Economics 677(L01) Environmental Economics

Instructor: M. Scott Taylor
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Email: mstaylor@ucalgary.ca

Lecture Location: ZOOM Delivery
Lecture Days/Time: TR 8:00-9:15
Office: ZOOM Delivery
Office hours: TR 17:00-18:00 (https://ucalgary.zoom.us/my/mstaylor)  Fall 2020

Course Description:
This course provides an introduction to environmental economics at the graduate level. It is typical in that we will use mostly microeconomic theory to discuss the nature of externalities, their implications, and the relevance of government policy in addressing environmental issues. It is atypical in that after a review of basic theory, we will study in depth a key set of four environmental topics. As you are undoubtedly aware, there are many pressing environmental issues in the world today. Some are local in nature, for example the issue of orphan wells in Alberta, others are purely national such as species preservation, while others are international - climate change. The field of environmental economics is very broad, and we will make use of tools from both macro and microeconomics as well as discuss empirical work. I will draw from your previous knowledge in all of these fields.

Course Objectives/Learning Outcomes:
By the end of this course the student will have a very good understanding of environmental economics and some knowledge of where the research front is on the set of our topics. 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 understand how economic growth and international trade can affect environmental outcomes and appreciate some of the difficulties in designing policy to address species loss and climate change.

Course Outline:
I have organized the material around four very topical policy issues. There are 25 lectures in total during the course. I plan on spending the first four lectures reviewing microeconomic and macro theory as well as some basics of statistical analysis. One lecture will be taken up by the midterm, and the remaining twenty will be divided evenly across the four key questions we discuss. This gives us about 5 lectures per study area. I am hoping to stick to this plan for each topic, but it is possible we either run out of time or world events intervene making us spend more time on one topic than another.

Each of the four sections or modules will proceed in much the same way, and there are common elements to each section. I will present the basic theory we may use to understand the issue. Following this we will then proceed with discussions of published work and book chapters that are relevant. In each topic I hope to finally discuss a brand-new working paper showing you what current research on the topic looks like.

The four modules are, in brief, organized around the following policy issues:
1. Economic Growth and the Environment: Is economic growth sustainable in the long run? What does sustainability mean? How do population pressures and resource use affect the sustainability of economic growth?

2. Deforestation: What drives deforestation worldwide? Is it poverty, over population, international trade or corruption? How do economists think about deforestation and what is the state of the art in terms of our understanding of the drivers?

3. Trade vs the environment: Is liberalized trade good or bad for the environment? Do differences in environmental regulation drive firms to pollution havens? What role should trade policy play in environmental discussions?

4. Species extinction and conservation: what is the role of environmental policy in species preservation? Is the market economy driving species to extinction? Has it done so in the past? What if anything should be done to preserve biodiversity? How do we value biodiversity?

Prerequisites/corequisites:
Admission to the MA or PhD Economics Program.

Required Textbook(s):
There is no required textbook and I will assign readings for each section. We will discuss some of the readings in class, but you are expected to read and study them independently.

Recommended Textbook(s):
None

Books on Reserve:
None

Online Delivery:
This course will be delivered online. Students are expected to be able to participate online in accordance with this Course Outline. Lectures, assignments, office hours, exams, readings and other course material, etc. all require online access and this access is the responsibility of the student. The instructor will make an effort to provide reasonable accommodations and flexibility as circumstances require. Students are expected to raise with the instructor at the beginning of the semester any potential concerns that require such accommodations.

In order to remotely participate in online courses, students will need to have: computer with a current and updated operating system (macOS or Windows will work with all university-supported online learning technologies), a current and updated web browser installed – the latest versions of Firefox, Safari, Chrome or Edge will help to avoid compatibility issues, secure and reliable internet, microphone / headphones, webcam (optional), scanner (or camera to scan your work).

Desire2Learn:
This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at http://d2l.ucalgary.ca 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.
Lectures:
Lectures will be delivered online at the Registrar scheduled times and delivered using ZOOM. If by
mutual and unanimous agreement we can choose a different time period, then lectures will be
streamed at that time, instead of the official lecture time of 8:00 am. The streaming interactive learning
sessions will not be recorded but slides will be subsequently posted to D2L for students whose Internet
access may be disrupted during the interactive Zoom sessions.

Grade Determination/Assessment:

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<thead>
<tr>
<th>Grade Description</th>
<th>Grade Point Value</th>
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<tbody>
<tr>
<td>MIDTERM EXAM</td>
<td>30%</td>
</tr>
<tr>
<td>FINAL EXAMINATION</td>
<td>40%</td>
</tr>
<tr>
<td>Literature Review</td>
<td>30%</td>
</tr>
<tr>
<td>100%</td>
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</tbody>
</table>

Grade Determination and Final Examination Details
Department of Economics Criteria for Letter Grades. Economics professors use the following criteria
when assigning letter grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point Value</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
<td>Outstanding</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
<td>Excellent-superior performance, showing-comprehensive understanding of subject matter</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>Good performance</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>Minimum pass for students in the Faculty of Graduate Studies</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Satisfactory performance</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
<td>Minimum pass for students in the Faculty of Graduate Studies</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
<td>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.</td>
</tr>
</tbody>
</table>

Students must receive a passing grade on the final exam to pass the course.

Non-programmable calculators will be allowed during the writing of tests or final examinations.

Tests and exams will not involve multiple choice questions.

There will be two examinations. One will be a typical midterm, and the other is a final exam scheduled
by the Department. The midterm will be on Thursday the 25th of October. The midterm and final exam
will be take-home format. The exams will be available on D2L. Students will download the exams from
D2L, complete the exam, scan it, and submit using Dropbox in D2L. The midterm exam is intended to be
completed in 75 minutes. The final exam is intended to be completed in 120 minutes. In addition, there
will be a short paper required for the course. It can, and perhaps should be, a literature review of any
specific topic of interest in environmental economics. The topic of your paper must be agreed to by the
instructor, as not all topics are good topics. It could be a very applied review of how we evaluate the
environmental consequences of transit upgrades; or it could be a review of the literature examining the
determinants of rhino extinction. I am open to many options. The paper cannot exceed 20 pages,
double spaced, including references. It is due one week after the final day of classes in December.
Absence from a Test/Exam

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES under any circumstances, nor may the quizzes be written early. Students unable to write the quizzes 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 date assigned by the Department, they need to arrange for a deferred exam with the department.

Reappraisal of Grades and Intellectual Honesty:
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 on the course.

For information on the Student Academic Misconduct Policy and Procedure please visit:

Additional information is available on the Academic Integrity Website at https://ucalgary.ca/student-services/student-success/learning/academic-integrity.

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 http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

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 http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf and http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty_0.pdf.
Copyright Legislation:
See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf. Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

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.

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 https://www.ucalgary.ca/pubs/calendar/current/e-6.html.

Important Dates:
Please check: http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html

Student Organizations:
Faculty of Grad Studies website: http://grad.ucalgary.ca/home

Graduate Students Association: http://gsa.ucalgary.ca/

Professional Development for Grad Students
Workshops and resources can be found at http://www.ucalgary.ca/mygradskills/
Economics Graduate Association: http://econ.ucalgary.ca/ega/

Student Support and Resources:
- See https://www.ucalgary.ca/ registrar/registration/course-outlines for information on campus mental health resources, the Student Ombuds’ Office, Student Success Centre, Safewalk, and Emergency Evacuation and Assembly.
- Online writing resources are available at https://ucalgary.ca/student-services/student-success/writing-support.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.

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.

MST
2020-08-18