

Course Title	:	Environmental Economics and Policy
Course Code	:	ECO4324
Recommended Study Year	:	3 and 4
No. of Credits/Term	:	3
Mode of Tuition	:	Lecture-Tutorial
Class Contact Hours	:	2-hour lecture per week 1-hour tutorial per week
Category in Major Prog.	:	Economics, SPPS/IEP/Major (Elective Course)
Discipline	:	Social Sciences
Prerequisite(s)	:	(a) ECO2101 Introduction to Economics, or (b) ECO2104 Introduction to Microeconomics and ECO2105 Introduction to Macroeconomics, or (c) BUS2105 Microeconomics for Business
Co-requisite(s)	:	N/A
Exclusion(s)	:	ECO3314 Environmental Economics and SSC4101 Environmental Issues and Policy
Exemption Requirement(s)	:	N/A

Brief Course Description

This course mainly applies economic analysis to environmental issues, while some insights from environmental science, psychology and political science will also be incorporated. The course will start by discussing the source of environmental problems, i.e. externality and market failure, and then focus on two central questions in environmental economics and management: how much environmental quality is desirable and how to achieve this desirable level. Major topics include nonmarket valuation, regulation and international environmental cooperation.

Aims

The course aims to:

1. enable students to understand environmental issues from a multidisciplinary, especially economic, perspective; and
2. equip them with the knowledge and skills necessary in understanding and evaluating environmental policy.

Learning Outcomes (LOs)

On completion of the course, students will be able to:

1. identify major environmental problems and critically analyse the relationship between

- economic growth and sustainable development,
- 2. critically assess alternative approaches to address environmental problems; and
- 3. evaluate government policies and their implications in terms of costs and benefits.

Indicative Contents

- 1. Introduction: Environmental challenges and sustainable development
- 2. Sources of environmental problems: Externalities, market failure and public goods
- 3. How much environmental quality?
 - 3.i. Social choice
 - 3.ii. Estimating environmental benefits: Non-market valuation
 - 3.iii. Estimating costs and benefit-cost analysis
- 4. How to get polluters to control their emissions? Principles of environmental regulation
 - 4.i. Command and control
 - 4.ii. Economic incentives (taxation, pollution right trading etc.)
 - 4.iii. Should a price be put on environmental quality? Behavioral, psychological and moral perspectives
- 5. Global environmental management
 - 5.i. Transboundary pollution
 - 5.ii. International environmental agreements
 - 5.iii. Global climate change

Teaching Method

Teaching is based on lectures combined with tutorials (LOs 1-3). On top of a mid-term test (LOs 1-2) and a final examination (LOs 1-3), students are required to make individual presentation (LOs 1-3) and participate in discussion at tutorials. Active student participation in class discussion will be encouraged. Problem sets covering real-world environmental problems and government policies will be discussed in tutorials (LOs 1-3).

Measurement of Learning Outcomes

- 1. Tutorial participation and discussions are designed to assess students' comprehension of assigned readings and problem sets (LOs 1-3).
- 2. Students will make an oral presentation on a related topic/problem (LOs 1-3).
- 3. A mid-term test will assess students' understanding of the basic concepts of

environmental issues and policy (LOs 1-2).

4. A final examination will assess students' overall understanding of environmental issues and policies covered by this course; and their ability to apply knowledge in a holistic, critical, and analytical manner (LOs 1-3).

Assessment

Continuous assessment :	100%
- tutorial attendance, participation and presentation *	25%
- 1 st mid-term test	35%
- 2 nd mid-term test	40%

*All students are required to attend tutorials. Marks will be deducted for absence without justifiable reasons.

Required/Essential Reading

Eban Goodstein and Stephen Polasky, Economics and the Environment, 9th edition, Wiley, June 2020.

Recommended/Supplementary Readings

Charles Kolstad, Environmental Economics, 2nd edition, Oxford University Press, 2011.

Scott Callan and Janet Thomas, Environmental Economics and Management: Theory, Policy, and Applications, 6th edition, South-Western Cengage Learning, 2013.

Important Notes:

- (1) Students are expected to spend a total of 9 hours (i.e. 3 hours of class contact and 6 hours of personal study) per week to achieve the course learning outcomes.
- (2) Students shall be aware of the University regulations about dishonest practice in course work, tests and examinations, and the possible consequences as stipulated in the Regulations Governing University Examinations. In particular, plagiarism, being a kind of dishonest practice, is “the presentation of another person’s work without proper acknowledgement of the source, including exact phrases, or summarised ideas, or even footnotes/citations, whether protected by copyright or not, as the student’s own work”. Students are required to strictly follow university regulations governing academic integrity and honesty.
- (3) Students are required to submit writing assignment(s) using Turnitin.
- (4) To enhance students’ understanding of plagiarism, a mini-course “Online Tutorial on Plagiarism Awareness” is available on <https://pla.ln.edu.hk/>.
- (5) Students must adhere to the University’s guidelines and practices when using Generative Artificial Intelligence (AI) tools. The official documents “Guidelines for Using GAI Tools at Lingnan University” and “Best Practices for Ethical and Responsible Use of GAI Tools in Course Assessments” can be found

here: <https://www.ln.edu.hk/tlc/generative-artificial-intelligence/gai-guidelines-best-practices>.

Grading Rubrics for Mid-term Test (25%) /Final Exam Questions (50%)

	Excellent (A, A-, B+)	Acceptable (B, B-, C+, C)	Poor (C-, D+, D, F)
Accuracy (10% and 20%)	The response uses the information from appropriate sources clearly, fully, directly, and accurately. (83-100%)	The response communicates most of the relevant information in a generally correct and understandable way. (50-82%)	The response contains several factual errors (0-49%)
Analytic depth (10% and 20%)	The answer and opinions provided are well-supported with obvious and direct reference to pertinent information. The argument examines all sides of an issue thoroughly. (83-100%)	The answer and opinions provided are generally supported though some assumptions are not obvious or stated clearly. Some propositions may not be defended well. The argument mentions all sides of an issue, though not all sides are analyzed in equally appropriate depth. (50-82%)	The answer and opinions provided are barely or not supported by any argument or appeal to information in the article, lecture, or other relevant source. The argument is narrow, superficial, and/or one-sided. (0-49%)
Clarity of exposition (5% and 10%)	The written response is excellent with no glaring errors of spelling, usage, or grammar. (83-100%)	The quality of writing is good with few, though noticeable, errors in usage, spelling, and grammar. (50-82%)	There are frequent language errors in usage, spelling, and/or grammar. (0-49%)

Rubrics for tutorial attendance and participation (10%)

	Excellent A-, A	Good B- to B+	Acceptable C- to C+	Poor D or below
Attendance (5%)	No absence	1-2 absences without appropriate reason	3-4 absences without appropriate reason	5 or more absences without appropriate reason
Participation (5%)	Frequently raises excellent questions and/or eagerly responds to questions	Often raises excellent questions and/or eagerly responds to questions	Occasionally raises questions and/or responds to questions	Rarely raises questions and/or responds to questions

Rubrics for Individual Presentation (15%)

	Excellent (A, A-, B+)	Acceptable (B, B-, C+, C)	Poor (C-, D+, D, F)
Accuracy (6%)	The response uses the information from appropriate sources clearly, fully, directly, and accurately. (83-100%)	The response communicates most of the relevant information in a generally correct and understandable way. (50-82%)	The response contains several factual errors. (0-49%)
Analytic depth (6%)	The answer and opinions provided are well-supported with obvious and direct reference to pertinent information. The argument examines all sides of an issue thoroughly and reasonably. (83-100%)	The answer and opinions provided are generally supported though some assumptions are not obvious or stated clearly. Some propositions may not be defended well. The argument mentions all sides of an issue, though not all sides are analyzed in equally appropriate depth. (50-82%)	The answer and opinions provided are barely or not supported by any argument or do not appeal to information in the article, lecture, or other relevant source. The argument is narrow, superficial, and/or one-sided. (0-49%)
Clarity (3%)	The presentation is excellent. (83-100%)	The quality of presentation is good and clear. (50-82%)	The presentation is unclear. (0-49%)