

Department of Economics Faculty of Arts

Fall 2023

Economics 677 Environmental Economics		
Instructor: Erica Myers	Lecture Location: SS 423	
Email: erica.myers@ucalgary.ca	Lecture Days/Time: TR 12:30-1:45	
Office: SS 414		
Office Hours: Thursday 11:30 am – 12:30 pm		

Course Description:

This course provides an introduction to environmental economics at the graduate level. The first part of the course will focus on environmental policy. We will use microeconomic theory to discuss the nature of externalities, their implications, and the relevance of government policy in addressing environmental issues. In the second part of the course, we will turn our attention to methods that have been developed to estimate the damage and cost functions needed to implement policy. Each part of the course represents two sides of the same coin. Policy design involves using neoclassical welfare theory to derive optimal policy rules while valuation.

Course Outcomes:

By the end of this course the student will have a good understanding of graduate environmental economics and some knowledge of where the research frontier is on the topics covered. They will understand the positive and normative implications of externalities and understand the incentives governments have to intervene in markets to address these market failures. They will understand the uses of various types of environmental policies and their limitations. They will also be familiar with and able to perform environmental valuation techniques such as property value, recreation, mortality risk, and stated preference.

Course Outline: Topics covered will include

Part 1: The Design of Environmental Policy

Theory of Externalities Environmental Policy Instruments Imperfect Information Competitive vs. Non-Competitive Output Markets Institutional Issues in Cap-and-Trade Programs Liability Transboundary Pollution Problems

Part 2:

Applied Welfare Analysis Revealed Preference Models Discrete Choice Analysis Recreation Demand Valuation Property Market Valuation Mortality Risk Valuation Stated Preference Approaches

Prerequisites/corequisites:

Admission to the MA or PhD Economics Program.

Required Textbook(s):

Phaneuf DJ, Requate T. A course in environmental economics: theory, policy, and practice. Cambridge University Press; 2016 Dec 24.

Books on Reserve:

None

Desire2Learn:

This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <u>http://d2l.ucalgary.ca</u> through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails go to your University of Calgary e-mail addresses only.

Grade Determination/Assessment:

	100%
FINAL EXAMINATION	40%
MIDTERM EXAMINATION	30%
PROBLEM SETS	30%

Grade Determination and Final Examination Details

Department of Economics Criteria for Letter Grades. Economics professors use the following criteria when assigning letter grades:

Grade	Grade Point Value	Description
A+	4.00	Outstanding
A	4.00	Excellent-superior performance, showing-comprehensive understanding of subject matter
A-	3.70	Very good performance
B+	3.30	Good performance
В	3.00	Satisfactory performance
B-	2.70	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	All grades below "B-" are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. Individual programs may require a higher passing grade.

A passing grade on any particular problem set or other component of the course is not required for a student to pass the course as a whole.

Bi-weekly problem sets will be due every other Tuesday at midnight. Each of the problem sets will carry equal weight in grade determination. Late problem sets will not be accepted. Students unable to turn in an assignment because of documented illness or family emergency will have the weight shifted to the remaining problem sets; otherwise a grade of zero will be assigned. You may (and are encouraged!) to work together on the problem sets. However, each student is required to turn in their own solutions (and code where relevant) described in their own words.

There will be a final examination, held in class, lasting 75 minutes. The final will be comprehensive, covering material from the whole semester. Non-programmable calculators WILL be allowed during the writing of tests or final examinations.

Tests and exams WILL NOT involve multiple choice questions.

The midterm exam will be held on Thursday, October 19th in class

The final exam will be held on Tuesday, December 5th in class

Absence from a Test/Exam

THERE WILL BE NO MAKEUP OR DEFERRED EXAMS under any circumstances, nor may the EXAMS be written early. Students unable to write the exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise, a grade of zero will be assigned. If a student cannot write their final exam on the designated date on the outline, they need to arrange for a deferred exam with the department.

Notes:

Students are responsible for all assigned material, e.g., supplementary material posted on D2L, regardless of whether or not the material was covered in class.

IMPORTANT POLICIES AND INFORMATION

Absence From a Mid-term Examination

Students who are absent from a scheduled term test or quiz for legitimate reasons are responsible for contacting the instructor via email within 48 hours of the missed test to discuss alternative arrangements. A copy of this email may be requested as proof of the attempt to contact the instructor. Any student who fails to do so forfeits the right to a makeup test.

Deferred Term Work Form: Deferral of term work past the end of a term requires a form to be filled out by the student and submitted, along with any supporting documentation, to the instructor. The form is available at:

https://live-ucalgary.ucalgary.ca/sites/default/files/teams/14/deferral-of-term-work-2020.pdf

Once an extension date has been agreed between instructor and student, the instructor will email the form to the Faculty of Arts Program Information Centre (ascarts@ucalgary.ca) for approval by the Associate Dean.

Deferral of a Final Examination

Deferral of a final examination can be granted for reasons of illness, domestic affliction, and unforeseen circumstances, as well as to those with three (3) final exams scheduled within a 24-hour period. Deferred final exams will not be granted to those who sit the exam, who have made travel arrangements that conflict with their exam, or who have misread the examination timetable. The

decision to allow a deferred final exam rests not with the instructor but with Enrolment Services. Instructors should, however, be notified if you will be absent during the examination. The Application for Deferred Final Exam, deadlines, requirements and submission instructions can be found on the Enrolment Services website at

https://www.ucalgary.ca/registrar/exams/deferred-exams.

Reappraisal of Grades:

For Reappraisal of Graded Term Work, see Calendar I.2 http://www.ucalgary.ca/pubs/calendar/current/i-2.html

For Reappraisal of Final Grade, see Calendar I.3 http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Academic Misconduct:

Academic Misconduct refers to student behavior that compromises proper assessment of students' academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

Student committing academic misconduct during the final exam will not receive a passing grade for the course.

For information on the Student Academic Misconduct Policy, Procedure and Academic Integrity, please visit: <u>https://www.ucalgary.ca/pubs/calendar/current/k-3.html</u>

Plagiarism And Other Forms Of Academic Misconduct

Academic misconduct in any form (e.g. cheating, plagiarism) is a serious academic offence that can lead to disciplinary probation, suspension or expulsion from the University. Students are expected to be familiar with the standards surrounding academic honesty; these can be found in the University of Calgary calendar at <u>http://www.ucalgary.ca/pubs/calendar/current/k.html</u>. Such offences will be taken seriously and reported immediately, as required by Faculty of Arts policy.

Recording of Lectures:

Recording of lectures is prohibited, except for audio recordings authorized as an accommodation by SAS or an audio recording for individual private study and only with the written permission of the instructor. Any unauthorized electronic or mechanical recording of lectures, their transcription, copying, or distribution, constitutes academic misconduct. See <u>https://www.ucalgary.ca/pubs/calendar/current/e-6.html</u>.

Academic Accommodations:

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services. SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their instructor. The full policy on Student Accommodations is available at

https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-studentsdisabilities-procedure

Research Ethics

Students are advised that any research with human subjects – including any interviewing (even with friends and family), opinion polling, or unobtrusive observation – must have the approval of the Conjoint Faculties Research Ethics Board. In completing course requirements, students must not undertake any human subject research without discussing their plans with the instructor, to determine if ethics approval is required.

Instructor Intellectual Property

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Freedom of Information and Protection of Privacy (FOIP) Act:

Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see https://www.ucalgary.ca/legal-services/access-information-privacy

ECM 2023-08-14