

FRE 502

COURSE DESCRIPTION

This course teaches students how to utilize theoretical and econometric models from International, Environmental, and Public Economics and answer questions related to trade in agrifood and environmentally-sensitive products, environmental externalities and regulation, and consumer markets for impure public goods (e.g. offsets).

COURSE DETAILS

Lectures: M,W 1:30-3pm

INSTRUCTOR

Instructor: Carol McAusland | Carol.McAusland@ubc.ca | MCML 337

Office hours: Tuesdays 3-4pm zoom¹ | Wednesdays 3-4pm (in person: MCML 154 or 337)

Course Assistant: Juan Fercovic

Dr. McAusland is Professor of Food & Resource Economics in the Faculty of Land & Food Systems. She has been teaching undergraduate and graduate courses in the areas of Environmental Economics, International Economics, Food Consumption Economics, and Statistics since the last millenium. She has held elected positions as the Chair of the Canadian Resource & Environmental Economics Association and member of the Board of Directors for the Association of Environmental and Resource Economics. She has served as the Co-Editor of the *Journal of Environmental Economics and Management (JEEM)* and on the editorial boards of the *Journal of the Association of Environmental and Resource Economics* and *JEEM*. Beyond UBC, she enjoys kayaking, baking, crafting, traveling, and building third places.

LEARNING OUTCOMES

Students completing this course will be able to use tools of International and Environmental Economics to

- predict how trade and non-trade policies will affect
 - consumer and producer welfare,
 - the flow of goods across borders, and
 - the intensity of polluting activity and resource use within affected jurisdictions
- forecast how environmental policies will alter
 - household welfare and industry profitability
 - trade flows
 - international distribution of carbon emissions
- evaluate the effectiveness of consumer-related actions to address
 - pollution from agricultural production
 - fossil fuel extraction and consumption

Students will also hone their skills in

- public speaking
- evaluating and documenting evidence
- formulating arguments to defend and critique policy initiatives

LEARNING MATERIALS

Available at Canvas: <http://www.canvas.ubc.ca>. You are required to regularly login to your course page for FRE 502. Your syllabus, course-lecture slides, additional material, announcements, assignments, and grades will be available there.

LEARNING ACTIVITIES, ASSESSMENTS AND DATES

Classroom meetings will be a combination of lecture and practice using analytical tools. Students should not hesitate to ask clarifying questions during lecture, and are strongly encouraged to use office hours to further clarify understanding and engage in exploratory discussions. Students are also encouraged to use Piazza to discuss course content with one another.

There will be three types of assessment activities: examinations, one coding assignment, and policy debates.

Examinations serve two purposes: (a) incentivize students to gain facility with the analytical tools taught in class and (b) provide feedback as to where mastery has/has not been achieved. To help students prepare for examinations, practice questions with worked solutions will be made available. Students will also be given opportunities to solve practice problems during meeting times, with solutions presented in real-time.

The coding assignment will give students hands on experience utilizing one of the most ubiquitous models of international trade: the gravity model.

For the policy debates, students will work in teams to do a deep dive into a specific policy question, assemble, document and analyze existing evidence to argue---in writing and verbally---for or against a specified policy proposal. Students will use Piazza (see Canvas for link) to propose debate topics. Teams will debate their researched topic in front of an audience of peers during the last two weeks of the semester.

Activity	Date / Deadline	Percent of Grade
Propose Debate Topics	Wed Sept 10, 2025	
<i>Debate Topics Announced</i>	Fri Sept 12, 2025	
Rank-order Topics	Sept 13-15, 2025	
<i>Debate Teams Announced</i>	Wed Sept 17, 2025	
Submit Workplan	Wed Sept 24, 2025	
Submit Outline	Wed Oct 8, 2025	
<i>Assignment Distributed</i>	Mon Oct 20, 2025	
Midterm	Wed Oct 22, 2025	23%
Mid-project Peer Evaluations	Tues Nov 4, 2025	
Assignment Due	Wed Nov 5, 2025	6%
Submit Slide Decks, Evidence Tables, and Bibliographies	Mon November 17, 2025	18%
In-Class Written Summaries	Wed November 19, 2025	18%
Debates	Nov 24 – Dec 3, 2025	10%
Participation during Classmates' Debates		1%
Experiment	Date TBD	1%
Final Exam	Date TBD	23%

COURSE POLICIES

Exam Policies

Any student missing the midterm exam because of illness will have that portion of their grade assigned to a combination of their other z-scores for other assessment activities, with the majority of the grade shifted to the final exam. Dumb calculators---i.e. calculators that cannot store or transmit data---may be used during exams. Phones and any other device capable of storing or transmitting/receiving data are prohibited during exams. This includes smart watches and glasses and Bluetooth-enabled hearing aids. Students will not be permitted to re-enter the exam room once the exam has started. To be clear, this prohibition includes bathroom visits.

Assignments:

Unless prior accommodations (for illness and/or family emergencies) have been made with the instructor, late assignments will be penalized at 10 percentage points per day (or partial) late. The exception is assignments that arrive less than 60 minutes after the submission deadline, which will receive only a 3% penalty.

Participation

The only “participation grade” in this course is for attending the debates of classmates’ debates. Students who attend all assigned debates and ask at least one substantive question will receive the full 1% point.

Group Presentations/Reports:

The Debates, Slide Decks and Bibliographies are team activities, for which each student’s grade will be based partially on a combination of individual and group contributions. Grades for Evidence Tables and In-Class Written Summaries are based almost entirely on individual work. Rubrics will be provided in advance.

Examinations are individual work.

For the coding assignment, students are encouraged to consult their classmates but what each submits must be the student’s own work. It is not acceptable to submit code that was generated by a third party, including generative AI.

Plagiarism:

Evidence fabrication² is egregious misconduct and will be penalized accordingly: in addition to applying MFRE policies for misconduct, any assignment containing fabricated evidence will be receive a grade of zero and the student will be referred to the program for disciplinary action.

Plagiarism---including submitting content written by generative AI without appropriate attribution ---constitutes academic misconduct. Each instance of plagiarism/inadequate attribution will incur a 2 percentage-point penalty from a student’s course grade; a student with four or more infractions will also be referred to program administrators for disciplinary action.

² Generative AI is widely understood to fabricate evidence, references, and claims and so should never be trusted for factual accuracy.

COURSE SCHEDULE

1. Environmental Economics Part I
 - a. Externalities & Internalities
 - b. Pigouvian Taxes
2. Simple Trade Model & Policy
 - a. Excess Supply & Demand
 - b. Tariffs, Subsidies and Quotas
3. Causes and Consequences of International Trade
 - i. Comparative Advantage
 - ii. Love of Variety, Firm Heterogeneity and Market Power
 - iii. Gravity
 - b. Policies
 - i. Non-Tariff Barriers (VERs, Procurement Rules, Anti-Dumping)
 - ii. Trade Agreements
 - c. Why do economists love trade, while others hate it?
 - i. Winners and losers
 - ii. Trade Liberalization in a Distorted Economy
4. Environmental Economics Part II
 - a. Marginal Cost of Abatement
 - b. Beyond Pigouvian Taxes: other policies including Cap and Trade
 - c. Deep Dive: Carbon Policy & Leakage
5. Consumers and Impure Public Goods
 - a. Divestment & Boycotts
 - b. Charges vs. Subsidies
 - c. Offsets
 - i. Pollution Penance
 - ii. Rebound
 - iii. Additionality

MFRE PROGRAM - COURSE PROTOCOL POLICIES

Working with Others on an Assignment

You are encouraged to work with other students, but you must turn in your own individual assignment. If you have an answer that is too close to another student's answer, this will be considered academic dishonesty and this will be handled according to the MFRE and UBC policies.

Recordings

There is no required distribution of recordings of class. Recording will be provided based upon on the decision of the course instructor. Classes are designed as and are intended to be in-person.

Copyright

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Further, audio or video recording of classes are not permitted without the prior consent of the instructor.

Missing Classes/Labs

Students are expected to attend all classes, labs, or workshops. If you cannot make it to a class, lab, or workshop due to a medical or personal emergency, email your Instructor, your Course Assistant, and Olivier Ntwali, MFRE Program Coordinator ahead of time to let them know.

Respectfulness in the Classroom

Students are expected to be respectful of their colleagues at all times, including faculty, staff and peers. This means being attentive and conscious of words and actions and their impact on others, listening to people with an open mind, treating all MFRE community members equally and understanding diversity.

Respect for Equity, Diversity, and Inclusion

The MFRE Program strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Métis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

Centre for Accessibility

The [Centre for Accessibility](#) (CfA) facilitates disability-related accommodations and programming initiatives designed to remove barriers for students with disabilities and ongoing medical conditions. If you are registered with the CfA and are eligible for exam accommodations, it is your responsibility to let Olivier Ntwali, Academic Program Coordinator, and each of your Course Instructors know. You should book your exam writing with the CFA using its [exam reservation system](#): for midterm exams or quizzes, at least 7 days in advance; and final exams, 7 days before the start of the formal exam period.

MFRE PROGRAM - ACADEMIC HONESTY POLICIES

Plagiarism and Academic Dishonesty

Academic dishonesty and plagiarism are taken very seriously in the MFRE program. All incidences of plagiarism will be escalated to the MFRE Academic Director with penalties ranging from a mark of zero on the assignment, exam or course to being required to withdraw from the program. Note: If a student needs to extend his/her program due to a failed course or unsatisfactory progress, they will have to pay the full MFRE tuition fees for that term/s.

Academic misconduct that is subject to disciplinary measures includes, but is not limited, to the following:

- **Plagiarism**, which is intellectual theft, occurs where an individual submits or presents the oral or written work of another person as his or her own. Correct citations must be provided where applicable for all reports/assignments. In all MFRE courses, material will be submitted to a service which UBC subscribes to, called TurnItIn. This service checks textual material for originality. For more information, review the [TurnItIn website](#).
- **Using Generative Artificial Intelligence (AI) tools** like ChatGPT, Bard, or other Generative AI models to generate content or conduct analysis for evaluations, without proper citation and/or if asked not to use AI, is considered plagiarism and academic misconduct. If students use AI in their submissions, they must cite the AI generator using citations consistent with the UBC Academic Honesty Standards.
- **Cheating**, which may include, but is not limited to falsification of any material subject to academic evaluation, unauthorized collaborative work; or use of unauthorized means to complete an examination.
- **Working with Others on an Assignment** is encouraged, but you must turn in your own individual assignment. If you have an answer that is too close to another student's answer, this will be considered academic dishonesty and a grade of zero will be applied and the matter handled according to the MFRE and UBC policies.
- **Resubmission of Material**, submitting the same, or substantially the same, essay, presentation, or assignment more than once (whether the earlier submission was at this or another institution) unless prior approval has been obtained from the instructor(s) to whom the assignment is to be submitted.
- **Use of Academic Ghostwriting Services**, including hiring of writing or research services and submitting papers or assignments as his or her own.

Student Responsibility: Students are responsible for informing themselves of the guidelines of acceptable and non-acceptable conduct for examinations and graded assignments as presented via MFRE Code of Conduct; MFRE Turn it in, Course Syllabus, MFRE Instructors; Canvas and UBC academic misconduct policies.

Penalties for Academic Dishonesty: Penalties for academic dishonesty are applied at the discretion of the MFRE program. Incidences of academic misconduct may result in a mark of zero on the assignment, examination, or course, required withdrawal from the program, and/or the matter being referred to UBC Graduate Studies.

LAND ACKNOWLEDGMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəy̓əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.