ENVS 220: Ecological Economics

Winter 2019 - Course Outline
Instructor: Sean Geobey

University of Waterloo - Faculty of Environmental Studies

Meeting times and locations:
Lectures will be held Tuesdays from 10:30am - 12:20pm in AL 113

Where to find this course outline: LEARN website: http://learn.uwaterloo.ca

Instructor and Office Hours:
Sean Geobey; Email: sgeobey@uwaterloo.ca When emailing you must put ENVS220 in the subject line to avoid your email getting lost in the shuffle. I will set regular times to read and respond to emails from this course. If you want to visit during office hours, please send an e-mail and request an appointment.

Office Hours: T: 1:00-2:00pm

Prerequisites: None

TA Office Hours:
TA’s will be available by e-mail for questions and office meetings.

Calendar Description: Evaluation of various economic approaches to the environment. The links between economics, systems and the natural environment will be explored and future directions examined.

Detailed Course Description: This course provides an introduction to ecological economics. An economic background is not a necessity for the course. We will start the course by examining what exactly ecological economics is, as opposed to conventional economics, and as sometimes differentiated from ‘environmental and resource economics’. We will then examine some basic concepts, such as economic growth, natural resources, and market failures and look at some of the theories on these concepts from a variety of economic perspectives. Measures of ‘progress’ will then be examined, comparing conventional measures (of wealth and growth) with those that incorporate environmental components, and we will discuss their usefulness – both conceptually as well as in a policy setting. Following a mid-term test, we will examine issues of equity and just distribution, as well as the implications of economic globalization for the environment, comparing views of conventional economists with those of ecological economists. The course will end with three weeks in which we’ll evaluate policy and individual responses from an ecological economics perspective. Here we will discuss policies focused around taxes, subsidies, quotas and emissions trading, as well as alternative markets and individual consumption. At times, the course will also evaluate both economic and ecological perspectives on the policy responses to current policy problems.

Objectives: The objective of this course is to provide students with an introduction to the field of ecological economics. The course aims to give students the basic tools and concepts to enable them to analyse issues and problems at the interface of the economy and the environment.

Readings: There is one required textbook for this course:
• Several additional required readings will be posted on Waterloo-LEARN.
• Assigned readings should be read *before* the relevant classes.

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<th>Marks Breakdown:</th>
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<td>Final Exam</td>
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**Mid-Term Test (30\%):** There will be a mid-term test held in class on February 12\textsuperscript{th} that covers material taught in the course from January 8\textsuperscript{th} to February 5\textsuperscript{th}.

**Economic Policy Brief (40\%):** You are to write a short policy brief of approximately 5-8 pages double-spaced, which is due on March 21\textsuperscript{st}. This ‘policy brief’ must be addressed to a specific group or individual, and it must give advice to that group or individual about how they should best address, using economic policy tools, any major policy issue relating to the environment. Your assignment, in other words, is to act as an economic policy advisor to that group or individual, helping them to think through how they should best address this particular environmental issue from their particular perspective. The range of possible groups or individuals for whom the brief is written is enormous. Some possibilities might, for example, include: a government (national, provincial/state, local), a prominent politician, a political party, a union, a business organization, a non-governmental organization, etc. In order to capture the attention of this audience, you should clearly explain your recommendation in a one page cover letter which should be attached to the front of the policy brief. The brief should then elaborate and defend this recommendation. The brief must also draw on at least 6 separate sources properly sourced in footnotes (journal articles, books and/or internet resources, but be sure to have a healthy mix of sources – i.e. not all from the internet!) beyond the required readings for the course. The brief will be evaluated according to how persuasively, concisely and interestingly you present the position that you are advocating to your chosen audience. Be creative!

**Final Exam (30\%):** There will be a final exam during the exam period, which primarily covers material taught since the mid-term. Because of the cumulative nature of the material we are learning, however, some basic concepts from the first part of the term will have relevance to the material taught in the second part of the term.

**Policy for Missed Exams:**
No make-up mid-term exam will be provided for this course. Students who do not have a relevant medical certificate will receive a mark of zero on any missed exam and their final grade will be assigned in accordance with the formula specified above. For students who have valid medical certificate (approved by the instructor), the weight of the missed exam will be transferred to the final exam. Policy regarding the missed final exam can be found at: http://www.registrar.uwaterloo.ca/students/accom_illness.html Students are advised to notify the instructor in person about the missed exam as soon as they are better. E-mail notification about the missed exam is not accepted.

**Late Assignments**

It is expected that all course assessments be handed in on the date and time that they are due. Failure to do so will result in a mark reduction of 10\% for the first day and 2\% for every day thereafter to a maximum
of 20%. Any assessment item that is more than 10 days late requires the instructor’s permission to hand in.

**Grades**
Exam marks will be posted on LEARN. Posting grades in public places or sending grades by e-mail are prohibited by university regulations.

**Remarking Policy**
If any student feels that the exam is not marked properly, he/she must inform the instructor within 6 days of the date on which the grades are posted on LEARN. Please be advised that the entire test will be remarked and the grade may improve, remain unchanged or perhaps even decrease as a result of the remarking process.

**Class Attendance**
Most of the exam material will be discussed in class and much of it will not be included in lecture slides. For this reason, it is important that you attend class. Student participation in class is also highly encouraged. Any specific questions can also be addressed during office hours.

**Waterloo LEARN:** There is a Waterloo-LEARN website set up for this course. Announcements, relevant web-links and optional readings will be posted on this site. You should check this site regularly for announcements. Course notes, some of the required readings, as well as additional readings will be posted on this site.

**University Statements:**

**Academic Integrity:** in order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, **including writing exams in a section that you are not registered in**, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, http://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71.

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, http://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70. In addition, consult http://arts.uwaterloo.ca/student-grievances-faculty-arts-processes for the Faculty of Arts’ grievance processes.

**Academic Integrity Website(arts):**
http://arts.uwaterloo.ca/arts/ugrad/academic-responsibility.html

**Academic Integrity Office (uwaterloo):**
http://uwaterloo.ca/academic-integrity/
Note for students with disabilities: The AccessAbility Services (AS) Office, located in Needles Hall Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS Office at the beginning of each academic term.

Schedule of Lectures and Readings:

**Session 1 – January 8**
Introduction

Required reading:

**Session 2 – January 15**
The Battle of Ideas: Neoclassical Environmental Economics vs Ecological Economics

Required reading:
- Daly and Farley, Introduction and Chapter 1

To think about:
- What are the key differences between environmental economics and ecological economics? Are the two schools of thought necessarily at odds with each other?

**Session 3 – January 22**
The Economic Growth Paradigm

Required reading:
- Daly and Farley, Chapters 2 and 3

To think about:
- How is the 'entropy law' relevant to economic growth according to ecological economists? Do you find their arguments convincing?

**Session 4 – January 29**
Natural Resources and Sustainability

Required reading:
- Daly and Farley, Chapters 4 and 7

Optional:
- Daly and Farley, Chapters 5 and 6

To think about:
- Are prices a good indicator of resource scarcity? Why or why not?

**Session 5 – February 5**

**Markets, Externalities and Market Failures**

Required reading:
- Daly and Farley, Chapter 10

Optional:
- Daly and Farley, Chapters 8-9 and 11-12

To think about:
- What are some of the principal ways in which markets fail when it comes to natural resources and ecosystem services? How do ecological economists and environmental economists seek to address market failures?

**Session 6 – February 12**

***Mid-Term Test to be held in regular class-time (same room)***

February 19 - no class reading week

**Session 7 – February 26**

**Indicators of Wealth, Indicators of Sustainability**

Required reading:
- Daly and Farley, Chapters 13 and 14

To think about:
- What are the main shortcomings of standard national income accounting? What other indicators might be more useful than standard income accounting in the pursuit of an environmentally sustainable economy?

**Session 8 – March 5**

**Economic Policy Tools 1: Environmental Taxes and Subsidies**

Required reading:
- Daly and Farley, Chapters 21 and 22
To think about:

➢ What are the merits and downsides of environmental taxes and shifts in subsidies as means to achieve environmental policy goals?

Session 9 – March 12

Economic Policy Tools 2: Quotas and Emissions Trading

Required reading:


To think about:

➢ Are quotas and emissions trading schemes worthwhile tools to combat problems such as air pollution and climate change?

Session 10 – March 19 - Policy brief due

Distribution and Sustainability

Required reading:

- Daly and Farley, Chapters 15 and 16
- Lakner and Milanovic, “Global income distribution from the fall of the wall until the Great Recession. 2014. (Posted on Waterloo-LEARN)

To think about:

➢ Is equity in wealth/income important for sustainability? What are the different views on this question put forward by ecological economists and neoclassical economists?

Session 11 - March 26

Globalization, Trade and Environment

Required reading:

- Daly and Farley, Chapters 18 and 19
To think about:
- What are the principal arguments of ecological economists against free trade and globalization? Do you find these arguments convincing?

Optional:
- Daly and Farley, Chapter 20

Session 12 – April 2
Consumption and Alternative Markets / Exam Review

Required reading (posted on LEARN):

To think about:
- What role can and should ‘green/fair’ trade and ‘sustainable’ consumption play in the pursuit of an environmentally sustainable economy?

**Final Exam to be Held in the Exam Period –
Date, Time and Room Location to be Announced**