

Carleton University  
Department of Economics  
ECON 5880Y: Trade and the Environment

Jevan Cherniwchan

Fall 2022

E-mail: [jevan.cherniwchan@carleton.ca](mailto:jevan.cherniwchan@carleton.ca)

Phone: +1 613-520-2600 ext. 3546

Office: C875 Loeb Building

Office Hours: By appointment

Course Page: [Brightspace](#)

Lectures: Wednesdays, 8:35am-11:25am

Location: A720 Loeb Building

---

## Course Description

This course investigates linkages between international trade and the environment. It provides an overview of the theoretical links between international trade and environmental outcomes, and critically examines the empirical evidence for these linkages.

## Course Materials

There is no required textbook for this course. A detailed list of recommended and required readings will be posted during the first week of class.

While there is no required textbook, the following books are useful references for students interested in pursuing research on international trade and the environment:

- Copeland, Brian R., and M. Scott Taylor. 2003. *Trade and the Environment: Theory and Evidence*. Princeton University Press.
- Feenstra, Robert C. 2016. *Advanced International Trade: Theory and Evidence*. Princeton University Press. Second Edition
- Dixit, Avinash K., and Victor Norman. 1980. *Theory of International Trade*. Cambridge University Press.
- Helpman, Elhanan, and Paul R. Krugman. 1985. *Market Structure and Foreign Trade*. MIT Press.

The following books are useful references for the methods employed in recent empirical research on international trade and the environment:

- Angrist, Josh and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press.
- Cunningham, Scott. 2021. *Causal Inference: The Mixtape*. Yale University Press.
- Huntington-Klein, Nick. 2022. *The Effect: An Introduction to Research Design and Causality*. Chapman and Hall/CRC.

## Evaluation

Student grades will be determined as follows:

|                                     |       |
|-------------------------------------|-------|
| Problem Sets (x3)                   | (30%) |
| Referee Reports (x2)                | (20%) |
| Literature Review/Research Proposal | (50%) |

## Problem Sets

Each student will be required to complete three problem sets. Unless explicitly noted, students are permitted to work on the problem sets with their classmates. However, students must ensure that all submitted work is their own. All problem set answers must be typed and submitted electronically in .pdf format via Brightspace by 9:00 pm on the day they are due. Problem set files should be named as follows: "*lastname\_firstname\_PS#.pdf*", where # denotes problem set 1, 2, or 3. Tentative due dates for the problem sets are as follows:

- Problem Set 1: Sept. 30.
- Problem Set 2: Oct. 31.
- Problem Set 3: Nov. 30.

Problem sets will typically be posted 10 days prior to the due date. **Note: Late problem set submissions will not be accepted.** Failure to submit a problem set without a valid reason will result in a grade of zero.

## Referee Reports

Each student will be required to write two 2-3 page referee reports on working papers (unpublished papers) of their choosing. Selected papers must be on a topic related to international trade and the environment, and have been written within the past 5 years. Papers discussed in this class or other related courses (Econ 5601/ECO 6160; Econ 5803/ECO 6143) can not be selected. A working paper cannot be reviewed by more than one student; allocations will be made on a first-come, first-served basis. Tentative deadlines for the referee reports are as follows:

- Sept. 30: Submit copy of working paper for referee report 1.

- Oct. 14: Referee report 1 due.
- Oct. 28: Submit copy of working paper for referee report 2.
- Nov. 11: Referee report 2 due.

All materials should be submitted by 9:00 pm on the day they are due and should be submitted electronically via Brightspace. Referee reports must be typed and submitted in .pdf format with 12 pt. font, 1 inch margins and 1.5 line spacing. Files should be named as follows: “*lastname\_firstname\_WP#.pdf*” or “*lastname\_firstname\_RR#.pdf*”, where # denotes working paper/referee report 1 or 2. **Late submissions of working papers will result in a 10% reduction of the final grade for the referee report for each hour (or part thereof) they are late. Late referee report submissions will not be accepted.** Failure to submit a referee report without a valid reason will result in a grade of zero.

### Literature Review/Research Proposal

Each student will be required to write a literature review *or* a research proposal on a topic related to international trade and the environment. Details are as follows:

- *Literature review*: Students will be required to write a 15-20 page (plus title page/references) literature review that synthesizes 10-15 research papers on a topic related to trade and the environment. The literature review should summarize and evaluate the chosen research papers to highlight the existing state of knowledge on the topic, and identify 2-3 “gaps” in the literature that could be the target of future research. The literature review should critically assess both the methodologies used in, and the results from the chosen papers.
- *Research proposal*: Students will be required to write a 15-20 page (plus title page/references) proposal for an original research paper. The proposal should clearly specify the research question, include a critical review of the relevant literature, discuss the contributions of the proposed research to the literature, and discuss the proposed methodology for answering the research question. If the proposed research is empirical, it should provide a description of the data to be used, and discuss the proposed empirical strategy. If the proposed research is theoretical, the proposal should provide a description of the key modelling assumptions.  
*Note*: PhD students are *required* to complete this option.

Students are expected to discuss the topic of their literature review/research proposal with me no later than Oct. 21. The review/proposal is due at 3:00pm on Dec. 9 and should be submitted via Brightspace. The literature review/research proposal should be submitted as a .pdf file with 12 pt. font, 1 inch margins and 1.5 line spacing. Files should be named as follows: “*lastname\_firstname\_LR.pdf*” for a literature review or “*lastname\_firstname\_RP.pdf*” for a research paper.

*Note*: Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

## Academic Integrity

The University Senate defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.” This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;
- handing in “substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs.”

Plagiarism is a serious offence that cannot be resolved directly by the course instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of “F” for the course. For more information please see the [Academic Integrity & Offenses of Conduct](#).

## Student Mental Health

As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

- **Emergency Resources (on and off campus):**
  - [Emergency Numbers](#)
- **Carleton Resources:**
  - [Mental Health and Wellbeing](#)
  - [Health & Counselling Services](#)
  - [Paul Menton Centre](#)
  - [Academic Advising Centre \(AAC\)](#)
  - [Centre for Student Academic Support \(CSAS\)](#)
  - [Equity & Inclusivity Communities](#)
- **Off Campus Resources:**

- **Distress Centre of Ottawa and Region:** (613) 238-3311 or TEXT: 343-306-5550
- **Mental Health Crisis Service:** (613) 722-6914, 1-866-996-0991
- **Empower Me:** 1-844-741-6389
- **Good2Talk:** 1-866-925-5454
- **The Walk-In Counselling Clinic**

## Statement on Pandemic Measures

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are **a number of actions you can take** to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette.

**Feeling sick?** Remaining vigilant and not attending work or school when sick or with symptoms is critically important. If you feel ill or exhibit COVID-19 symptoms do not come to class or campus. If you feel ill or exhibit symptoms while on campus or in class, please leave campus immediately. In all situations, you should follow Carleton's **symptom reporting protocols**.

**Masks:** Masks are no longer mandatory in university buildings and facilities. However, we continue to recommend masking when indoors, particularly if physical distancing cannot be maintained. We are aware that personal preferences regarding optional mask use will vary greatly, and we ask that we all show consideration and care for each other during this transition.

**Vaccines:** While proof of vaccination is no longer required to access campus or participate in in-person Carleton activities, it may become necessary for the University to bring back proof of vaccination requirements on short notice if the situation and public health advice changes. Students are strongly encouraged to get a full course of vaccination, including booster doses as soon as they are eligible and submit their booster dose information in **cuScreen** as soon as possible. Please note that Carleton cannot guarantee that it will be able to offer virtual or hybrid learning options for those who are unable to attend the campus.

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 response and health and safety requirements please see the **University's COVID-19 website** and review the **Frequently Asked Questions (FAQs)**. Should you have additional questions after reviewing, please contact [covidinfo@carleton.ca](mailto:covidinfo@carleton.ca).

## Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

## **Pregnancy Obligation**

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the [Pregnancy Accommodation Form](#).

## **Religious Obligation**

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the [Equity and Inclusive Communities website](#).

## **Academic Accommodations for Students with Disabilities**

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the [Paul Menton Centre website](#) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

## **Survivors of Sexual Violence**

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: [carleton.ca/sexual-violence-support](http://carleton.ca/sexual-violence-support).

## **Accommodations for Student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see [the policy](#).

## Course Copyright

Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copyright protected and remain the intellectual property of their respective author(s). All course materials, including lecture notes, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s).

Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s).

## Course Outline

Schedule is tentative and subject to change. Topics may be added or removed time permitting.

**Lecture 01 - 09/07:** Course Overview/Stylized Facts

**Lecture 02 - 09/14:** Comparative Advantage and the Composition Effect

**Lecture 03 - 09/21:** Comparative Advantage and the Composition Effect (cont'd)

**Lecture 04 - 09/28:** Comparative Advantage and the Composition Effect (cont'd)

- 09/30: Problem set #1 Due.
- 09/30: Submit copy of working paper for referee report 1.

**Lecture 05 - 10/05:** Environmental Regulations and Trade Flows

**Lecture 06 - 10/12:** Environmental Regulations and Trade Flows (cont'd)

- 10/14: Referee report 1 due.

**Lecture 07 - 10/19:** Free Trade and Aggregate Pollution Levels

- 10/21: Last day to have literature review/research proposal topic approved.

**No Lecture - 10/26:** Fall break.

- 10/31: Problem set #2 Due.

**Lecture 08 - 11/02:** Free Trade and Aggregate Pollution Levels

- 11/04: Submit copy of working paper for referee report 2.

**Lecture 09 - 11/09:** Firms and the Technique Effect

**Lecture 10 - 11/16:** Firms and the Technique Effect (cont'd)

- 11/18: Referee report 2 due.

**Lecture 11 - 11/23:** Interactions between Trade and Environmental Policy

**Lecture 12 - 11/30:** Interactions between Trade and Environmental Policy

- 11/30: Problem set #3 Due.

**Lecture 13 - 12/07:** The Environmental Consequences of International Transport

- 12/09: Literature review/research proposal due.