

NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS  
ECONOMICS EC2172A-001  
Department of Economics  
Western University

**September 2018**

**Instructor:** Irene Trela  
**Office:** 4081 SSC  
**Phone:** (519) 661-2111 ext. 85054  
**E-mail:** [itrela@uwo.ca](mailto:itrela@uwo.ca)  
**Office Hours:** T 2:30-3:30, TH 3:30-4:30, or any time my office door is open  
**Classroom meeting time(s) & location:** T 10:30-11:30, TH 10:30-12:30 B&GS 0165  
**Course website:** <https://owl.uwo.ca/portal>  
**Undergraduate inquiries:** 519-661-3507 SSC Room 4075 or [econugrd@uwo.ca](mailto:econugrd@uwo.ca)

**Registration:**

You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://student.uwo.ca>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

**Prerequisite Note:**

The prerequisite(s) for this course is (are) **Economics 1021A/B and Economics 1022A/B, or Economics 2001A/B.**

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course in question for graduation.

## **Course Objectives:**

Environmental economics is a valuable means of inquiring why people behave as they do toward the natural environment and how we might restructure the current system to rectify harmful practices. Its strength lies in the fact that it can help design effective environmental policies, get more environmental improvement from the resources we devote to these programs, and help us learn more about the levels of environmental damages and the values people put on improving the environment. The aim of this course is to present students with the types of problems environmental economists work on and some of the approaches they might take.

## **Course Learning Outcomes:**

Students will be able to apply economic reasoning and methods effectively to the study of environmental issues.

Students will be able to use economic theories of market inefficiency to explain environmental problems.

Students will be able to identify major current environmental problems and their economic components.

Students will be able to identify major current policies to remedy environmental problems.

Students will be able to apply the concept of trade-off to environmental policies.

Students will be able to use elementary cost-benefit analysis to measure the effectiveness of environmental policies.

Students will be able to evaluate the impact of environmental policies on individual and social welfare.

## **Textbook:**

Barry Field and Nancy Olewiler, *Environmental Economics*, 4th Canadian edition, McGraw-Hill Ryerson, 2015.

The textbook is also available on 2 hr reserve at D.B. Weldon Library.

## Grading:

|             |   |     |
|-------------|---|-----|
| Midterm*    | Scheduled for Friday, November 2, 6:00-8:00pm | 40% |
| Final Exam* | To be announced by the Registrar's Office     | 60% |

\*The midterm and final exams are each 2 hours in length and in multiple choice formats. Questions will be a mix of theory questions (in multiple choice format), true and false statements (in multiple choice format), problems (in multiple choice format), and questions based on information presented in tables and/or graphs (in multiple choice format).

**Note: Computer marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.**

**Note: Use of electronic devices (cell phones, iPods, iPads, laptops, etc) and dictionaries are not allowed during exams; electronic devices caught in a student's possession or on will be taken as an attempt to cheat. Students are also banned from wearing or having on their desk any kind of wristwatch/timepiece during exams (time will be displaced on either a wall clock, board or projector). During exams students may use only a non-programmable/non-graphing calculator (but lids/covers must be removed).**

## Course Website

<http://owl.uwo.ca>: This site gives you access to lecture notes for theory, applications (in the form of additional topics of discussion) for real-life examples, homework questions for numerical practice, review questions to further help prepare you for exams, and announcements. Answers to homework and review questions are posted on the site, with the exception of the answers to homework questions that will be taken up in class – answers to these questions will only be available from class, so if you miss class on the day a one of these homework questions is taken up, it will be your responsibility to obtain notes from a fellow student. Applications (in the form of additional topics of discussion) for real-life examples will be taken up in class, so again, if you miss class on the day an application is taken up, it will be your responsibility to obtain notes from a fellow student. **NOTE: The lecture notes posted on the course website are supplementary material and should not be regarded as a substitute for lectures. There will be many additional topics covered in class that are NOT in the posted lecture notes. Students are reminded that class material (including posted lecture notes and additional topics) and homework and review questions will ALL be subject to examination.**

## **Course Outline**

### **1. Introductory**

What is Environmental Economics? Chapter 1

Linkages between the Economy and the Environment: A Taxonomy, Chapter 2

### **2. Basic Microeconomic Foundations of Environmental Economics**

Benefits and Costs, Supply and Demand, Chapter 3

Economic Efficiency and Markets, Chapter 4

The Economics of Environmental Quality, Chapter 5

### **3. Cost-Benefit Analysis**

Framework of Analysis, Chapter 6

Benefit-Cost Analysis: Benefits, Chapter 7

Benefit-Cost Analysis: Costs, Chapter 8

### **4. Environmental Policy Analysis**

Criteria for Evaluating Environmental Policies, Chapter 9

Liability Laws, Property Rights, Moral Suasion, Green Goods, Chapter 10

Standards, Chapter 11

Emission Taxes and Subsidies, Chapter 12

Transferable Discharge Permits, Chapter 13

Environmental Policies in Perspective, Chapter 14

### **5. Environmental Policy in Canada**

Environmental Policy in Canada: An Overview, Chapter 15

Water Pollution-Control Policy, Chapter 16

Air Pollution-Control Policy, Chapter 17

Policy on Toxic and Hazardous Substances, Chapter 18

Recycling, Solid Waste Disposal, and Land Use, Chapter 19

Global Environmental Problems, Chapter 20

**Please Note**  
**Department Policies for 2018-2019**

Remember that the University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

1. Guidelines and policies for the Faculty of Social Science and the Department of Economics are posted online in the current Western Academic Calendar at:  
<http://westerncalendar.uwo.ca>.
2. Students must familiarize themselves with the “Rules of Conduct for Examinations”  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/exam/administration.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/exam/administration.pdf).
3. **Cheating as an academic offence:** Students are responsible for understanding what it means to “cheat”. The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as a notation on an official academic transcript, suspension or expulsion.
4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryId=1&SelectedCalendar=Live&ArchiveID=#Page\\_20](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryId=1&SelectedCalendar=Live&ArchiveID=#Page_20)).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

5. It is a Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students must submit assignments in class or to the instructor during office hours.
6. When appealing a mark, students should refer to the Student Academic Appeals section in the current Western Academic Calendar at:  
[http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryId=1&SelectedCalendar=Live&ArchiveID=#Page\\_14](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryId=1&SelectedCalendar=Live&ArchiveID=#Page_14).

Please note the relevant deadlines.

The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed with a written appeal (e-mails are not acceptable) to the Undergraduate Director in Economics, stating the reasons for their appeal. A checklist is provided at:  
[http://economics.uwo.ca/undergraduate/program\\_counselling/responsibilities\\_policies.html#appeals](http://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals).

7. Systematic adjustments of a class grade distribution (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

8. Note the following add and drop deadlines:

Deadline to add a first term half course:

**Friday September 14, 2018**

Deadline to drop a first term half course:

**Monday November 12, 2018**

9. Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

### **Policy Regarding Makeup Tests and Final Examinations**

*Academic accommodation will **not** be granted automatically on request. Students **must** demonstrate by documentation that there are **compelling** medical or compassionate grounds before academic accommodation will be considered.*

Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or having their value reweighted on a retroactive basis, is **not** permitted. Students must also book travel arrangements AFTER final exam dates have been posted as they must not conflict with test or final exams.

Unless medically incapable of doing so, students must notify their instructor prior to the test date or at least within **24 hours** when requesting a makeup exam. Failure to follow this procedure may result in denial of academic accommodation and a grade of zero. Students should also set up an appointment as soon as possible to meet with their instructor. If the instructor is not available, send an email message, copying the Undergraduate Coordinator at [econugrd@uwo.ca](mailto:econugrd@uwo.ca). **Notifying instructors of a missed exam does not automatically entitle students to a makeup.**

Students who seek a makeup exam must also provide supporting medical or other relevant documentation that their absence from a scheduled test or exam is beyond their control. Documentation should be submitted to the Academic Counselling Office of the student's *home* Faculty **as soon as possible (preferably within 24 hours of the scheduled test)**. Failure to follow this procedure may result in denial of academic accommodation and a grade of zero. If the documentation submitted is not acceptable, students will receive a zero for the missed test.

For personal illness, students may consult Student Health Services and request a Student Medical Certificate from the physician. If assessed by an off-campus doctor, students must obtain a certificate from his/her office at the time of the visit. The off-campus medical certificate form must also be used and can be found at:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

Notes stating "For Medical Reasons" are not considered sufficient.

For religious or compassionate circumstances, students should ask their Academic Counsellor what documentation to provide. If documentation is judged sufficient, the Academic Counsellor will issue a Recommendation for a Special Examination (a single form for midterms or a triple-

color form for final exams). Once students have this form, they must contact their instructor as soon as possible to make arrangements. Even if approved by their Academic Counsellor, there is no guarantee that students will be allowed to write the makeup test/exam.

For final examinations, students need to seek permission from their *home* Faculty Counsellor, Instructor, and the Department Undergraduate Director. Failure to follow this procedure may result in a grade of zero. Students must ensure that the Special Examination form has been signed by the Instructor and Department Undergraduate Director and that the form is returned to the Academic Counselling Office for approval without delay. If approved, makeup examinations will be written within one month of the end of the exam period.

### **Policies Regarding Academic Accommodation**

The Faculty of Social Science's policies regarding academic accommodation is found at [http://counselling.ssc.uwo.ca/procedures/having\\_problems/index.html](http://counselling.ssc.uwo.ca/procedures/having_problems/index.html).

"Academic Rights and Responsibilities" are also outlined in the Western Calendar at <http://westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&command=showCategory&SelectedCalendar=Live&ArchiveID=>. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated procedures.

### **Policy Regarding Class Attendance**

If the instructor deems a student's class attendance as unsatisfactory, that student may be prohibited from writing the final examination. If there is intent to make use of this University policy, the student will be notified in writing.

### **Statement on Mental Health and Support Services**

Students under emotional/mental distress should visit [http://uwo.ca/health/mental\\_wellbeing/](http://uwo.ca/health/mental_wellbeing/) for more information and a complete list of resources on how to obtain help.