

Seminar on the United Nations Framework Convention on Climate Change (UNFCCC) EAS 501.158

September 1 – October 13, 2021 | Wednesday, 5-6pm | Virtually on Zoom
1 credit (Satisfactory/Unsatisfactory grading)

INSTRUCTORS

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BACKGROUND

The United Nations Framework Convention on Climate Change (UNFCCC) is the primary vehicle for international negotiations addressing anthropogenic climate change. Once a year, the 194 parties to the framework attend a meeting known as the Conference of Parties (COP). Since 2009, when COP 15 was held in Copenhagen, University of Michigan students and faculty have attended as observer delegates. In November of this year, 14 delegates from UM will be observing the negotiations at COP 26 in Glasgow, Scotland. This seminar will prepare those delegates and others interested in the UNFCCC.

OBJECTIVES

The UNFCCC COP is an international negotiation on climate change that has been in progress for over a quarter century. Thus, listening to the present state of these negotiations can initially feel like walking into the middle of a long-standing conversation. The purpose of this seminar is to provide an orientation to the central issues involved in the climate talks. We will explore the pillars of UNFCCC process (e.g., climate science, mitigation, adaptation, loss and damage, finance, technology, accountability, climate equity) and compare the key agreements (Kyoto Protocol, Copenhagen Accords, Paris Agreement) that have arisen from the process. Students will have the opportunity to take on the perspective of different nations in a Mock UN exercise that will concretize the challenges of reaching international consensus on climate action. They will also have the opportunity to engage with [Climate Blue](#), a UM student organization that is working with the [University Climate Change Coalition](#) (UC3) to help decarbonize the University of Michigan.

EVALUATION

Students will receive either a satisfactory or unsatisfactory grade depending on active participation during seminars and timely completion of readings and assignments, all of which are available on Canvas: <http://umich.instructure.com>.

SCHEDULE

Sep 1	Introduction and logistics
Sep 8	Background, structure, and history of the UNFCCC
Sep 15	Mitigation, adaptation, and implementation
Sep 22	Climate change science and the COP
Sep 29	Climate Equity (Developing vs. developed countries)
Oct 6	Mock UN negotiation
Oct 13	Climate Problem Solving
Oct 31 – Nov 12	COP 26 in Glasgow, Scotland

DETAILED SYLLABUS

September 1 - Introduction and logistics

[No readings]

September 8 - Background, structure, and history of the UNFCCC

Introduction

UNFCCC (2014). Adapting to a changing climate.

The agreements

The Convention (UNFCCC)

The Kyoto Protocol

The Paris Agreement

UNFCCC structure

COP: Conference of the Parties

CMA Conference of the Parties serving as the meeting of the Parties to the Paris Agreement

CMP: Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

SBSTA: Subsidiary Body for Scientific and Technological Advice

SBI: Subsidiary Body for Implementation

APA: Ad Hoc Working Group on the Paris Agreement

IPCC: Intergovernmental Panel on Climate Change

Secretariat

History

Timeline of the UNFCCC

IISD (2018) Summary of the Bangkok Climate Change Conference in September 2018. Earth Negotiations Bulletin.

IISD (2018) The History of Climate Governance.

[OPTIONAL]

Rich (2018). Losing Earth: The Decade We Almost Stopped Climate Change

September 15 - The Pillars of Climate Governance: Mitigation, adaptation, and implementation

Background: The three pillars

IISD (2015). The Pillars of Climate Governance

Pillar 1: Mitigation

UNFCCC (2018). Mitigation: The Big Picture

UNCC (2015). Introduction to Climate Change Mitigation

Pillar 2: Adaptation

UNFCCC (2018). Adaptation and resilience: The Big Picture

UNCC (2015). Introduction to Climate Change Adaptation

Pillar 3: Means of Implementation

UNFCCC (2018). Climate Finance: The Big Picture

UNFCCC (2018). Technology: The Big Picture.

UNFCCC (2018). Capacity Building: The Big Picture.

Nationally Determined Contributions (NDCs)

UNFCCC (2018). Nationally Determined Contributions

WRI (2015). Decoding INDCs: A Guide for Understanding Country Commitments

NDC Data [OPTIONAL]

UNFCCC NDC Registry

U.S. NDC

WRI (2015). CAIT Paris Contributions Map

September 22 - Climate change science and the COP

Introductory Material

Rood, R. (2018). Introductory Material (Climate Change)

<https://sites.google.com/a/umich.edu/introductorymaterial/>

History of climate change science

Mason, J. (2013) The History of Climate Science

<https://skepticalscience.com/history-climate-science.html>

Science and the UNFCCC

IISD (2015). The Science and Economics of Climate

<http://enb.iisd.org/paris-knowledge-bridge/video-3-the-science-and-economics-of-climate-governance/>

The science

UNCC (2015). Introduction to Climate Change Science.

Vale, P.M. (2016) The changing climate of climate change economics

[OPTIONAL]

Rood, R. (2014). Climate Change: General Introduction

Wear, S. (2015). The Carbon Dioxide Greenhouse Effect

Wear, S. (2015). Simple Models of Climate Change

Johnson, G. (2013). Climate Change Science 2013: Haiku

IPCC (2014). Climate Change 2014: Synthesis Report

Various Authors (2011). Four degrees and beyond: the potential for a global temperature increase of four degrees and its implications. *Philosophical Transactions A of The Royal Society*.

The numbers

McKibben, B. (2012). Global Warming's Terrifying New Math. Rolling Stone.

Roston, E. & Migliozi, B. (2015). What's really warming the world? Bloomberg Business.

Ge, M., Friedrich, J., and Damassa, T. (2015). 6 Graphs Explain the World's Top 10 Emitters.

World Resources Institute (2013). Infographic: The Global Carbon Budget

World Resources Institute (2014). Infographic: Choose Your Future: 4 Possible Emissions Pathways

World Resources Institute (2014). Interactive: Carbon Emissions Past, Present and Future

World Resources Institute (2014). U.S. Greenhouse Gas Emissions by Sector, 2011

World Resources Institute (2015). Infographic: What Do Your Country's Emissions Look Like?
Darby, M. (2015). Greening the world energy mix in 9 graphs. RTCC.

Data resources [OPTIONAL]

World Resources Institute (2015). Climate Data Explorer

World Bank (2015). Climate Change Data

Falkner (2016). The Paris Agreement and the new logic of international climate politics

September 29 - Climate Equity

Cameron, E. (2012). What Is Equity in the Context of Climate Negotiations? World Resources Institute.

Chan, N. (2016) Climate Contributions and the Paris Agreement: Fairness and Equity in a Bottom-Up Architecture

Pauw, P. et al. (2014). Different Perspectives on Differentiated Responsibilities. German Development Institute. Excerpt pp. 1-16.

Raman, M. (2016). The Climate Change Battle in Paris. Third World Network.

[OPTIONAL]

Rajamani, L. (2015). Differentiation in a 2015 Climate Agreement. Center for Climate and Energy Solutions.

Cameron, E. and Bevins, W. (2013). Climate Justice: Equity and Justice Informing a New Climate Agreement. World Resources Institute.

CAIT Equity Explorer. World Resources Institute.

Climate Equity Reference Calculator. EcoEquity and the Stockholm Environment Institute.

More on Mitigation, Adaptation, and Implementation

Briner, G. et al. (2014). Taking Stock of the UNFCCC Process and its Inter-linkages. Climate Change Expert Group. Paper No. 2014 (4). Excerpt pp. 15-19.

Porter, E. (2015). Getting to \$100 Billion in Climate Change Aid. NY Times.

Popovich, N. & Fountain, H. (2017). What is the Green Climate Fund and How Much Does the U.S. Actually Pay?

[OPTIONAL]

UNCC (2015). Introduction to Climate Change Finance

C2ES (2015). Market Mechanisms: Understanding the Options

October 6 - Mock UN negotiation

Pauw, P. et al. (2014). Different Perspectives on Differentiated Responsibilities. German Development Institute. Excerpt pp. 21-29.

Thwaites, J & Ameriasinghe, N.M. (2016). 5 Climate Finance Issues to Watch at Marrakech. WRI.

October 13 - Climate Problem Solving

The role of non-state Actors

UNFCCC (2015). Non-State Actor Zone for Climate Action (NAZCA).

[OPTIONAL]

Bodansky, D. (2011). Multilateral Climate Efforts Beyond the UNFCCC. Center for Climate and Energy Solutions.

Will technology save us?

Carbon Brief (2016) 10 ways 'negative emissions' could slow climate change

GAO (2011). Climate Engineering: Technical Status, Future Directions, and Potential Responses

Hamilton, C. (2015). The Risks of Climate Engineering. New York Times.

Monbiot, G. (2015). Meet the ecomodernists: ignorant of history and paradoxically old-fashioned. The Guardian.

The bigger picture

Rood, R. (2016). We Have No Choice, but to Carry On. WunderBlog.

Nixon, R. (2014). Naomi Klein's 'This Changes Everything'. New York Times.

Walsh, B. (2011). Fighting Climate Change by Not Focusing on Climate Change. Time.

Plautz, J. (2014). The Climate-Change Solution No One Will Talk About. The Atlantic.

Howard, E. (2015). 10 green leaders on the best ways you can fight climate change. The Guardian.

Knight, M. (2010). Idealism or Political Pragmatism: What should youth bring to the UN climate change negotiations?

ASSIGNMENTS

1. UNFCCC Countries data collection (Due: September 7)
2. Nationally Determined Contributions (Due: September 14)
3. UNFCCC Coalitions (Due: September 28)
4. Position statement on Climate Finance for Mock UN (Due October 5)
5. Climate Problem Solving (Due October 13)

COURSE LOGISTICS

Technology Requirements

- All class sessions will be held online via Zoom. The links to the zoom meetings are available on the left-hand side of the course [Canvas](#) page.
- Students are ideally expected to attend the online zoom sessions from 5-6pm on Wednesdays. If that is not possible, students will be expected to watch recordings of the sessions which will be made available shortly after each session on [Canvas](#).
- All reading and homework assignments will be made available on [Canvas](#) one week prior to their due date.
- The course may additionally use Google Docs as a tool to drive discussions.

Privacy and recorded lectures

Course lectures will be recorded on Zoom and made available to other students in this course. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact Avik Basu (abasu@umich.edu) during the first week of class (or as soon as you enroll in the course, whichever is latest) to discuss alternative arrangements. Otherwise you will be asked to consent to be recorded for the purpose of sharing the recording with your classmates. Students are prohibited from distributing any recorded class activity without written permission from the instructor, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

COVID-19 Resources

We are working to provide the best learning experience possible given the current circumstances of the pandemic. Given the uncertainty of COVID-19, we ask that students be understanding of any course changes we may have to implement based on potential public health developments. We are committed to providing assistance should you need any physical or mental health related concerns. If you have any such concerns, or other comments or questions in general, please do not hesitate to contact us.

You can find the latest updates about the University of Michigan and COVID-19 here: <https://campusblueprint.umich.edu/>