ECON 371 Syllabus

Fall 2023

Instructor: Patrick Baylis

Course information

- Tuesdays and Thursdays, 12:30pm - 2pm, BUCH A102
  - Except for Thursday, October 12th ("Make up Monday")
- Office hours: https://calendly.com/patrick-baylis/371-group-office-hours
- Teaching Assistants: TBD
- Course email: ubcecon-g-econ371001@ubc.ca: Please send all course-related questions here (and not Canvas).

This version: September 5, 2023

Overview

Why do many major cities in have bad air quality? How much is a national park worth? Is there such a thing as too little pollution? Why are wildfires becoming more costly to fight? What should we be willing to pay to avoid two degrees of global warming? Why do poor and underprivileged communities often experience the worst air and water quality?

If these kinds of questions are interesting to you, then you're in the right place. The goal of this course is to explore relationships between the environment – the physical world in which we live – and the economy – the buying and selling of goods and services in society. Economics provides a powerful framework for understanding and correcting environmental problems and for measuring the value of both good and bad environmental quality. Since environmental qualities are rarely traded in private markets, scholars of environmental economics (like you!) are frequently forced to confront market failures and deviations from the world of perfect competition described in "Economics 101".

In this course, we'll think about how to understand and categorize the various ways unregulated markets can fail to provide the right level of environmental quality, as well as the policy tools

available to correct some of these failures. We'll also learn to use some of the techniques economists have developed to measure the value of environmental goods and bads. By the end of the course, students should have: A) a solid grounding in the economic theories that help to describe the causes of market-related environmental problems, B) an understanding of the various policy instruments that have been and could be used to correct some of these problems, and C) the ability to apply this knowledge to a range of environmental topics.

Details

Delivery: This course will be delivered twice a week, in person. It is possible that our mode of delivery may need to change following public health or University guidance.

Canvas: Canvas is the central location for this information about the course. I will communicate with you through announcements on Canvas, course material will be posted on Canvas, including lecture slides, recordings, and assigned readings, and all assignments will be given, graded, and returned through Canvas.

Textbook and other course materials: The textbook for the course is *Markets and the Environment* (2e) by Nathaniel O. Keohane and Sheila M. Olmstead (abbreviated KO). You may access it for free through the UBC library and a physical edition is also available for purchase online. Note that while KO is an excellent resource for a policy-oriented introduction to the concepts of the course, the content covered in our lecture notes will extend well beyond what is discussed in the book. In addition to introducing new topics that are not covered in KO, we will also be working with mathematical and graphical models to illustrate the ideas and concepts in the course. I will make other assigned material available through Canvas. You are responsible for the content of the assigned chapters and other required material and for the content of the lectures.

Related courses: Related courses offered by the School of Economics include Economics 370 (Cost Benefit Analysis), 374 (Land Economics), 471 (Non-renewable Resources) and 472 (Renewable Resources).

Prerequisites: ECON101 (Principles of Microeconomics) and ECON102 (Principles of Macroeconomics)

Learning activities: Students will learn the course material by completing the assigned readings, attending lecture, completing problem sets, and taking the final.

Student learning outcomes

1. Work with key economic concepts (e.g., benefits, costs, efficiency, supply, demand, equilibrium, externalities, market failures, and many more…) to describe how environmental goods and bads are created.
2. Use graphical and mathematical models of markets and decision-making to describe how markets can lead to inefficient levels of environmental quality.

3. Discuss and model a range of possible policy solutions to environmental problems.
4. Articulate some of the important intellectual contributions to the field of environmental economics.
5. Extend concepts from class to discuss other kinds of social problems (environmental and otherwise) using the tools and methods learned in this course.

Assessments

Your grade will be determined by your participation in class, two midterms, and a final. In keeping with VSE grading polices, the average grade in this course will fall between 70 and 80%.

Participation: I expect you to attend class and to stay engaged in class discussions. As such, participation will represent 5% of your grade. We will use iClicker Cloud to allow for real-time questions and feedback during lecture time.

I expect that most students will need to miss a few classes, e.g., for illness. As such, I will automatically drop **four** class sessions from the computation of your overall participation score. **There is no need to let me know when you are missing an individual class**, but if you miss **more than four** please be in touch. I will also send out occasional check-in surveys that will be included in your participation score.

Midterms: There will be two midterms, each worth 25% of your overall grade, given in person during class time. The second midterm will be cumulative, i.e., it will include material from the course taught thus far. Both midterms will be closed-note, i.e., you will only be permitted to use a calculator.

Final exam: The final will be worth 45% of your grade and will be cumulative, i.e., it will cover material from the entire course. It will be given in person during the assigned final exam time (to be determined). The final will be also be closed-note.

Ungraded Problem Sets: To help you prepare you for the midterms and final, we will provide three problem sets that are **optional**, i.e., worth zero points.

Re-marking requests: If you believe that an assessment was graded incorrectly by the TA, you can appeal by notifying me via Canvas. However, to be fair, I will regrade the entire assessment, so your score may go up *or* down as a result. *No appeals will be accepted more than seven days after the assessment was returned.*

Topics

The following list of topic is provided as preview of the direction of the course. The detailed schedule will be given and updated on Canvas.

- The economy and the environment
- Benefits, costs, and efficiency
- Markets, externalities, and public goods
- Cost-benefit analysis
- Valuing environmental goods
- Introduction to environmental policy
- Environmental taxes and subsidies
- Permit trading systems
- The economics of climate change
- The economics of natural disasters

Undergraduate academic policies

Student success

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious, spiritual and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here: https://senate.ubc.ca/policies-resources-support-student-success/.

Policy on sharing course materials

All the materials provided to you as part of this course are protected by copyright. All assignment instructions, quiz questions and answers, discussion questions, announcements, lecture slides, audio/video recordings, Canvas modules, and any other materials provided to you by your instructor or in the textbook are for use only by students enrolled in this course this term. Sharing any of these materials beyond this course, including by posting on file-sharing websites (e.g., CourseHero, Google Docs) is a violation of copyright law and an academic offence. Copying and pasting sentences from the lecture notes or the textbook (e.g., definitions) into for-profit software (e.g., Quizlet) is likewise a violation of copyright law, and an academic offence. Violations of this policy will be treated according to the provisos of the Code of Student Conduct. For further information about copyright law, please refer to https://copyright.ubc.ca/students/.

Policy on Academic Honesty

It is the policy of the Vancouver School of Economics to report all violations of UBC's standards for academic integrity to the office of the Dean of Arts. All violations of academic integrity standards will result in a grade of zero on the relevant assessment (exam, paper, assignment etc.). Students who do not have a previous offence may have the option to enter into a diversionary process with the Dean of Arts to resolve their misconduct (https://academicintegrity.ubc.ca/diversionary-process/). Any student who has a previous academic offence will be referred to the President's Advisory Committee on Student Discipline (PACSD) (https://universitycounsel.ubc.ca/homepage/guides-and-resources/discipline/). PACSD may impose additional penalties including: a transcript notation indicating that the student has committed an academic offence, zero in the course, and/or suspension or expulsion from the University. You are personally responsible for understanding and following

the UBC's policies for academic integrity: https://vancouver.calendar.ubc.ca/campus-wide-policies-and-regulations/academic-honesty-and-standards. A Canvas module has been made available you for this purpose titled "Avoiding Academic Misconduct". It is your responsibility to read the materials in that module before submitting any work in this course. Speak to your instructor if you have any questions regarding the standard for academic integrity at UBC and/or the VSE polices on academic misconduct.

There are only three acceptable grounds for academic concessions at UBC: unexpected changes in personal responsibilities that create a schedule conflict; medical circumstances; and compassionate grounds when the student experiences a traumatic event, sexual assault, or death in the family or of a close friend. Academic concessions for graded work and exams are granted for work that will be missed due to unexpected situations or circumstances. Situations that are expected (such as time constraints due to workload in other courses) or are predictable (such as being scheduled for paid work) are not grounds for academic concession.

Requests for academic concessions should be made before the due date for that graded work and/or the writing of the exam. UBC policy does not allow for concessions to students who have missed work because they have registered for a course after the due date for that work. You can read more about the rules for academic concessions here: https://students.ubc.ca/enrolment/academic-learning-resources/academic-concessions. Students in the Faculty of Arts who require a concession can apply for concessions using this form here: https://students.air.arts.ubc.ca/academic-concession-form/. Students in other Faculties should consult their faculty website on academic concessions. Please note that the role of the faculty advising office is to review the evidence and to either support or not support concession requests. The final decision to grant the request always rests with your instructor.

Policy on the Use of AI Learning Tools

The use of AI tools (or any other tool besides a calculator) is prohibited during the midterms or the final. You may use AI tools to assist your learning in other ways, e.g., you may ask ChatGPT to help explain how to answer questions from the ungraded problem sets, but you should be careful to check your understanding with other resources: these tools frequently deliver confidently wrong answers to unsuspecting users.