

ENV 221H1-F Multidisciplinary Perspectives on the Environment
School of the Environment
University of Toronto
Summer 2020

First lecture: July 6th, 2020

Lectures: Mondays & Wednesdays,

Location: online/hybrid delivery

Time: 2 pm - 4 pm (Eastern Standard Time)

Instructor: Dr. Erich Vogt - erich.vogt@utoronto.ca

Office Hours: by appointment only

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Michael Adamson - michael.adamson@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. Multidisciplinary 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, there will be a review of 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 (climate change, energy, 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 challenges with an multidisciplinary lens and approach in both research and teaching.

Course format/Blackboard Collaborate

The course will be delivered by way of 'Blackboard (Bb) Collaborate'. The delivery of the lectures will take place 'live' at the designated times (Mondays and Wednesdays, 2 pm – 4 pm). Attendance and participation in the lectures is expected of students who plan to connect throughout North America's time zones. 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' review on Quercus. For a basic introduction to both Quercus and Bb Collaborate I suggest consulting the following posts:

- https://help.blackboard.com/Collaborate/Ultra/Participant/Get_Started -
- <https://qstudents.utoronto.ca/blackboard-collaborate-ultra-student-use/#more-602>
- https://q.utoronto.ca/courses/46670/pages/student-quercus-guides#h_326108522141535558104934

Course framework

The course material is presented in three ways: course readings, lectures (on Mondays and Wednesdays) 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 attend and follow lectures and tutorials well prepared.

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 of the 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 weekly lectures through further discussion in smaller group settings. Each Tutorial will be led by a teaching assistant. The topics to be discussed will be announced via e-mail and Quercus in advance of the tutorial date. Attendance and participation in the tutorials is expected. 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 the 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. Last but not least, students should check and confirm their respective tutorial group as well as the time of the tutorial.

The four tutorials will be held on the following dates and times in a live/synchronous manner:

TUT 0101 – Monday, 1 pm – 2 pm; July 13th; July 27th; August 10th; August 17th

TUT 0201 – Wednesday, 12 pm – 1 pm; July 15th; July 29th; August 5th; August 12th

TUT 0301 – Wednesday, 1 pm – 2 pm: July 15th, 2020; July 29th; August 5th; August 12th

TUT 0401 – Monday, 4 pm – 5 pm, July 13th; July 27th; August 10th; August 17th

TUT 0501 – Wednesday, 4 pm – 5 pm: July 15th; July 29th; August 5th; August 12th

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. Required readings are marked with an "R", all unmarked readings are complementary.

I traditionally do not spend time in class reviewing books' and readings' content; rather I will selectively pick on some of the main themes and hypotheses of writers' works, then test and pick them apart – with your help!!!

Writing Centers' support

Please be aware of the wide range of resources for writing support available in the Faculty of Arts and Science. Undergraduate students taking summer courses in FAS 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.

All seven FAS writing centres will be operating during this summer session, and all will be offering remote instruction. The modality may differ by college. I strongly encourage students to 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>.

Students whose first language is not English are encouraged to make us of UofT's English Language Learning program (ELL)'s summer offerings. For detailed information consult

<http://www.artsci.utoronto.ca/current/advising/ell> or contact the ELL coordinator Leora Freedman at leora.freedman@utoronto.ca.

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 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. All writing assignments must be submitted electronically via

Quercus. More specific instructions will be provided in both lectures and tutorials by the end of the first week of classes.

Three (3) pages, 1.5 spacing, TNR 12 font, no footnotes/endnotes, no bibliography. A selection of essays will be posted roughly 2 weeks before due date on Quercus, and papers are expected to be submitted electronically on Quercus.

Due: July 24th, 2020

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 lectures and tutorials.

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

Due: August 7th, 2020

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 SDG 13. 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 solution from concept to practice. More specific instructions will be given in both lectures and tutorials.

The paper shall be a 1.5 spacing, with 1 inch margins, 12 points font, footnotes/endnotes and bibliography.

Due: August 19th, 2020

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 show students have done the readings and are thinking critically about the content and discourse of the class.

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 assessment/exams

Late penalties

No due dates will be extended unless discussed with and agreed upon by the head 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 health reasons,

provided that students submit the proper documentation by way of the Absence Declaration Tool

<https://www.artsci.utoronto.ca/news/daily-update-undergraduate-students-summer-courses-and-absence-declaration-tool> For students to access the Absence Declaration Tool they must sign into ACORN and click on “Profile and Settings” at the top left corner of the webpage. Absence for other than health reasons must be documented through proper notifications from either UofTs Accessibility Services or the College Registrar. In both cases the relevant documentation must be submitted to the designated TA.

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

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* (<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. 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 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 at <https://www.studentlife.utoronto.ca>

Multidisciplinary Environmental Studies

Lecture topics and readings

Monday, July 6th/Wednesday July 8th

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, pp. 1–24, Island Press, 2005 **R**

<https://www.millenniumassessment.org/documents/document.356.aspx.pdf>

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

Paul Crutzen & Christian Schwagerl, “Living in the Anthropocene: Toward a New Global Ethos,” Yale Environment 360 (24 Jan. 2011)

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

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

Elinor Ostrom, et al., “Revisiting the Commons: Local Lessons, Global Challenges,” Science (April 1999), pp. 278-282 **R**

Monday, July 13th/Wednesday, July 15th

The driving force: Capitalism, Globalization, and the Great North-South 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 **R**

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 **R**

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 **R**

Jennifer Clapp/Peter Dauvergne, *Paths to a Green World – The Globalization of Environmentalism*, pp. 45–82, MIT Press, 2005 **R**

John Glenn, Introduction, in *Globalization: North-South Perspectives*, pp. 1-28, Routledge Press, 2007 **R**

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 20th, Wednesday, July 22nd

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, *Red Sky at Morning*, pp. 25–42, Yale University Press, 2004 **R**

James Gustave Speth, *Red Sky at Morning*, pp. 77–88, Yale University Press, 2004 **R**

James Gustave Speth: Environmental Failure: A Case for a New Green Politics, <https://e360.yale.edu/features/environmental-failure-a-case-for-a-new-green-politics> R

World Resource Institute, 'The Outcomes of Johannesburg: Assessing the World Summit on Sustainable Development', pp. 1–14, https://wriorg.s3.amazonaws.com/s3fs-public/pdf/wssd_sais_outcomes.pdf

Monday, July 27th/Wednesday, July 29th

Case Study: Climate Change

Readings

IPCC Special Report, October 2018 – Summary for Policymakers - https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf R

UNFCCC – COP 25/Madrid, in unfccc.int “Climate change visualized: How Earth's temperature has changed since 1970”, see <https://www.axios.com/climate-change-earth-temperature-change-902e2958-451b-4044-a6a3-8dab46902da6.html?fbclid=IwAR0vIGfdduQ0v4mpzFvEBK8U1qdTQHOQ8YS5gZgJ3keZYbSOXX9vbTtUcNc>

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
Erich Vogt, “Current State of Climate Politics”, pp. 188–198, in Environmental Policy and Law (42/3), 2012 R

World Development Report 2010, The World Bank - Climate Change and Development, Overview pp 1 – 26, see <https://openknowledge.worldbank.org/handle/10986/4387> R

Will Steffen, “A Truly Complex and Diabolical Policy Problem,” in Dryzek, et al., The Oxford Handbook of Climate Change and Society (2012)

David J.C. MacKay, “Price carbon – I will if you will,” Nature (15 Oct. 2015), pp. 315-316

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

“C40 cities - Around the world”, ‘C40 cities are taking bold climate action, leading the way towards a healthier and more sustainable future’, see www.c40.org
 William Antholis/Strobe Talbott, Fast Forward – Ethics and Politics in the Age of Global Warming, Brookings Institution Press, 2010 R

<https://news.trust.org/item/20200402140540-dqerc/>

<https://www.nytimes.com/2020/04/30/climate/global-emissions-decline.html?smid=em-share>

<https://thehill.com/policy/energy-environment/493987-study-links-pollution-to-covid-19-deaths-in-europe>

<https://news.trust.org/item/20200403042333-fs7fx/>

Monday, August 3rd

Civic Holiday, no class

Wednesday, August 5th

Case Study: Energy

Readings

The World Bank – Energy, see

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

International Energy Agency, “World Energy Outlook 2019”, see

<https://www.iea.org/reports/world-energy-outlook-2019> R

“Off-shore wind to become a \$1 trillion industry”, 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/>

Further links:

Sustainable Energy for All initiative **R**
UNDP Environment and Energy **R**
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

Mr. Joerg Wittenbrink

Senior Policy Advisor

Ministry of Energy, Northern Development and Mines

Ontario

Monday, August 10th/August 12th

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 **R**

Simon Nicholson/Paul Wapner, Chapter 6

8th World Water Forum in Brasilia/Brazil,

<http://www.worldwaterforum8.org/node/942>

Ken Conca, Governing Water: Contentious Transnational Politics and Global
 Institution Building, MIT Press, 2005, Chapters 1 & 6 **R**

“Oceans on the front lines of global climate change”, see

<https://www.brookings.edu/blog/planetpolicy/2017/10/31/oceans-on-the-front-lines-of-global-climate-change/>

Guest presentation by:

Mr. Lawson Oates, Director, Toronto Water

(former head of Toronto Environment Office)

Monday, August 17th

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 R

“The world is off track to end hunger, so what’s the solution”; see <https://www.brookings.edu/blog/future-development/2017/10/23/the-world-is-off-track-to-end-hunger-so-whats-the-solution/>

Raj Patel, “Can the World Feed 10 Billion People?” (May 4, 2011) *Foreign Policy* R

Richard Manning, “The Oil We Eat: Following the Food Chain to Iraq”, 2004, *Harper’s Magazine*, at <http://harpers.org/TheOilWeEat.html>

James Foster, GWU, 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>

Consult FAO website (fao.org) - Note: As the UN custodian for agriculture and food, the FAO supports countries’ efforts in monitoring the following SDGs (1, 2, 5, 6, 12, 14, 15)

“The State of World Fisheries and Aquaculture – 2018”, pp. 1-83; see <http://www.fao.org/3/I9540EN/i9540en.pdf>

“The State of the World's Forests - 2018”, pp. 1–19; see <http://www.fao.org/3/I9535EN/i9535en.pdf>

“The State of Food and Agriculture – 2018, pp. 1–21; see <http://www.fao.org/3/ca6030en/ca6030en.pdf>

Ifad.org “As climate shocks intensify, UN food agencies urge more support for southern Africa's hungry people”, see <https://www.ifad.org/en/web/latest/news-detail/asset/41402041>

The State of Food Security and Nutrition in the World 2019 – FAO report, pp 1 – 47, see <http://www.fao.org/3/ca5162en/ca5162en.pdf> R

Guest presentations by:

Prof. Roberta Fulthorpe

Department of Physical and Environmental Sciences, UTSC

Ms Nidhi Tandon, Agricultural Economist, Consultant

Prof. Sarah Wakefield

Department of Geography and Planning, UofT

Good luck!!!