INTERNATIONAL ENVIRONMENTAL LAW AND POLICY

COURSE DESCRIPTION: An examination of international environmental law and policy with a special focus on efforts to address climate change, including the Paris Agreement under the UN Framework Convention on Climate Change. This course serves as a companion to PSC 246, but PSC 246 is not a prerequisite. The goal of this course is to provide a foundational understanding of this rapidly developing, controversial field. Topics include consideration of the scientific, political, and economic drivers of international environmental law; the variety of tools (e.g., treaties, agreements, "soft law," voluntary incentive programs and market based approaches); and examples of how some international environmental issues have been addressed to date, including efforts to date on climate change. The course will be taught through lectures, discussion, a research paper, a group project and three tests.

CREDIT HOURS: 4 credit hours. This course follows the College credit hour policy for 4-credit courses. This course meets twice weekly for 150 minutes per week. The course also includes independent out of class assignments and group work for 1 hour per week, including using assigned readings and other class materials (as noted in the syllabus assignments). These activities include to preparation to lead or participate in group discussion, work on group case discussion questions, worksheets (posted on Blackboard), reflections, and team-based group project. Students are expected to spend at least 8 hours per week on assigned reading and papers as discussed below. Length of reading assignments will vary given the complexity of the material assigned.

CLASS DAYS/TIMES and LOCATION: Tuesdays and Thursdays, 15:20-16:40, Lattimore 210

COURSE OUTLINE AND READINGS: The class will include considerable class discussion as well as lectures. There will be one paper, student led discussion, group project presentations, and three tests. Class attendance is expected; grades will reflect attendance and participation.

OFFICE HOURS: I will have office hours before class from 2:00-3:00 Tuesdays and Thursdays in Harkness Room 316 or by appointment. The best way to contact me is by e-mail (<u>tnoto@rochester.rr.com</u>).

TEXTS:

Oliver A. Houck, *Taking Back Eden – Eight Environmental Cases that Changed the World*, Island Press, 2010.

Regina S. Axelrod, Stacy D. VanDeveer, eds., *The Global Environment – Institutions, Laws and Policy* (4th Edition, Sage 2015)

James Gustave Speth, "*Red Sky at Morning*" (Yale University Press, 2005) – *available as an e-book or on reserve in the library.* **Please do** <u>not</u> confuse with the novel called **Red** Sky at Morning.

Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (3rd Edition, Cambridge University Press 2014)

Additional readings will be available on electronic reserve. All readings are *required* and should be read before class to enhance the value of both the lectures and the discussion.

ASSIGNMENTS: Directions will be provided (and posted on Blackboard) for each assignment. Be sure to comply with all instructions, including *minimum* page limits. *Academic honesty is important; you must include citations, quotation marks, and works cited.* Points will be deducted for late work <u>unless</u> prior permission is given.

GRADING: Attendance, participation, group work, worksheets, group project and discussion: 15%; Paper: 15%; Test #1: 20%; Test #2: 25%; Test #3: 25%.

COURSE LEARNING/OUTCOMES: Students will be able to demonstrate a basic foundational understanding of international environmental law (IEL) and policy, from guiding principles (including sustainable development and common but differentiated responsibilities) to the treaty regimes studied this semester (including the Ozone regime and the UN Framework Convention on Climate Change and the Paris Agreement) as assessed by the three unit tests. Students will develop their skills in analyzing and discussing IEL issues through frequent classroom discussion, assigned readings, and out of class assignments. Students will further their research, collaboration, and presentation skills through working on a group project that will enhance student understanding of how forest biodiversity, conservation and timber resource issues and governance vary from State to State. Students will gain insight through writing a thoughtful, well-supported research paper examining climate change law and policy through the lens of the challenges and policies of a particular developing or developed country.

ACADEMIC SUPPORT SERVICES: Students are encouraged to utilize academic support services: the Writing Speaking and Argument Program, <u>https://writing.rochester.edu</u>; Center for Excellence in Teaching and Learning (CETL), <u>www.rochester.edu/college/cetl/</u>

ACADEMIC HONESTY: All assignments and activities associated with this course must be performed in accordance with the University of Rochester's Academic Honesty Policy. More information is available at: www.rochester.edu/college/honesty

DISABILITY RESOURCES: The University of Rochester respects and welcomes

students of all backgrounds and abilities. In the event you encounter any barrier(s) to full participation in this course due to the impact of disability, please contact the Office of Disability Resources. The access coordinators in the Office of Disability Resources can meet with you to discuss the barriers you are experiencing and explain the eligibility process for establishing academic accommodations. You can reach the Office of Disability Resources at: http://disability@rochester.edu; (585) 276-5075; Taylor Hall. https://www.rochester.edu/college/disability/faculty/syllabus-statements.html

SCHEDULE OF CLASSES:

I. Introduction: What is international environmental law?

Jan. 17 <u>Introduction and discussion</u> – We will review the syllabus and expectations for this class. Discussion will include: What is international environmental law and policy (IEL)? What are some of the general principles in IEL?

Reading: The Global Environment, Ch. 1 pp. 1-10; Ch. 2 pp. 26-48

Jan. 22 <u>The Historical Context, IEL Institutions & Principles</u>: Historical context (from fisheries and fur seals to climate change). Sources of IEL and principles. Framework convention and protocol, COP, and Secretariat, etc. What is a regime?

Reading: The Global Environment, Ch. 3 pp. 53-78

IEL principles worksheet (on Blackboard) and group discussion

II. <u>The Hole in the Stratospheric Ozone Layer & the Montreal Protocol: Mobilizing</u> <u>an Effective International Response</u>

Jan. 24 <u>The Hole in the Stratospheric Ozone Layer:</u> Overview of ODS issue, the Vienna Convention, the Montreal Protocol and structure of the Ozone Regime.

Reading: The Global Environment, Ch. 4 pp. 83-105

Jan. 29 <u>The Success of Global Ozone Policy:</u> Examining the scientific, economic, institutional and political factors that contributed to successful Ozone Regime.

Reading: The Global Environment, Ch. 5 pp. 110-127

Justin Gillis, "The Montreal Protocol, A Little Treaty That Could" New York Times (December 9, 2013)

Ozone regime design choices worksheet (on Blackboard) and group discussion

Jan. 31 <u>Will the Ozone Layer Recover by 2050?</u>: Addressing challenges including exemptions, compliance, waste, funding and impact of climate change.

Reading: Keith Bradsher, "Push to Fix Ozone Layer and Slow Global Warming" New York Times (Mar. 15, 2007)

Joanna Foster, "The Enduring Effects of Ozone Depletion" New York Times Green Blog Post (Feb. 1, 2013)

"Ozone Layer on Track to Recovery: Success Story Should Encourage Action on Climate" UNEP News Centre (Sep. 1, 2014)

Brian Handwerk, "Whatever Happened to the Ozone Hole?" National Geographic News (May 7, 2010)

Chris Mooney, "Someone, Somewhere is Making a Banned Chemical that Destroys the Ozone Layer, Scientists Suspect" (The Washington Post, May 16, 2018)

Feb. 5 <u>The Kigali Amendment:</u> Addressing the hole in the stratospheric ozone layer *and* climate change.

Coral Davenport, "Nations, Fighting Powerful Refrigerant that Warms Planet, Reach Landmark Deal" New York Times (Oct. 15, 2016)

Alexander Ovodenko, "140 Countries Will Phase Out HFCs. What Are These and Why Do They Matter?" Washington Post (November 3, 2016)

"Reworking the Ozone Treaty to Work for Climate Change" Living On Earth (PRI November 12, 2010)

"New Climate-Friendlier Coolant Has a Catch: It's Flammable" New York Times (Oct. 23, 2016)

Kigali Amendment worksheet (on Blackboard) and group discussion

Review for Test #1

Feb. 7 TEST #1: Ozone Regime and IEL Principles

III. Biological Diversity, Endangered Species and Regulating Trade in Wildlife

Feb. 12Biological Diversity, 6th Wave of Extinction & Convention on BiologicalDiversity (CBD):Biological diversity, threats to biodiversity, and the BiodiversityConvention.

Reading: Principles of International Environmental Law, Ch. 10 pp. 449-457

Red Sky at Morning, Ch. 2 pp. 23-42

Feb. 14 <u>Biological Diversity and Sustainable Development</u>: Genetic diversity, biotechnology, intellectual property, traditional knowledge, bioprospecting, and balancing conservation, access, equitable sharing of benefits in a sustainable way. Nagoya Protocol on Access and Benefit Sharing (ABS); Cartagena Protocol (biosafety).

Reading: The Global Environment, Ch. 12 pp. 283-301

Principles of International Environmental Law, Ch. 10 pp. 458-471

Biodiversity and SD worksheet (on Blackboard) and group discussion

Feb. 19 <u>Regulation of Trade in Wildlife - CITES</u>: How does CITES work? How are species listed? Does it ban trade in all listed species (significance of Appendix I, II, and III)? How does the permitting system work and who implements CITES at the State level (Management & Scientific Authorities)? What is Global Environment Facility and how does it help developing countries?

Reading: Principles of International Environmental Law, Ch. 10 pp. 472-483

I.S., "*The endangered species trade: On the Way Out*" The Economist (Mar. 16, 2013)

Feb. 21 <u>Supply and Demand Side Strategies, and Enforcement:</u> Magnitude of the issue: 4th largest crime by value in the world. Supply and Demand side strategies. Enforcement issues and Operation Thunderstorm.

Reading: Rachel Nuwer, "The Key to Stopping The Illegal Wildlife Trade: China" The New York Times (Nov. 19, 2018)

Zach Goldhammer, "*Can You Wage a War on Poaching*?" The Atlantic Monthly (Aug. 7, 2014)

Caroline Davies, "Prince Charles: world must 'attack demand' for illegal wildlife products" The Guardian (Feb. 13, 2014)

CITES & illegal wildlife trade worksheet (on Blackboard) and group discussion

IV. <u>Hazardous Waste, Transboundary Movement of Hazardous Waste, "Toxic</u> <u>Colonialism," and The Basel Convention</u>

Feb. 26Hazardous Waste, Transboundary Shipment & Disposal, "ToxicColonialism and the Strategy & Structure of the Basel Convention:What is waste? What

is hazardous waste? What is "toxic colonialism?" Design of Basel Convention as a global notice and consent regime (PIC), not a ban. How does the Basel Convention work? Why didn't the U.S. ratify and what role is the U.S. playing? Economics, politics and ethics of *exporting* hazardous waste. Recovery and recycling industry. Economic, political and ethical challenge.

Reading: The Global Environment, Ch. 11 pp. 259-279; Ch. 6 pp. 143-144.

Feb. 28 <u>25-Years Later: How is Basel Convention Working?</u>: Is Trade-Related Strategy Sufficient and Appropriate? What Should the Goals of International Hazardous Waste Regulation Be? How do N/S State Perspectives Impact this Analysis? Role of NGOs, free trade, PIC, recycling; human rights and "toxic trespass;" Bamako Convention; liability concerns.

Reading: Laura Pratt, "Decreasing Dirty Dumping? A Reevaluation of Toxic Waste Colonialism and the Global Management of Transboundary Hazardous Waste," 35 William & Mary Environmental Law & Policy Review 581 (2011)

Mar. 5 <u>E-Waste Challenge</u>: The nature and magnitude of the E-waste challenge and government, NGO and corporate sustainability efforts. Review for Test #2.

Reading: E-waste handout & worksheet (on Blackboard) & group discussion

Mar. 7 TEST #2: Biodiversity, Transboundary Movement of Hazardous Waste & N/S issues

Mar. 12-14 NO CLASS – SPRING BREAK

V. <u>Forests: Significance, State of World's Forests, Absence of Global Forests</u> <u>Convention & Binding Protocol, EU's FLEGT Action Plan & Climate Change</u>

Mar. 19 Importance of Forests, State of the World's Forests, Concept of Sustainability, International Forest Principles: Ecosystem services provided by forests. Thorny issues of forest protection, logging, illegal logging, conversion of forests, desertification and climate change. Why isn't there a global forest convention? Assign groups for group project; handout for group project will be provided.

Listening: "The Rain Forest Was Here: Scientists Say the Amazon is Still Teaching Us New Lessons" (NPR Morning Edition: Nov. 12, 2015)

Reading: Principles of International Environmental Law, Ch. 10 pp. 495-501

Jeff Tietz, "*The Fate of Trees: How Climate Change May Alter Forests Worldwide*" (Rolling Stone Magazine, March 12, 2015)

Helen MacDonald, "Dead Forests and Living Memories" (New York Times Magazine, Sept. 17, 2015)

Jeremy Hance, "Failing Our Forests: In Two Years We've Lost Enough Forests To Cover Spain," The Guardian (Dec. 22, 2017)

Gabriel Popkin, "*Cure Yourself of Tree Blindness*" New York Times (Aug. 27, 2017)

Mar. 21 <u>Amazonas Lodge Case Study</u>: Guest speaker: Professor Milena Novy-Marx.

Reading: Handout (on Blackboard) for group discussion

Mar. 26 <u>Forest Powerpoint Presentations and Discussion:</u> Each group will present its 15 minute Powerpoint on its assigned forest ecosystem and participate in class discussion.

Reading: Taking Back Eden and other research for Powerpoint presentation.

Mar. 28 <u>Forest Powerpoint Presentations and Discussion:</u> Continued group powerpoint presentations and class discussion.

April 2 <u>Implementation of EU's Forest Law Enforcement, Governance and Trade</u> (FLEGT) Action Plan. What is FLEGT? How is sustainable forest management through trade and regulation working in the Absence of a Global Forest Protocol?

Video: "The Story of FLEGT"

Reading: "The Voluntary Partnership Agreement (VPA) Process in Central and West Africa: from theory to practice" (Food and Agriculture Organization of the United Nations, Rome, 2014)

Forests, sustainable development and FLEGT worksheet (on Blackboard)

VI. Climate Change:

April 4 <u>Climate Change Challenge</u>: Science, greenhouse gases, timeline, tipping points, feedback loops. IPCC reports. Scientific opinion v. public perception of scientific opinion. Sources of GHGs.

Reading: Justin Gillis, "Short Answers to Hard Questions About Climate Change" (The New York Times, Nov. 28, 2015)

Charles C. Mann, "*How to Talk About Climate Change So People Will Listen*" (The Atlantic Monthly Magazine, Sept. 2014)

Eric Holthaus, "The Point of No Return: Climate Change Nightmares Are Already Here" (Rolling Stone Magazine, Aug. 5, 2015)

Joel Achenbach, "*Why Do Many Reasonable People Doubt Science?*" (National Geographic Magazine, Mar. 2015)

Viewing: "Climate Change 101 With Bill Nye the Science Guy" (smithsonianmag.com)

"John Oliver, Climate Change and the existence of Jesus" (Last Week Tonight with John Oliver, Feb. 9. 2015)

April 9 <u>Globalization and Sustainability</u>: Tension between globalization, capitalism, consumption and sustainability.

Reading: James Gustave Speth, "*Red Sky at Morning*" (Yale University Press, 2005) Ch. 6-8 (pp. 119-171)

Paul Ehrlich, Gretchen Daily, Scott Daily, Norman Myers, James Salzman, "*No Middle Way on the Environment*" The Atlantic online (December 1997)

Pete Spotts, "Why some Americans remain skeptical about climate change" The Christian Science Monitor (Dec. 1, 2015)

Handout and group discussion questions on consumption, sustainability, ethics, globalization, and climate change (on Blackboard) & group discussion

April 11 <u>Conference Efforts Leading up to United Nations Climate Change</u> <u>Conference in Paris (COP 21)</u>: 1992 Earth Summit in Rio de Janeiro & UNFCC; 1997 Kyoto Protocol and binding targets on developed countries; 2009 Conference of the Parties in Copenhagen.

Reading: The Global Environment, Ch. 6 pp. 138-142; Ch. 10 pp. 234-254.

Coral Davenport, "A Climate Deal, 6 Fateful Years in the Making" (New York Times, Dec. 13, 2015)

April 16 <u>China, India and the U.S.</u>: Obama Administration 2014 Agreement with China. Obama executive orders and Clean Power Plan. World Bank report – "Decarbonizing Development." China's and India's climate and air pollution challenges.

Reading: The Global Environment, Ch. 8-9 pp. 187-229

Eduardo Porter, "India is Caught in a Climate Change Quandry" (New York Times, Nov. 10, 2015)

David Biello, "Everything You Need to Know About the U.S.-China Climate Agreement" (Scientific American, Nov. 12, 2014)

Ernest Kao, "Air pollution is killing 1 million people and costing Chinese economy 267 billion yuan a year..." (South China Morning Post, Oct 2, 2018)

Aayushi Awasthi, "Why India Needs to Worry About Climate Change" (BBC, Oct. 25, 2018)

April 18 <u>Paris Agreement (COP 21):</u> How does the Paris Agreement work? Why is the Agreement structured the way it is? Significance of goal and "All in" strategy. How the major provisions reflect art of compromise. NDCs, "name and shame," loss and damage, climate finance.

Reading: "Nations Approve Landmark Climate Agreement in Paris," New York Times (December 12, 2015)

"What Does a Climate Deal Mean for the World?" New York Times (December 12, 2015)

"Inside the Paris Climate Deal," New York Times (December 12, 2015)

"Climate Accord is a Healing Step if Not a Cure," New York Times (December 12, 2015)

"Paris Climate Change Agreement: The Deal at a Glance," The Telegraph (December 12, 2015)

Robinson Meyer, "A Reader's Guide to the Paris Agreement" (The Atlantic Monthly Dec 16, 2015)

April 23 <u>Paris Agreement ~ Uncertain Future?</u>: What does Trump Administration decision to withdraw from Paris Agreement mean in a global context?

Michael D. Shear, "Trump Will Withdraw U.S. From Paris Climate Agreement" (New York Times, June 1, 2017)

Isabel Hilton, "China Emerges as Global Climate Leader in Wake of Trump's Triumph" (The Guardian, Nov. 22, 2016)

Noah Smith, "China is the Climate Change Battleground" (Bloomberg, Oct 14, 2018)

Somini Sengupta, "U.S. China Friction Threatens to Undercut the Fight Against Climate Change" (New York Times, Dec. 7, 2018)

Jean Chemnick, "How the World is Coping 1 Year After Trump Abandoned the Paris Climate Pact (Scientific American, May 31, 2018)

Joseph Curtin, "The Paris Climate Agreement Versus the Trump Effect" (The Institute of International and European Affairs, March 12, 2018)

Dave Keating, "The Paris Climate Agreement Survived Trump. Can It Survive Brazil's Bolsonaro?" (Forbes, Oct 24, 2018)

Review for Test #3

April 25 Test #3

April 30 Paper due