibliography. A selection of essays will be provided roughly 2 weeks before the respective due date.

All writing assignments/papers are expected to be submitted electronically via Quercus.

Due: July 23rd, 2023, 11.59 p.m. (EST)

2) Memorandum - 30 Percent

You are the special climate change envoy of a G20 country of your choice. Write a climate change memorandum for the sherpa of your chosen G20 country and present your arguments for crafting a policy with an eye toward its cross-cutting nature. More specific instructions will be given in both the lectures and tutorials.

Four (4) pages, 1.5 spacing, TNR 12 font, no footnotes/endnotes, no bibliography.

Due: August 6th, 2023, 11.59 p.m. (EST)

3) Research/Policy paper – 35 Percent

The purpose of this combined research/policy paper is to give students an opportunity to explore and develop a paper that focuses on one of the SDGs with directly relevant environmental impacts. This five (5) page paper must: (1) examine the chief causes/drivers of the issue(s)/problem(s) - as you see them based on your own critical assessment; (2) outline what the international community has agreed to do about it (targets, indicators); and (3) provide ideas and recommendations of how best to move the envisioned solution from concept to practice. More specific instructions will be given in writing.

The paper shall have 1.5 spacing, 1 inch margins, TNR 12 font, **as well as footnotes or endnotes and bibliography.**

Due: August 16th, 2023, 11.59 p.m. (EST)

Evaluation criteria of all written work products

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

- 1) **Content:** Content is Queen/King!!!
- 2) **Mechanics:** Defined as freedom from minor factual errors and spelling and grammatical errors. Where asked, students are expected to include thorough, accurate and consistent references in any bona fide academic referencing style that includes page numbering.
- 3) **Writing style:** It should be appropriate for an academic environment. Beyond that, style will be evaluated primarily in terms of clarity. Proper use of the English language is expected!
- 4) **Structure:** Papers will also be evaluated in terms of their organization and coherence. The structure of the paper must logically flow from the assignment question(s) and must add up to a coherent whole.
- 5) **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.
- 6) **Analysis:** Analysis will be evaluated in terms of success in using evidence in the form of data/information to construct a logical argument which convincingly answers your assignment question(s).

4) Participation in bi-weekly lectures and tutorials - 10 Percent

Students are expected to attend all lectures and tutorials, and to participate actively in tutorial discussions. Participation means making insightful comments, asking probing questions, and being involved in the ongoing discussions in ways that demonstrates students have done the readings and are thinking critically about the content and discourse of the class.

If the time zones in which students are based would significantly impair their ability to participate in synchronous tutorials, please contact your TA prior to the first tutorial to seek approval to follow the four tutorials asynchronously.

Alternatively, other arrangements can be arranged to ensure that you can attain a superior participation mark.

Evaluation criteria of all oral contributions

- 1) **Success in communicating** key concepts succinctly and accurately, thereby demonstrating sound understanding of the work being presented.

- 2) **Mechanics of communication**, such as manner of speaking (including good diction and tone), structure of the presentation and level of organization.
- 3) **Ability to respond** appropriately and fairly to questions and contribute to and stimulate unstructured discussion among peers.

There will be no mid-term and no final exam

Late penalties

No due dates will be extended unless discussed with and agreed upon by your TA in advance. Penalty for late work will be 2% of the assignment mark per day late, including weekends. **Late papers will be accepted only for one week after the due date.** Papers submitted later will not be reviewed and assessed. The only exemption from this penalty will be for work that is late for both medical or non-medical reasons for work that is granted a prior extension for both medical or non-medical reasons. In such cases, students must record either their absence from academic participation or late submissions through the ACORN online absence declaration. In addition, students should advise both the instructor and their designated TAs of their absence and request for late submissions.

Grading scheme

The course will follow the University of Toronto's undergraduate courses grading scheme:

A+	90 - 100%
A	85 - 89%
A-	80 - 84%
B+	77 - 79%
B	73 - 76%
B-	70 - 72%
C+	67 - 69%
C	63 - 66%
C-	60 - 62%
D+	57 - 59%
D	53 - 56%
D-	50 - 52%
F	0 - 49%

More information is available here: <https://fas.calendar.utoronto.ca/rules-regulations#grading>

Academic Integrity “The University of Toronto is committed to the free and open exchange of ideas, and to the values of independent inquiry. Academic integrity is fundamental to our university community’s intellectual life. What does it mean to act with academic integrity? U of T supports the International Center for Academic Integrity’s definition of academic integrity as acting in all academic matters with honesty, trust, fairness, respect, responsibility, and courage. For an Indigenous perspective on these values, you might also like to read more about the Seven Grandfathers approaches to academic integrity. In our Code of Behaviour on Academic Matters, the University has identified academic offences that run counter to those values, and that are in opposition to our mission to create internationally significant research and excellent academic programs. This code outlines the behaviours that constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential academic offences include, among others, the use of ChatGPT and AI as tools in the pursuit of your academic performance. Additional academic offences include:

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.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes working in groups on assignments that are supposed to be individual work).

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 (but not limited to) doctor's notes.
- Falsifying institutional documents or grades.

All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code of Behaviour on Academic Matters. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me. If you have questions about appropriate research and citation methods, you are expected to seek out additional information from me or other available campus resources like the College Writing Centres (<https://writing.utoronto.ca/writing-centres/arts-and-science/>), the Academic Success Centre, or the U of T Writing Website.”

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation website (<https://uoft.me/pdt-faq>).

Familiarize yourself with the University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) and (<https://www.academicintegrity.utoronto.ca/>). It is the rule book for academic behaviour at the U of T, and you are expected to know the rules. You can get additional guidance on academic integrity from the website of the Office of Student Academic Integrity at: www.artsci.utoronto.ca/osai/students

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: https://studentlife.utoronto.ca/task_levels/accessibility-and-academic-accommodations/

The University is committed to developing an accessible learning environment that provides reasonable accommodations to enable students with disabilities to meet the essential academic requirements of the University's course and programs.

Please be aware of the academic accommodation policies and resources page on the Provost's website:

<https://www.vicprovoststudents.utoronto.ca/students/academic-accommodation/> Accessibility Remote/Online Learning information and resources are available at: <https://studentlife.utoronto.ca/covid-19-accessibility-faqs/>

Writing Centers

A wide range of resources for writing support is available in Arts & Science during the Summer sessions.

1. All seven Faculty of Arts & Science (FAS) writing centres will be operating during the 2023 Summer session, and all will be offering synchronous one-on-one instruction (in-person and online) with asynchronous options at some colleges. Students should visit each individual centre's site for information on how to make an appointment.

The FAS centres are listed at <https://writing.utoronto.ca/writing-centres/arts-and-science>.

Note that undergraduate students taking Summer courses in the Faculty of Arts & Science are eligible to seek help at their home college's centre and at other centres for work in college program courses. In the summer, students may book up to TWO appointments per week.

2. More than 60 Advice files on all aspects of academic writing are available from <http://advice.writing.utoronto.ca>. Students benefit from your recommendation of specific material relevant to your course and assignments. Printable PDF versions are listed at <http://advice.writing.utoronto.ca/student-pdfs>.

I also want to refer students to "How Not to Plagiarize" and other advice on documentation format and methods of integrating sources. These pages are listed at <http://advice.writing.utoronto.ca/using-sources>.

For general information about writing resources at U of T, students can start here: <https://writing.utoronto.ca>.

3. Information about the English Language Learning program (ELL)'s summer offerings is available at [English Language Learning | Faculty of Arts & Science \(utoronto.ca\)](#). For more information, please contact the ELL coordinator Leora Freedman at ell.newcollege@utoronto.ca.

Additional services and support

The following are important links to help you with academic and/or technical service and support:

- General student services and resources at [Student Life](#)
- Full library service through [University of Toronto Libraries](#)
- Resources on conducting online research through [University Libraries Research](#)
- Resources on academic support from the [Academic Success Centre](#)
- Learner support at the [Writing Centre](#)
- Information for [Technical Support/Quercus Support](#)

Multidisciplinary Environmental Studies

Lecture topics and readings

Wednesday, July 5

Introduction to the course – status report on the multidisciplinary challenges of the environment

Readings

World Resource Institute, The Millennium Ecosystem Assessment - Ecosystems and Human Well-being – Synthesis Report, Summary for Decision Makers pp. 1–24; see

<https://www.millenniumassessment.org/documents/document.356.aspx.pdf?msclki d=a9a330cfc76111ecaac5b655758ef8e4>, Island Press, 2005

Dale Jamieson, Reason in a Dark Time – Why the struggle against climate change failed – and what it means for our future, pp.178–200, Oxford University Press, 2014

Joshua Rothman, “The Big Question: Is the world getting better or worse?,” The New Yorker (23 July 2018), pp. 26-32

Elizabeth Kolbert, “Enter the Anthropocene”, pp. 13 -16, in Simon Nicholson/Paul Wapner (eds.), Global Environmental Politics – From Person to Planet, Paradigm Publishers, 2015

James Gustave Speth, red sky at morning, ‘World of Wounds’, pp. 13-22, Yale University Press, 2004

Monday, July 10/Wednesday, July 12

The driving force: Capitalism, Globalization, and the Great Divide

Readings

James Gustave Speth, The Bridge at the Edge of the World, ‘ Modern Capitalism: Out of Control’, pp. 46–66, Yale University Press, 2008

Jonathan Rowe, “Who is an Economy For? Rethinking GDP”, pp. 220–227, in Simon Nicholson/Paul Wapner (eds.), *Global Environmental Politics – From Person to Planet*, Paradigm Publishers, 2015

Paul Krugman, “Environmental Economics 101 – Overcoming Market Failures”, pp. 164–172, in Simon Nicholson/Paul Wapner (eds.), *Global Environmental Politics – From Person to Planet*, Paradigm Publishers, 2015

Joseph Stiglitz, *Globalization and its Discontents – The Way ahead*, pp. 214–252, W. W. Norton, 2002

Angus Deacon/Anne Case, *Deaths of Despair and the Future of Capitalism*, Princeton University Press, 2020

Monday, July 17/Wednesday, July 19

The environmental awakening and the great pushback

Readings

Charles C. Mann, *The Wizard and the Prophet*, Alfred A. Knopf, 2018, pp. 39–155, Alfred A. Knopf, 2018

Charles L. Harper, “Environmentalism: Ideology, Action and Movements”, pp. 345–384, in *Environment and Society: Human Perspectives on Environmental Issues*, Prentice Hall, 2001

James Gustave Speth, “Environmental Failure: A Case for a New Green Politics”; see

https://e360.yale.edu/features/environmental_failure_a_case_for_a_new_green_politics

World Resource Institute, *The Outcomes of Johannesburg: Assessing the World Summit on Sustainable Development*, pp. 1–14; see

https://wriorg.s3.amazonaws.com/s3fs-public/pdf/wssd_sais_outcomes.pdf

Monday, July 24/Wednesday, July 26

Case Study: Climate Change

Readings

Vanessa Nakate, *A Bigger Picture*, Mariner Books, 2021, Note: In *A Bigger Picture*, Nakate shares her story as a young Ugandan woman who sees that her community bears disproportionate consequences to the climate crisis. At the same time, she sees that activists from African nations and the global south are not being heard in the same way as activists from white nations are heard. Inspired by Sweden’s Greta Thunberg, in 2019 Nakate became Uganda’s first *Fridays for Future* protestor, awakening to her personal power and summoning within herself a commanding political voice.

“Scientists deliver ‘final warning’ on climate crisis: act now or it’s too late”; see <https://www.theguardian.com/environment/2023/mar/20/ipcc-climate-crisis-report-delivers-final-warning-on-15c>

“Rethinking the World Bank Model for More Climate Financing”; see <https://www.cgdev.org/blog/rethinking-world-bank-model-more-climate-financing>

“Concessional Climate Finance: Is the MDB Architecture Working?” see https://www.cgdev.org/publication/concessional-climate-finance-mdb-architecture-working?utm_source=20230314&utm_medium=cgd_email&utm_campaign=cgd_weekly

“What Lula’s victory in Brazil could mean for climate change”; see <https://www.context.news/climate-justice/what-lulas-victory-in-brazil-could-mean-for-climate-change>

“Green colonialism” - Indigenous world leaders warn over west’s climate strategy; see

<https://amp.theguardian.com/world/2023/apr/23/un-indigenous-peoples-forum-climate-strategy-warning>

“Greenhouse gas emissions must peak within 4 years, says leaked UN report”; see <https://www.theguardian.com/environment/2021/aug/12/greenhouse-gas-emissions-must-peak-within-4-years-says-leaked-un-report>

IPCC – Climate Change 2021 – The Physical Science Basis – Summary for Policy Makers; see

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf?msclkid=e0355bdec75e11eca7c830fb9ae8f59f

IPCC Special Report, October 2018 – Summary for Policymakers; see

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf

UNFCCC – COP 26/Glasgow “Outcomes of the Glasgow Climate Change Conference”; see [https://unfccc.int/conference/glasgow-climate-change-conference-october-november-](https://unfccc.int/conference/glasgow-climate-change-conference-october-november-2021?msclkid=5efe124dc75f11ec9955fdf11a0c5613)

[2021?msclkid=5efe124dc75f11ec9955fdf11a0c5613](https://unfccc.int/conference/glasgow-climate-change-conference-october-november-2021?msclkid=5efe124dc75f11ec9955fdf11a0c5613)

Climate Promises Made in Glasgow Now Rest With a Handful of Powerful Leaders; see <https://www.nytimes.com/2021/11/14/climate/glasgow-cop26-leadership.html?smid=em-share>

The richest 10% produce about half of greenhouse gas emissions. They should pay to fix the climate; see

<https://www.theguardian.com/commentisfree/2021/dec/07/we-cant-address-the-climate-crisis-unless-we-also-take-on-global-inequality>

Greenhouse gas emissions must peak within 4 years, says leaked UN report; see <https://www.theguardian.com/environment/2021/aug/12/greenhouse-gas-emissions-must-peak-within-4-years-says-leaked-un-report>

Dale Jamieson, *Reason in a Dark Time – Why the struggle against climate change failed – and what it means for our future*, pp. 11-60, Oxford University Press, 2014
 David Miller, *Solved - How the World's Great Cities are Fixing the Climate Crisis*, University of Toronto Press, 2020

“Carbon tax or cap-and-trade?”; see <https://davidsuzuki.org/what-you-can-do/carbon-tax-cap-trade>

“Biden vows to double aid to developing countries vulnerable to climate crisis”; see <https://www.theguardian.com/us-news/2021/sep/21/joe-biden-un-general-assembly-climate-aid-developing-countries>

“By any measure, 2022 will be a big year for climate policy in Canada; see <https://www.thestar.com/opinion/contributors/2022/02/07/by-any-measure-2022-will-be-a-big-year-for-climate-policy-in-canada.html>

“Trudeau Was a Global Climate Hero. Now Canada Risks Falling Behind”; see <https://www.nytimes.com/2021/04/21/world/canada/trudeau-climate-oil-sands.html?smid=em-share>

„Prime Minister Trudeau announces increased climate ambition”; see <https://pm.gc.ca/en/news/news-releases/2021/04/22/prime-minister-trudeau-announces-increased-climate-ambition>

“Fact check: have GHG emissions risen under Trudeau?”; see <https://www.cbc.ca/news/politics/fact-check-ghg-emissions-1.6167437>

“What Biden’s climate leadership means for Canada”; see <https://www.macleans.ca/opinion/what-bidens-climate-leadership-means-for-canada/>

Is \$100 Billion a Year Enough to Cover the Cost of Climate Damage?; see <https://www.cgdev.org/blog/100-billion-year-enough-cover-cost-climate-damage>

“How CC is contributing to skyrocketing infectious diseases”; see <https://www.propublica.org/article/climate-infectious-diseases>

“Deaths from fossil fuel emissions higher than previously thought”; see <https://www.seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought>

Monday, July 31

Case Study: Energy

Readings

International Energy Agency, “World Energy Outlook 2022”, Executive Summary; see <https://www.iea.org/reports/world-energy-outlook-2022/executive-summary>

World Development Report 2010: Development and Climate Change

WB – Energy – Overview: Context-Strategy-Results; see

<https://www.worldbank.org/en/topic/energy/overview>

“Off-shore wind to become a \$1 trillion industry in 2040”; see

<https://www.iea.org/newsroom/news/2019/october/offshore-wind-to-become-a-1-trillion-industry.html>

“Coal”; see <https://www.iea.org/topics/coal/>

“Electricity”; see <https://www.iea.org/topics/electricity/>

“Energy access”; see <https://www.iea.org/energyaccess/>

“Energy efficiency”; see <https://www.iea.org/topics/energyefficiency/>

“Energy security”; see <https://www.iea.org/topics/energysecurity/>

“New IEA report highlights the need and means for the oil and gas industry to drastically cut emissions from its operations”; see <https://www.iea.org/news/new-iea-report-highlights-the-need-and-means-for-the-oil-and-gas-industry-to-drastically-cut-emissions-from-its-operations>

“53 Ways to reform fossil fuel consumer subsidies and pricing”; see

<https://www.iisd.org/gsi/subsidy-watch-blog/53-ways-reform-fossil-fuel-consumer-subsidies-and-pricing>

“Only 1 in 10 utilities prioritize renewable electricity”; see

https://www.theguardian.com/business/2020/aug/31/only-one-in-10-utility-firms-prioritise-renewable-electricity-global-study?CMP=share_btn_link

Further links:

[Sustainable Energy for All initiative](#)

[UNDP Environment and Energy](#)

[UNIDO Energy and Climate Change](#)

[International Energy Agency](#)

[International Renewable Energy Agency](#)

[UN Energy](#)

Guest presentations by:

Prof. Danny Harvey, Department of Geography, UofT

Prof. Adonis Yatchew, Economics Department, UofT

Editor-in-Chief, The Energy Journal

Ms Rachele Levin, OEB, Energy Transition Lead

Wednesday, August 2

Case study: Water

Readings

Maude Barlow, “Where has all the Water gone?” pp. 58–67, in Nicholson/Wapner (eds.), *Global Environmental Politics – From Person to Planet*, Paradigm Publishers, Boulder/London, 2015

Simon Nicholson/Paul Wapner, Chapter 6

9th World Water Forum in Dakar/Senegal in 2022; see

<https://www.worldwaterforum.org/en>

Ken Conca/Erika Weinthal (Editors), *The Oxford Handbook of Water Politics and Policy*, Oxford University Press, 2020

“What You Need to Know About Oceans and Climate Change”; see

<https://www.worldbank.org/en/news/feature/2022/02/08/what-you-need-to-know-about-oceans-and-climate-change?msclkid=eb682828c75c11ec9f0c0a30607894ed>

“Science of Climate Change – Water Climate and Society: Challenges in a Rapidly Changing World”; see

<https://video.search.yahoo.com/yhs/search?fr=yhs-mnet-001&ei=UTF-8&hsimp=yhs->

[001&hspart=mnet¶m1=796¶m2=84469&p=water+challenges+climate+c](https://video.search.yahoo.com/yhs/search?fr=yhs-mnet-001&ei=UTF-8&hsimp=yhs-001&hspart=mnet¶m1=796¶m2=84469&p=water+challenges+climate+c)

[hange&type=type9043493-spa-796-](https://video.search.yahoo.com/yhs/search?fr=yhs-mnet-001&ei=UTF-8&hsimp=yhs-001&hspart=mnet¶m1=796¶m2=84469&p=water+challenges+climate+c)

[84469#id=1&vid=d4c6af00312cd37c5d6c7152ac516063&action=click](https://video.search.yahoo.com/yhs/search?fr=yhs-mnet-001&ei=UTF-8&hsimp=yhs-001&hspart=mnet¶m1=796¶m2=84469&p=water+challenges+climate+c)

“How Water Finally Became a Climate Change Priority”; see

<https://www.scientificamerican.com/article/how-water-finally-became-a-climate-change-priority/>

“How Climate Change Impacts Water Access”; see

<https://education.nationalgeographic.org/resource/how-climate-change-impacts-water-access/>

“Water and the global climate crisis: 10 things you should know”; see

<https://www.unicef.org/stories/water-and-climate-change-10-things-you-should-know>

Guest presentation by:

Mr. Lawson Oates, Director, Toronto Water
(former head of Toronto Environment Office)

Monday, August 7

Civic holiday, No class

Wednesday, August 9

Case study: Agriculture and food security

Readings

Lester Brown, “The Global Food Crisis”, pp.68 – 71, in Simon Nicholson/Paul Wapner (eds.), Global Environmental Politics –From Person to Planet, Paradigm Publishers, Boulder/London 2015

Raj Patel, “Can the World Feed 10 Billion People?” (May 4, 2011) Foreign Policy
James Foster, George Washington University, Multidimensional poverty: - measurement and implications; see

<https://www.youtube.com/watch?v=HUvLwgQsTL8>

Consult World Bank website (www.worldbank.org) – Note: As the premier global development organizations, the WB focuses on the Poverty-Context-Strategy-

Results nexus; see <https://www.worldbank.org/en/topic/poverty/overview>

<https://www.worldbank.org/en/topic/poverty/overview#2>

<https://www.worldbank.org/en/topic/poverty/overview#3>

“FAO flagship publications - Forests, Agricultural Commodity Markets, World Fisheries and Aquaculture, Food Security and Nutrition in the World, Food and Agriculture”; see <https://www.fao.org/publications/home/fao-flagship-publications/en>

“2021 COFI Declaration for Sustainable Fisheries and Aquaculture”; see <https://www.fao.org/3/cb3767en/cb3767en.pdf?msclid=3606e7b3c75911eca533a8676005f1e9>

Guest presentations by:

Prof. Roberta Fulthorpe

Department of Physical and Environmental Sciences, UTSC, TBC

Ms Nidhi Tandon, Agricultural Economist, Consultant

Prof. Sarah Wakefield

Department of Geography and Planning, UofT, TBC

Monday, August 14

What went well, What didn't, What should we do differently?

Roundtable with students

Good luck!!!