

The Planet's Last Frontiers
Fall 2018
Mondays 2-4PM, Trinity College 24

Instructor: Prof. Jessica Green
Office: Sidney Smith, 3031
Office Hours, Tuesdays, 3-5PM
(*please sign up on Quercus*)

Course Description

This course will examine the law, politics and environmental challenges surrounding three parts of the Earth that belong to no one (i.e. *res nullius*): Antarctica, the high seas (and a variety of associated environmental issues) and outer space. We ask several questions related to each of these areas:

- 1) What environmental threats do they face?
- 2) How have these threats been addressed – both through international environmental law, and other policy approaches?
- 3) Have these approaches been successful, and why or why not?

The course will consist of four parts. First, we review the history and mechanics of international environmental law to understand the tools available to manage these areas. Next, we investigate each of the three areas in detail, looking both at general issues of management as well as specific cases. Each geographic area will start with a discussion of the environmental aspects: what's there, why we care about it and how it's currently managed. We will then turn to the legal and political responses.

Course Format

This class will be run in a seminar-style format. Thus, doing the readings, ***and bringing copies of the readings to class***, is essential.

Learning Objectives

By the end of the semester, you should:

- Be able to identify the major environmental and social issues facing the planet's last frontiers.
- Understand the different types of actors involved and their contributions to solutions or inaction.
- Be able to explain the political challenges and legal approaches to international cooperation on transboundary environmental problems.

Readings

Since this is a seminar, doing the readings is an essential component to the success of the course. **You are expected to do ALL of the readings each week, and bring hard copies of the readings to class.** I will consider bringing the readings to class as part of your participation grade (see below). Occasionally, there are readings / websites intended for informational purposes which you will not have to print. These will be denoted by ** in front of the entry.

All readings will be available electronically either on the Internet or through Quercus. **UofT-e** means they are available through the library website. **Quercus** means they are available in the readings module on the Quercus site for the class.

Course Assignments, Due Dates and Grading

The details of each assignment are detailed in the document "Assignments" available on the Quercus.

1. **Annotated bibliography (15%).** On the topic of your choice, in preparation for case study. **Due 29 October**, via Quercus
2. **Case Study of an issue facing one of the Frontiers (50%)** The final product will be a 4000-6000 word paper using the sources of the annotated bibliography to describe a problem of the last frontiers, how it is currently governed, key obstacles (including states' interests) and proposed / actual solutions. **Final Draft due 5 December**
 - You will also be required to submit a preliminary outline, as a way of making sure you don't leave the whole assignment to the end of term. (5% of the 50%) **Due 12 November**
 - You will also give a final presentation of the case study on the last day of class (10% of the 50%). **Due 3 December**
3. **Participation (10%).** This includes coming to class, **with hard copies of the readings**, and participating in discussion. It also includes circulating questions on the reading 3 times during the semester, to be submitted via Quercus, and responding to those questions at least 5 times.
4. **Take home term test (25%). Due 5 December**

Policies and Expectations

- In this course, you can expect that I will strive to be fair, respectful, responsive and open-minded.
- In return, I ask you to be respectful of your classmates and of me, be prepared and on time for class, and meet deadlines for assignments.
- I expect that everyone will attend and participate actively in class. Active participation includes both contributing your ideas (questions, comments, analyses, insights) and listening to the contributions of others (without distraction).
- **No laptops.** The only exception is if you have permission from Accessibility Services, or you are a note taker. Here's why: "Experimental tests of immediate retention of class material have also found that Internet browsing impairs performance. Moreover, recent research suggests that even when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing." *Psychological Science*, DOI: 10.1177/0956797614524581.
- **No texting.** It's disrespectful to me and your fellow classmates. Also, when you think you're being sneaky texting in your lap, you're not. Consider this as 2 hours of internet free existence.
- If you are too tired to stay awake in class, please go home and nap.
- You are expected to come to class, and I may make announcements in class that are not posted on Quercus. If you miss class, it is your responsibility to ensure that you find the information you have missed. I also encourage you not to ask me questions such as "did I miss anything important?" – I tend to think everything I share during class is important.

- **Students with Disabilities:** Students with disabilities who require special arrangements should contact the Student Accessibility Services at (416) 978 8060; accessibility.services@utoronto.ca. Some students find that they must wait to contact and secure approval from Accessibility Services: in these cases, **you should still contact me in advance**, to let me know you might require accommodations for assignments.

Attendance

I will take attendance on an unannounced basis. You are allowed one “freebie” absence. After that, absences will negatively affect your participation grade. Four or more absences (recorded by me) will cut your participation grade to 0. 2-3 recorded absences will reduce it by half.

Quercus

All course materials that are not available on the Internet will be in the “Readings” folder in Quercus. All other documentation will also be available through the Home screen on Quercus.

All assignments, unless otherwise specified, should be submitted via Quercus. I have specified that all assignments be submitted as Word documents. Thus, if you try to submit using Pages or as a .pdf, the file will not be accepted.

Please do not contact me if you are experiencing technical difficulties with Quercus. Consult the Help menus, especially [the one for students](#). You may also contact: Ime.migration@utoronto.ca

Deadlines and late penalties

All deadlines are final. For each day an assignment is late, a half grade will be deducted. This means if an A- paper is one day late, it will be a B+. If a B paper is two days late, it will be a C. I may make exceptions under extenuating circumstances, such as illness or family emergency. However, these will require documentation. If there are other issues that you think may affect your ability to turn in assignments on time, I suggest you contact me *as early as possible*. I am **not** inclined to give extensions to those who ask the night before.

Email and communication

I will hold weekly office hours on Tuesdays, and I will be very glad to meet with you at those times to discuss readings, lectures, assignments, essays, and more. **You must sign up for office hours using the course calendar on Quercus.**

I have also listed my email address in the contact information at the start of the syllabus; however, please consider several things when reaching out to me by email:

- **Please check (and double-check) that the answer to your query is not in the syllabus before you contact me with questions.**
- You are expected to write from your University of Toronto email account. If you write from another email account (Hotmail, Gmail, Yahoo, etc), I might not answer.
- I generally use email to address simple yes/no questions and to make arrangements about logistics; if you have any substantive concerns, please come to my office hours.
- I will do my best to respond to your messages, but please don't expect a rapid response. I will not be responding daily to emails about the class, and will not check my email on evenings and weekends. As such, please plan ahead if you need to reach out to me.

- If you write to request an extension or accommodation the night before an assignment is due, I am unlikely to accommodate your needs or offer assistance.
- Please treat emails as a professional form of communication; I expect proper grammar, sentences, and greetings and sign-offs in your messages, and you can expect the same from me. Please include a greeting, and please address me as Prof. Green. A sign-off is also appropriate (“sincerely,” “thanks,” “cheers,” followed by your name).

Legal

Please read the policy on [academic integrity](#). Plagiarism results in failure in the class. **Academic dishonesty is a serious offense that can result in loss of credit, suspension, and possibly expulsion from the university. *All suspected cases of academic dishonesty will be reported.***

Plagiarism includes:

- copying sentences or fragments from any source without quotes and references
- not citing a source used in your papers
- citing internet information without proper citation
- presenting someone else’s work as your own
- *inadvertently* copying verbatim from any source.

In many cases, plagiarism is a mistake rather than a deliberate act. If you have questions about what constitutes plagiarism, please come talk to me. I also encourage you to consult [this page](#) from the Writing center.

Sept 10: Introduction and overview

Sept 17: A crash course in international environmental law

Questions: Why do we have international environmental law? What does IEL look like?

- Hardin, Garrett. 1968. The Tragedy of the Commons. *Science* 162: 1243–1248. **Uoft-e** and available [here](#)
- Ostrom, Elinor, Joanna Burger, Christopher Field, Richard Norgaard, and David Policansky. 1999. Revisiting the Commons: Local Lessons, Global Challenges. *Science* 284(5412): 282–287. **Uoft-e** and available [here](#)
- Barrett, Scott. 2010. *Why Cooperate? The Incentive to Supply Global Public Goods*. Oxford ; New York: Oxford University Press. Chapter 1. **Uoft-e**
- Bodansky, Daniel. 2010. *The Art and Craft of International Environmental Law*. Cambridge, MA: Harvard University Press. Chaps 1&2. **Quercus**.
- **Read the [Stockholm Declaration on the Human Environment](#) and [the Rio Declaration on Environment and Development](#)

Sept 24: The Antarctic Treaty System

Questions: What are the key provisions of the Antarctic Treaty, and how are they notable? What are the other agreements in the “Antarctic Treaty System” and what issues do they address?

- **Read the [Antarctic Treaty](#)
- Arnold, Rudolph. 1975. “The Common Heritage of Mankind as a Legal Concept.” *The International Lawyer* 9(1): 153-58. **Uoft-e**
- The Development of the Antarctic Treaty System. Available [here](#)
- Peterson, MJ. 1980. “Antarctica: The Last Great Land Rush on Earth.” *International Organization* 34(3): 377-403 **Uoft-e**

Oct 1: The Antarctic Treaty System

Questions: What are some of the major challenges facing the ATS? How are they being address? With what success?

- **Read Articles 2 and 9 of [the Convention for the Conservation of Antarctic Marine Living Resources](#) (CCAMLR)
- **Read this [FAQ about krill](#), written by CCAMLR
- [Greenpeace Report](#) on krill fishing
- Osterblom, Henrik, et. al. 2014. Reducing Illegal Fishing in the Southern Ocean: A Global Effort. *Solutions* 4(5): 72-9. Available [here](#)
- **The Guardian, “Antarctica’s tourism industry is designed to prevent damage, but can it last?” Available [here](#)
- Verbitsky, Jane. 2013. “Titanic Part II? Tourism, uncertainty and insecurity in Antarctica in Brady, Anne Marie (ed.) 2013. *The Emerging Politics of Antarctica* Abingdon: Routledge. Chapter 11. **Uoft-e**
- Schillat, Monika. 2016. “Adventure Tourism Poses New Challenges for the International Association of Antarctica Tour Operators. In Monika Schillat et al. *Tourism in Antarctica*. **Uoft-e**

Oct 8: NO CLASS, THANKSGIVING

Oct 15: The Oceans: Fisheries

How do we manage the world's fisheries? How does the principle of sovereignty work on the high seas? Is sustainable fishing possible?

- **Articles 87 and 116-120 of UNCLOS. Available [here](#)
- DeSombre, Beth and J. Samuel Barkin. 2011. *Fish*. Cambridge: Polity Press. Chapter 4. **Quercus**
- **The Economist. 2014. "In Deep Water." Available [here](#)
- Soroos, MS. 1989. The Turbot War: Resolution of an International Fishery Dispute. In Niels Gleditsch, ed. *Conflict and the Environment*. NATO ASI Series. **Quercus**
- Green, Jessica and Bryce Rudyk. 2018. Closing the High Seas to Fishing: A club approach. **Quercus**.

Oct 22: The Oceans: IUU Fishing and Transshipment

How can IUU Fishing be effectively addressed? Can non-state actors make a difference?

- Agnew, David J. et. al. 2009. Estimating the Worldwide Extent of Illegal Fishing. *PLOS One* 4(2). Available [here](#)
- Miller, Nathan et al. 2018. Identifying Global Patterns of Transshipment Behavior. *Frontiers in Marine Science* 5(240). Available [here](#)
- Miller, Dana D., and U. Rashid Sumaila. 2014. Flag use behavior and IUU activity within the international fishing fleet: Refining definitions and identifying areas of concern. *Marine Policy* 44: 204–211. **UofT-e**
- **Read about a [Global Record of Fishing Vessels](#)
- **Read about the Port State Measures Agreement [here](#)

Oct 29: The Oceans: Human Rights

Questions: What are the causes of human rights abuses on the high seas? How can they be addressed?

Guest Speaker: Peter Vandergeest, Department of Geography, York University.

- Marschke, Melissa and Peter Vandergeest. 2016. "Slavery Scandals: Unpacking labour challenges and policy responses within the off-shore fisheries sector. *Marine Policy*. 68(June): 39-46. **UofT-e**
- **The Guardian. 2014. Revealed: Asian slave labour producing prawns for supermarkets in US, UK. Available [here](#)
- International Labor Organization. 2013. Caught at Sea: forced Labour and Trafficking in Fisheries. Read the Executive Summary, Introduction and pp. 23-45. Available [here](#)
- ** Read about the UK's Transparency in Supply Chains Act. Available [here](#)

Nov 5: NO CLASS, READING WEEK

Nov 12: The Deep Sea: Mining and Bioprospecting

Questions: Is the Seabed common heritage of mankind? How is it regulated? How does prospecting work, and who benefits?

- Lodge, Michael. 2016. "The Deep Sea Bed" In Donald Rothwell et al. eds, *The Oxford Handbook of the Law of the Sea*. Oxford: Oxford University Press. **UofT-e and Quercus**.

- Carrington, Damian. 2017. “Is deep sea mining vital for a greener future – even if it destroys ecosystems. *The Guardian*. Available [here](#)
- Davison, Janet. 2018. “Murky Waters” *CBC News*. Available [here](#)
- Durden, Jennifer et al. 2018. Environmental Impact Assessment process for deep-sea mining in the Area. *Marine Policy* 87: 194-202. **UofT-e**

Nov 19: Biodiversity Beyond National Jurisdiction and Bioprospecting

Questions: Why are states negotiating a new BBNJ treaty? Are genetic resources heritage of mankind? What, if any, means should be used to protect biodiversity on the high seas?

- **Specter, Michael. 2013. Can we patent life? *The New Yorker*. Available [here](#)
- Rabitz, Florian. 2017. *The Global Governance of Genetic Resources*. London: Routledge. Read pp. 131-144 – which is the first part of **Chapter 8**.
- Blasiak, Robert et al. 2018. “Corporate Control and global governance of marine genetic resources.” *Science Advances* 4(6): eaar527. **UofT-e** and available [here](#)
- Read a brief overview of the Nagoya Protocol [here](#)
- ENB Summary of BBNJ Negotiations, TBA.

Nov 26: Space

Questions: Do we need a space treaty? A moon treaty? Why? How should space and the moon be governed?

- Buck, Susan. 1998. *The Global Commons: An Introduction*. Washington DC: Island Press. Pp. 137-153 **Quercus**
- Brehm, Andrew. 2015. Private Property in Outer Space. 33 *Wis. Int'l L.J.* 353. **Quercus**
- **Peruse the Lunar Registry website. Especially [here](#) and [here](#)
**<http://www.unoosa.org/oosa/en/ourwork/copuos/history.html>
- **Skim the [Outer Space Agreement](#)
- **Skim the [Moon Agreement](#)
- **Check out Google’s [Lunar XPrize](#)
- **Read about [Moon Express’s landing on the moon](#).

Dec 3: Final presentations and review