Upon this gifted age, in its dark hour
Rains from sky a meteoric shower of facts
They lie unquestioned, uncombed
Wisdom enough to leech us of our ill is daily spun,
But there exists no loom to weave it into fabric.

Edna St. Vincent Millay, Poet

SYLLABUS
WS 2020

First class: January 7th, 2020
Tuesdays: 15:00 – 17:00
Location: Earth Sciences Centre, 5 Bancroft Ave, #1050
Instructor Dr. Erich Vogt
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Head TA: Janina Kowalski - janina.kowalski@utoronto.ca
TAs: Samara Mendes Moreira de Andrade
samara.andrade@mail.utoronto.ca
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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, First Nation, government, or organization can fully illuminate alone the fabric of, or fashion solutions to environmental problems, both locally and globally, and achieve sustainability.
We are about to find out if the international community, acting in concert, can. Through the United Nations Sustainable Development Goals, also known as the ‘Global Goals’, we are all summoned to do our part, both individually and collectively, to protect the planet, end poverty, and ensure that all people enjoy peace and prosperity.

These effort could be helped along through academic endeavors where each constituent discipline informs the investigation of the others, and where hypotheses might even be jointly formed by knitting together different perspectives. An interdisciplinary approach to environmental studies therefore seems to hold much promise for first unraveling and then synthesizing the complex interactions between the collective behavior of *homo sapiens* and their environment, and generating, in the process, more optimal solutions to a plethora of environmental challenges.

Yes, the world has problems, and the University has departments. And while the academic community is getting its head around trying to knit different perspectives and approaches into one interdisciplinary body of knowledge, the ‘situation on the ground’ is getting worse, not better. Why is that? What are we presently doing in response? And, last but not least, what do we actually need to do to avoid crossing irreversible tipping points? These are some of the key questions this course will attempt to address.

**Course framework**
The course material is presented in three ways: course readings, 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).

Limited laptop use will be in effect during weekly lectures and tutorials.

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 to both the lectures and tutorials well prepared.
Emails are normally responded to within 48 hours, but not during weekends or on public holidays. Power-point presentations will be made available in a time-delayed manner, and they will be posted on Quercus.

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 an interdisciplinary body of knowledge provides to tackle them;
- demonstrate a more sophisticated understanding of the value-added interdisciplinary 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.

Teaching and Learning Philosophy
Good teaching at its best is a conversation with students actively engaged in the ensuing learning process. To that end lectures and tutorials are essential tools for teaching the most basic skills: comprehension and reasoning. They put a premium on the connection between individual facts and offering the needed context to building sound arguments. Lectures require students to synthesize, organize and react as they listen.

Participation and sharing knowledge are two of the guiding principles of the course. Both however require doing the indispensable: investing the time needed to do the assigned readings. If you are unable to commit the requisite time, this course may not be for you!

Instructor, TAs and students alike recognize that we all have unique, albeit diverse insights, knowledge and experiences with regard to the topic, and that, therefore, it is imperative that everyone is sensitive to and respectful of the contributions of others. It is against this backdrop that the instructor and TAs are committed to actively contribute to a safe class environment with zero tolerance for physical,
verbal or relational aggression. They are also committed to ensure that every comment, perspective and question is treated with respect.

We will attempt to draw on the most collaborative aspects of thinking and learning (without succumbing to ‘group-think’), and to explore how viewing the themes under investigation through multiple lenses further enrich our understanding. We will also be seeking out ways to address them better together.

**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. Attendance and participation in the tutorials is expected. Students should check and confirm their respective tutorial group as well as the time and place of the tutorial. That information will be made available on Quercus in early January.

Tutorials will be held on Wednesdays and Thursdays on these days: 29./30. January, 12./13. February, 26./27.2. February, 18./19. March.

**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. Core readings are marked in the reading list by the letter “C”.

**Course Assignments and distribution of marks:**

1) **Critical review - 20 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 due date. Papers are expected to be submitted electronically via Quercus.
**Due: February 4th, 2019**
2) Memorandum - 25 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: March 3rd, 2019

3) Research/Policy paper – 30 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 solution from concept to practice. More specific instructions will be given in both the lectures and tutorials. The paper shall be a 1.5 spacing, with 1 inch margins, 12 points font, footnotes/endnotes and bibliography.
Due: March 31st, 2019

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 weekly lectures and biweekly tutorials - 25 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 exam

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 a University of Toronto Student Medical Certificate is submitted, or for personal reasons if documentation from Accessibility Services or a College Registrar is submitted. In both cases the relevant documentation must be submitted to the head 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](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](http://www.governingcouncil.utoronto.ca/policies/behaveac.htm)). 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:
  o working in groups on assignments that are supposed to be individual work
  o 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
INTERDISCIPLINARY ENVIRONMENTAL STUDIES
Lecture topics and readings

Part I: Why do we have Environmental problems?

1st week, January 7th, 2020
Introduction – Assessing the interdisciplinary nature of our current environmental conundrum

Readings:
Robin Attfield, ”Environmental Problems and Humanity”, pp. 1-30, in Environmental Ethics Journal, Polity, 2003 - C

2nd week, January 14th, 2020
How did we get there? – let’s step back before moving forward

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

3rd week, January 21st, 2020
The new economic engine: Capitalism

Readings:
4th week, January 28th, 2020
Capitalism 2.0 - Globalization and the emerging North-South divide

Readings:
Jennifer Clapp/Peter Dauvergne, Paths to a Green World – The Globalization of Environmentalism, pp. 45–82, MIT Press, 2005 - C

Part II: What have we been doing about them?

5th week, February 4th, 2020
Earth Day 1970 – the beginnings of an environmental awareness, consciousness and movement across civil society

Readings:
Jennifer Clapp/Peter Dauvergne, Paths to a Green World – The Globalization of Environmentalism, pp. 45–82, MIT Press, 2005
James Gustave Speth, red sky at morning, pp. 25–42 , Yale University Press, 2004
James Gustave Speth, red sky at morning, pp.77–88, Yale University Press, 2004
Jennifer Clapp/Peter Dauvergne, Paths to a Green World, Chapter 1 – Peril or Prosperity? Mapping Worldviews of Global Environmental Change, pp. 1–17, MIT Press, 2005 - C
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

6th week, February 11th, 2020
Nation states and business caught flat-footed, rushing to catch up and ‘lead from behind’

Readings:
James Speth/Peter M. Haas “From Stockholm to Johannesburg: First Attempt at Global Environmental Governance”, pp. 52–81, in Global Environmental Governance, Island Press, 2006 - C
James Gustave Speth, red sky at morning, ‘ten-global scale concerns - the global change agenda emerged’, pp. 88–97, Yale University Press, 2004 - C
IPCC Special Report, October 1978 (1.5 degrees) – Summary for Policymakers https://www.ipcc.ch/sr15/ - C
NO CLASS, Reading Week, February 17th – 21st, 2020

7th week, February 25th, 2020
Case Study: Climate Change (SDG 13 & 16), Part I (1992 – 2009)

Readings:
IPCC Special Report, October 2018 – Summary for Policymakers -
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 - C

8th week, March 3rd, 2020
Case Study: Climate Change, Part II (2010 – 2019) - The emergence of subnational response systems: North/South, Provinces, States, Municipalities (SDG 11, SDG 12)
Readings:
World Bank, World Bank Development Report 2010 – Development and Climate Change – an Overview, pp. 1 – 26,

Part III: What do we need to do about them?

9th week, March 10th, 2020
Energy - Transforming the economic engine: Clean and affordable energy for all (SDG 7)
Case study with stakeholders
Readings:
World Development Report 2010: Development and Climate Change
WB – Energy – Overview: Context-Strategy-Results -
https://www.iea.org/reports/world-energy-outlook-2019 - C
“Off-shore wind to become a $1 trillion industry”, see
“Coal”, see https://www.iea.org/topics/coal/ - C
“Electricity”, see https://www.iea.org/topics/electricity/ - C
“Energy access”, see https://www.iea.org/energyaccess/ - C
“Energy efficiency”, see https://www.iea.org/topics/energyefficiency/ - C
“Energy security”, see https://www.iea.org/topics/energysecurity/ - C
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

10\textsuperscript{th} week, March 17\textsuperscript{th}, 2020
No poverty/No hunger: agriculture racing to bring about food security (SDG 1, SDG 2)
Case study with stakeholders

Readings:
World Bank, World Bank Development Report 2010 – Development and Climate Change – an Overview, pp. 1–26,
James Foster, GWU, Multidimensional poverty: - measurement and implications, see https://www.youtube.com/watch?v=HUvLwgQsTL8 - C
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
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)
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

11th week, March 24th, 2020
Culture eats strategy, policy and politics – moving from mainstream to visionary Roundtable with stakeholders

Readings:
Charles C. Mann, The Wizards and the Prophets, Alfred A. Knopf, 2018
Dale Jamieson, Reason in a Dark Time – Why the struggle against climate change failed – and what it means for our future, pp. 144–177, Oxford University Press, 2014 - C
James Gustave Speth, red sky at morning, pp. 151–171 & pp 191–201, Yale University Press, 2004
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


Paul Wapner, Forcing Cultural Change, in NW, Global Environmental Politics – From Person to Planet, pp. 192–201, MIT Press, 2010 – C

Greta Thunberg – TIME Person of the Year 2019, see 14 https://twitter.com/GretaThunberg/status/1204795860401434624/photo/1

“Friday September 27 Is Canada’s Climate Moment”, see https://below2c.org/2019/09/friday-september-27-is-canadas-climate-moment/

“ENvironnement JEUnesse will continue to fight for climate justice”, see https://enjeu.qc.ca/justice-eng/ - C

“Kids are suing Gov. Rick Scott to force Florida to take action on climate change”, see https://www.miamiherald.com/news/local/environment/article208967284.html

“Supreme Court refuses to block trial pushed by young people seeking to force government to act on climate change”, see https://s2.washingtonpost.com/d77226/5bdcd770e6e81b2ef3563450/ZXJpY2gudm9ndEByb2dlcnMuY29t/1/10/c219113f208dfb69fd4bbbe3942ec975 - C

“People’s climate case – meet the plaintiffs”, see https://peoplesclimatecase.caneurope.org/

and https://act.wemove.eu/campaigns/people-vs-eu-climate - C

“Nobel-Winning Economist to Testify in Children’s Climate Lawsuit”, see https://biotech.law.lsu.edu/blog/document_cw_01-2.pdf

12th week, March 31st, 2020

Students’ reflection/evaluation – What went well, what not, what should be done differently