THE UNIVERSITY OF HONG KONG FACULTY OF BUSINESS AND ECONOMICS

ECON3232 Environmental Economics

GENERAL INFORMATION

Instructor: Dr. Guojun He

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Tutor: NA

Pre-requisite(s): ECON2210 Intermediate Microeconomics and ECON2280 Introductory Econometrics

Co-requisite(s): N/A Mutually exclusive: N/A

Course website: http://moodle.hku.hk Other important details: TBA

COURSE DESCRIPTION

This course is about environmental economics with an emphasis on policies that seek to mitigate the impacts of environmental problems. We will connect microeconomic theories with real world environmental policy applications. The course begins with an overview of microeconomic theories that are particularly relevant to environmental regulations; then it moves on to the key topics in environmental economics and policies. Particular issues include market failure, externality, common goods and public goods, valuation of non-market goods, environmental regulations, renewable and nonrenewable resource management, air pollution, water pollution, and economics of climate change. The objective of this course is to develop an understanding of environmental problems from an economist's point of view.

COURSE OBJECTIVES

- 1. To provide students with important facts about environmental problems in our society and discuss their economic importance
- 2. To provide in-depth understanding of the key economic models in environmental economics
- 3. To develop essential analytical skills to analyze various environmental policies
- 4. To foster critical thinking of the students in assessing public policies
- 5. To broaden perspectives of ethics and social responsibility

FACULTY LEARNING GOALS (FLGs)

- FLG1: Acquisition and internalization of knowledge of the programme discipline
- FLG2: Application and integration of knowledge
- **FLG3**: Inculcating professionalism **FLG4**: Developing global outlook
- FLG5: Mastering communication skills
- FLG6: Cultivating leadership

COURSE LEARNING OUTCOMES (CLOs)

COURSE LEARNING OUT COMES (CLOS)		
Course Learning Outcomes	Aligned Faculty Learning Goals (FLGs)	
CLO1. Understand basic economics models to analyze environmental problems	FLG1	
CLO2. Being able to apply different non-market valuation methods to value environmental goods and conduct benefit-cost analysis	FLG1, FLG2, FLG3	
CLO3. Being able to compare different social policies and analyze their welfare implications	FLG1, FLG2, FLG3, FLG4	
CLO4. Demonstrate effective written and verbal communication and teamwork skill through presentations and reports	FLG5, FLG6	

Course Teaching and Learning Activities		Expected Study Hours	Study Load (% of study)
TLA1. Interactive Lectures with Discussions and Debates TLA2. Group Projects (Presentations + Reports) TLA3. Assignments TLA4. Self-Study (Readings)		36 30 30 36	27% 23% 23% 27%
	Total	132	100%

Assessment Methods	Brief Description (Optional)	Weight	Aligned Course Learning Outcomes
A1. Final Exam A2. Assignments A3. Group Presentation + Report A5. Participation	(Four assignments in total)	40% 20% 30% 10%	CLO 1-4 CLO 1-4 CLO 1-4 CLO 1-4
	Total	100%	

STANDARDS FOR ASSESSMENT

Course Grade Descriptors

D+, D

F

A+, A, A

Demonstrate superb ability to comprehend the course materials and achieve all the intended learning outcomes of the course, as evidenced by an exceptionally thorough understanding of the concepts and reasoning presented in this course and being able to apply it creatively to the analysis and interpretation of observed economic phenomenon.

B+, B, B

Demonstrate strong ability to comprehend the course materials and achieve the majority of the intended learning outcomes of the course, as evidenced by a good understanding of the concepts and reasoning presented in this course and being able to apply it well to the analysis and interpretation of observed economic phenomenon.

C+, C, C

Demonstrate fair levels of understanding of the course materials, as evidenced by a roughly accurate understanding of the concepts and reasoning presented in this course and being able to apply it most of the time to the analysis and interpretation of observed economic phenomenon.

Demonstrate some evidence of basic familiarity with the course materials, as evidenced by a somewhat accurate understanding of the concepts and reasoning presented in this course and beingable to apply it only some of the time to the analysis and interpretation of observed economic phenomenon.

Demonstrate a poor grasp of the course materials, as evidenced by a largely inaccurate understanding of the concepts and reasoning presented in this course and being unable to apply it to the analysis and interpretation of observed economic phenomenon.

Assessment Rubrics for Each Assessment (Please provide us the details in a separate file if the space here is not enough)

Exam and Ho	mework Assignments
A+, A, A-	Respond to all or almost all of the questions clearly and accurately. All or almost all of the responses are well organized, clear, fluent, and with appropriate elaboration.
B+, B, B-	Respond to most of the questions clearly and accurately. Most of the responses are well organized, clear, fluent, and with appropriate elaboration.
C+, C, C-	Respond to some of the questions clearly and accurately. Some of the responses are well organized, clear, fluent, and with appropriate elaboration.
D+, D	Respond to few of the questions clearly and accurately. Few of the responses are well organized, clear, fluent, and with appropriate elaboration.
F	Respond to very few of the questions clearly and accurately. Very few of the responses are well organized, clear, fluent, and with appropriate elaboration.

Group	Presentation	+	Report	

A+, A, A-	Strong evidence of superb ability in a clear identification of the problem, a clear logical analysis,
	a clear and logical policy recommendation, as well as a clear delivery.

B+, B, B- Strong evidence of ability in a clear identification of the problem, a clear logical analysis, a clear

C+, C, C-	logical policy recommendation, as well as a clear delivery. Evidence of adequate ability in a clear identification of the problem, a clear logical analysis, a clear logical policy recommendation, as well as a clear delivery.
	clear logical policy recommendation, as well as a clear delivery.
D+, D	Evidence of basic ability in a clear identification of the problem, a clear logical analysis, a clear logical policy recommendation, as well as a clear delivery.
F Little or no evidence of basic ability in a clear identification of the problem, a clear logic analysis, a clear logical policy recommendation, as well as a clear delivery.	
Participation	
A+, A, A-	Attend almost all lectures (> 85%) and participate in the exercises and discussions therein.
B+, B, B-	Attend most lectures (> 70%) and participate in the exercises and discussions therein.
C+, C, C- Attend more than half of all lectures (> 55%) and participate in the exercises and discuss therein.	

Attend slightly less than half of all lectures and participate in the exercises and discussions

Attend much less than half of all lectures and participate in the exercises and discussions

COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

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therein.

Week	Topics
1	Economics and Environmental Economics
2	Comparative Statics and Welfare Analysis
3	Externality and Coase Theorem
4	Valuing the Environment
5	Benefit-Cost Analysis
6	Production, Costs, and Pollution
7	The Economics of Environmental Regulations
8	Regulations: Standards and Market-based Instruments
9	Renewable and Non-Renewable Resource Management
10	Air Pollution and Pollution Control Policies
11	Pollution and Health in China
12	The Economics of Climate Change
13	Presentation and Final Review

REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)

- "The Economics of the Environment", by Peter Beck and Gloria Helmand, Prentice Hall; 1 edition, 2010.
- "Environmental & Natural Resource Economics" by Tom Tietenberg and Lynne Lewis, Pearson Press.
- · Reading materials provided by the instructor

MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

- conducting mid-term survey in additional to SETL around the end of the semester
- Online response via Moodle site
- Others: regular discussion with students on their needs and their learning progress

COURSE POLICY (e.g. plagiarism, academic honesty, attendance, etc.)

Class Conduct

D+, D

Students are required to attend all classes on time. If you miss a class, it is entirely your responsibility for what you have missed. In case you have to leave the class early, please inform the instructor beforehand and leave quietly. No use of mobile phone or chatting is allowed when the class is in session. Remember to turn off or mute the phone before each session. The instructor has the discretion to give penalty in case of class misconduct. Respect your instructors and your fellow students and be considerate to others.

• Plagiarism and Misconduct

No plagiarism will be tolerated. The University Regulations on academic dishonesty will be strictly enforced. Please check the University Statement on plagiarism on the web: http://www.hku.hk/plagiarism/.

Academic dishonesty is behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to

gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

- Plagiarism The representation of someone else's ideas as if they are one's own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged.
- o The representation of work as solely one's own when in fact it is the result of a joint effort.

Where a candidate for a degree or other award uses the work of another person or persons without due acknowledgment:

- The relevant Board of Examiners may impose a penalty in relation to the seriousness of the offence;
- The relevant Board of Examiners may report the candidate to the Senate, where there is prima facie evidence of an intention to deceive and where sanctions beyond those in (1) might be invoked.

ADDITIONAL COURSE INFORMATION (e.g. e-learning platforms & materials, penalty for late assignments, etc.)

- Announcement, assignments, and lecture slides will be posted on the course website. Hard copy of lecture
 notes will not be provided. Students are expected to log into and check the system regularly for any updated
 information and announcements, and to download the teaching and learning materials for the study. Students
 are also required to read extra reading materials that are posted on the course website.
- Penalty for late submission of assignments and group project: any late submission of homework assignments, or the group project will be subject to a 50% penalty deduction of the respective total marks per calendar day after [11:59 pm] of the due date, unless prior written permission is obtained from the Instructor under special circumstances, e.g. medical leave.
- E-mail should be reserved for questions related to scheduling, appointments or administrative issues. The instructor will not answer questions about class materials by e-mail; please come to office hours or schedule an appointment if you have any questions related to course material.
- Special examinations are not granted to students taking up summer internships. Please avoid starting your internships before the end of the examination period.