

**City University of Hong Kong**  
**Course Syllabus**

**offered by Department of Economics and Finance**  
**with effect from Semester B 2018/19**

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**Part I Course Overview**

<b>Course Title:</b>	<b>Green Economics</b>
<b>Course Code:</b>	<b>GE1205</b>
<b>Course Duration:</b>	<b>1 Semester</b>
<b>Credit Units:</b>	<b>3</b>
<b>Level:</b>	<b>B1</b>
<b>Proposed Area:</b> <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input checked="" type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
<b>Medium of Instruction:</b>	<b>English</b>
<b>Medium of Assessment:</b>	<b>English</b>
<b>Prerequisites:</b> <i>(Course Code and Title)</i>	<b>Nil</b>
<b>Precursors:</b> <i>(Course Code and Title)</i>	<b>Nil</b>
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	<b>Nil</b>
<b>Exclusive Courses:</b> <i>(Course Code and Title)</i>	<b>Nil</b>

## **Part II Course Details**

### **1. Abstract**

This course provides student with knowledge of environmental issues, which is inclusive of discovering environmental problems in the “real-life” context, analysing key issues in an innovative way and figuring out effective solutions to these situations. Current topics such as what is the interrelation between environmental issues and economics and what is the influence of environmental issues on the society, government and technological development will be deeply discussed in seminars. Meanwhile, the course aims to arouse student’s interest in environmental issue and develop student’s sense of responsibility of environmental protection.

Student will gain the knowledge through discussion during seminars, teamwork in group project and interaction during presentation. In addition, because environmental protection is a multi-disciplinary subject matter, cross-disciplinary seminar talks will be arranged to facilitate understanding. Through the course, students will enhance their creative thinking and analytical skills.

#### **Course Aims**

- (1) Arouse students’ awareness and interest in environmental issues and help them think critically on the issues;
- (2) Understand the relations between the environment and the economy and discover the underlying interrelations;
- (3) Develop students’ ability in analyzing and solving environmental problems using their creative and innovative ability.
- (4) Develop students’ sense of responsibility of environmental protection, and lead them to do self-reflection and assessments on issues related to environmental protection;
- (5) The course also encourages discovery learning as students use their knowledge and skills acquired through seminars to discover, for themselves various solutions that incorporate economic analysis when dealing with environmental problems in real-life contexts;
- (6) Students will develop their attitude and ability to discover and innovate through class discussion and group case studies. The project presentation and examinations will reflect their accomplishments in discovery and innovation.

## 2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs <sup>#</sup>	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Identify and outline current and major environmental issues; to motivate discovery-based learning; students are to compare and contrast different issues.	20%	√	√	√
2.	Explain how the environment is related to economy; and how economic analysis and illuminate these issues; students will discover the interrelations between environment and economy, and strengthen their discovery skills when examining these issues in real life context.	25%	√	√	√
3.	Apply multi-dimensional analysis to environmental issues and problems; incorporate perspectives from economics, politics, science and engineering.	25%	√	√	√
4.	Suggest practical solutions to environmental problems based on in-depth reflection, criticism, and assessment.	20%	√	√	√
5.	Demonstrate awareness of one's own responsibility to environmental protection.	10%	√	√	
		100%			

\* If weighting is assigned to CILOs, they should add up to 100%.

# Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

### A1: Attitude

*Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.*

### A2: Ability

*Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.*

### A3: Accomplishments

*Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.*

### 3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
<b>Seminars</b>	<p>Lecturer encourages students to think critically and logically by asking them to respond to questions and getting students to solve the problems by themselves instead giving away the solutions</p> <p>Suggested arrangements/interactions:</p> <ul style="list-style-type: none"> <li>– Part 1: 30 minutes</li> <li>– The instructor outlines basic ideas or showing related videos</li> <li>– Part 2: 30 minutes</li> <li>– Students are divided into groups</li> <li>– Each group is assigned a piece of reading</li> <li>– Readings can be different for each group</li> <li>– Students discuss the topics based on the readings</li> <li>– Part 3: 30 minutes</li> <li>– A representative from each group summarize and present the group's ideas</li> <li>– If there are too many groups, which group to present can be determined by random draw</li> <li>– Group can also present their conclusions in an online forum for discussion</li> <li>– At the end of this part, each group are required to submit one question for further discussion</li> <li>– Part 4: 30 minutes</li> <li>– Each group takes the question raised by another group for further discussion</li> <li>– Each group is required to write a short paragraph based on the question (about 50 to 100 words), providing explanations or solutions for the question.</li> <li>– The short paragraph should be submitted at the end of this part.</li> <li>– Part 5: 30 minutes</li> <li>– The instructor gives comments on students' presentation and draws conclusion of the topic.</li> <li>– An extra session may be arranged for group project presentation.</li> </ul>	√	√	√	√		3 hours per week

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
<b>Group project</b>	<p>Suggested arrangements</p> <ul style="list-style-type: none"> <li>• 4 to 5 students form a group</li> <li>• Each group identifies an environmental problem (may be through a field trip to places with environmental damages)</li> <li>• Students need to explain and analyze the problem</li> <li>• Students need to suggest practical solutions to the problem</li> <li>• Students need to submit an essay as a summary of their findings</li> </ul>	√	√	√	√	√	
<b>Presentation</b>	<p>Suggested arrangements</p> <ul style="list-style-type: none"> <li>• Students present their group project in the last (extra) seminar</li> <li>• Each group needs to respond to questions raised by the audiences</li> <li>• Students can discuss with the instructor on their chosen topic</li> <li>• The instructor gives verbal feedback to students after their presentation</li> </ul>	√	√	√	√	√	
<b>Weekly journal</b>	<p>Suggested arrangements</p> <ul style="list-style-type: none"> <li>• Require students to keep a weekly journal of what have they done to support the environmental protection</li> <li>• These journals can be used for discussion on Topic 13</li> <li>• Students need to submit their weekly journals at the end of week 10 for informal assessment and feedback</li> </ul>	√	√	√	√	√	
<b>Cross-discipline seminar talk (tentatively scheduled for the weekends)</b>	<p>One to two seminar talks by professionals from the School of Energy and Environment (SEE) will be arranged during lectures. Students are required to submit a post-seminar report to reveal their understanding of the issues discussed in the seminar.</p>	√	√	√	√		

#### 4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.					Weighting*	Remarks
	1	2	3	4	5		
Continuous Assessment: 100%							
Group project Report and Presentation (It assesses students' ability to identify and describe real-world environmental problems, and offer practical solutions to them based on economic and other considerations. Students are required to present their work in both written report and verbal presentation.)	√	√	√	√	√	30%	
Participation in seminars (Exercises covering various green economics issues will be given to students in seminars. The purpose is to develop students' collaborative ability to apply economic concepts to the issues including their fixes through discussion and reflection.)	√	√	√	√	√	10%	
Short quizzes (A combination of multiple-choice questions and short real-world cases. The former assess students' understanding of the interrelations between environment and economy, and the later assess their ability to apply multi-dimensional analysis to environmental problems and their solutions.)	√	√	√	√		50%	
Weekly journal or Seminar report (It is a written record of one thing that student does every week during the course to protect and save the environment. It develops students' awareness of the environmental problems and issues through examining their environments, and working out suitable actions for fixing them.)	√	√	√	√	√	10%	
Examination: 0% (duration: , if applicable)							
						100%	

\* The weightings should add up to 100%.

**5. Assessment Rubrics**

*(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)*

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Group project Report and Presentation		i. Delivering a succinct, convincing and fluent presentation on the original analysis and practical solutions to an environmental problem ii. Students have demonstrated very strong overall ability to discover and innovate, and shown very strong evidence of accomplishments of discovery	i. Delivering a fluent presentation on the critical analysis and practical solutions to an environmental problem ii. Students have demonstrated strong overall ability to discover and innovate, and shown strong evidence of accomplishments of discovery.	i. Delivering a presentation on the basic analysis and solutions to a simple environmental problem ii. Students have demonstrated some ability to discover and innovate, and shown satisfactory evidence of accomplishments of discovery	Students have demonstrated marginal ability to discover and innovate, and shown marginal evidence of accomplishments of discovery.	Students have demonstrated little evidence of ability to discover and innovate, and shown little evidence of accomplishments of discovery.

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Participation in seminars (including the questions and short paragraphs submitted during the seminars)		i. Strong evidence of original thinking in applying the multi-dimensional analysis and proposing practical solutions to environmental problems ii. Extensive knowledge in current environmental issues	i. Some evidence of critical capacity and analytic ability in applying the multi-dimensional analysis and proposing practical solutions to environmental problems ii. Evidence of familiarity in current environmental issues	i. Basic understanding in major environmental issues		
Short quizzes		i. Superior abilities in identifying major environmental issues, understanding the relations between environment and economy and appreciating the multi-disciplinary nature of environmental issues	i. Evidence of abilities in identifying major environmental issues, understanding the relations between environment and economy and appreciating the multi-disciplinary nature of environmental issues	i. Ability of applying basic analysis and developing solutions to simple environmental problems	Sufficient familiarity with the subject.	Little evidence of familiarity with the subject.

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Weekly journal or Seminar report		i. Practical and innovative ways of supporting environmental protection mentioned in the journals	i. Practical ways of supporting environment protection mentioned in the journals	i. Limited ways of supporting environmental protection mentioned in the journals		

**Part III Other Information** (more details can be provided separately in the teaching plan)

**1. Keyword Syllabus**

Natural Resources, waste, ecosystem, biodiversity, global climate change, environmental quality, economic activity and environment materials balance model, energy production and consumption, Kyoto Protocol, Copenhagen Conference

Scarcity, choices, opportunity cost, circular flow model, market system, demand supply, consumers, producers, competitive market, efficiency, cost and benefit analysis

**2. Reading List**

**2.1 Compulsory Readings**

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	<i>The Economic Approach to Environmental and Natural Resources</i> , Third Edition, by KAHN, J.R., published by Thomson South-Western, 2005.
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**2.2 Additional Readings**

(Additional references for students to learn to expand their knowledge about the subject.)

<b>Supplementary Readings:</b>	
1.	<i>Economics</i> , Second edition, by KRUGMAN, P and WELLS, R, published by Worth Publishers, 2010.
2.	<i>Environmental Economics: An Introduction</i> , 5 <sup>th</sup> Edition, by B.C. Field and M.K. Field, published by McGraw-Hill, 2009.
3.	<i>Environmental Economics and Policy</i> , Fourth Edition, by TIETENBERG, T., published by Addison Wesley, 2004.
4.	<i>Environmental Economics: Applications, Policy, and Theory</i> , Fifth edition, by THOMAS, J.M. and CALLAN, S.J., published by Thomson South-Western, 2009.
5.	<i>Environmental Science</i> , Eleventh Edition, by MILLER, G.T., published by Thomson Learning, 2006.
6.	<i>Living in the Environment</i> , Fifteenth Edition, by MILLER, G.T., published by Thomson Learning, 2007.
7.	<i>Natural Resource and Environmental Economics</i> , Third Edition, by PERMAN, R., MA, Y., MCGILVRAY, J., and COMMON, M., published by Addison Wesley, 2003.
8.	<i>Our Choice: A Plan to Solve the Climate Crisis</i> , by GORE, A., published by Rodale, 2009.
9.	<i>The Copenhagen Diagnosis</i> , 2009: Updating the World on the Latest Climate Science, The University of New South Wales Climate Change Research Centre (CCRC), Sydney, Australia.
<b>Online Resources:</b>	
1.	A long game: China sees opportunities as well as dangers in climate change, The Economist, 3 December 2009 <a href="http://www.economist.com/specialreports/displaystory.cfm?story_id=14994880">http://www.economist.com/specialreports/displaystory.cfm?story_id=14994880</a>
2.	A special report on climate change and the carbon economy, The Economist, 3 December 2009 <a href="http://www.economist.com/specialreports/displayStory.cfm?story_id=14994872">http://www.economist.com/specialreports/displayStory.cfm?story_id=14994872</a>
3.	Booklet: How to save the climate published by Greenpeace China <a href="http://www.greenpeace.org/raw/content/china/ch/press/reports/save-climate-booklet.pdf">http://www.greenpeace.org/raw/content/china/ch/press/reports/save-climate-booklet.pdf</a>
4.	Can Energy Be Governed?, Ann Florini, Project Syndicate, 11 January 2010 <a href="http://www.project-syndicate.org/commentary/florini2">http://www.project-syndicate.org/commentary/florini2</a>

5.	Carbon trading, CBC News, 3 November 2006 <a href="http://www.cbc.ca/news/background/kyoto/carbon-trading.html">http://www.cbc.ca/news/background/kyoto/carbon-trading.html</a>
6.	Carbon Trading: How it works and why it fails?, by Tamra Gilbertson and Oscar Reyes, published by Dag Hammarskjold Foundation Uppsala, 2009 <a href="http://www.carbontradewatch.org/index.php?option=com_content&amp;task=view&amp;id=322&amp;Itemid=292">http://www.carbontradewatch.org/index.php?option=com_content&amp;task=view&amp;id=322&amp;Itemid=292</a>
7.	CityU Greenweb <a href="http://www7.cityu.edu.hk/greenweb/">http://www7.cityu.edu.hk/greenweb/</a>
8.	Climate Change and “Climategate”, Bjørn Lomborg, 12 November 2009 <a href="http://www.project-syndicate.org/commentary/lomborg55">http://www.project-syndicate.org/commentary/lomborg55</a>
9.	Copenhagen deal: key points, BBC News, 19 December 2009 <a href="http://news.bbc.co.uk/2/hi/science/nature/8422307.stm">http://news.bbc.co.uk/2/hi/science/nature/8422307.stm</a>
10.	Copenhagen Diagnosis 2009 <a href="http://www.copenhagendiagnosis.org/">http://www.copenhagendiagnosis.org/</a>
11.	European Environmental Agency <a href="http://www.eea.europa.eu/">http://www.eea.europa.eu/</a>
12.	Friends of the Earth, <a href="http://www.foe.co.uk/">http://www.foe.co.uk/</a>
13.	How Carbon Trading Works? <a href="http://science.howstuffworks.com/carbon-trading.htm/printable">http://science.howstuffworks.com/carbon-trading.htm/printable</a>
14.	Q&A: The Copenhagen Climate Submit, BBC News, 21 December 2009 <a href="http://news.bbc.co.uk/2/hi/science/nature/4269921.stm">http://news.bbc.co.uk/2/hi/science/nature/4269921.stm</a>
15.	Q&A: The Kyoto Protocol, BBC News, 16 February 2005 <a href="http://news.bbc.co.uk/2/hi/science/nature/4269921.stm">http://news.bbc.co.uk/2/hi/science/nature/4269921.stm</a>
16.	Is it worth it? What economists have to say about mitigating climate change, The Economist, 3 December 2009 <a href="http://www.economist.com/specialreports/displaystory.cfm?story_id=14994731">http://www.economist.com/specialreports/displaystory.cfm?story_id=14994731</a>
17.	Kyoto Protocol <a href="http://unfccc.int/resource/docs/convkp/kpeng.pdf">http://unfccc.int/resource/docs/convkp/kpeng.pdf</a>
18.	Overcoming the Copenhagen Failure, Joseph E. Stiglitz, Project Syndicate, 6 January 2010 <a href="http://www.project-syndicate.org/commentary/stiglitz121">http://www.project-syndicate.org/commentary/stiglitz121</a>
19.	The green slump: Why investors have been deserting clean energy, The Economist, 3 December 2009 <a href="http://www.economist.com/specialreports/displaystory.cfm?story_id=14994802">http://www.economist.com/specialreports/displaystory.cfm?story_id=14994802</a>
20.	United Nations Economic Mission for Europe <a href="http://www.unece.org/env/">http://www.unece.org/env/</a>
21.	United States Environmental Protection Agency (EPA) <a href="http://www.epa.gov/">http://www.epa.gov/</a>
<b>Multimedia Resources:</b>	
1.	Design e <sup>2</sup> (Video Recording): the economies of being environmentally conscious, PBS Home Video, 2006 Call No.: NA2542.35 .D44 2006
2.	Environmental issues and human impact (Video Recording), Princeton, N.J. : Cambridge Educational, 2006 Call No.: TD174 .E5825 2006
3.	State of the planet (Video Recording), London: BBC Worldwide, 2001 Call No.: GF75 .S838 2001
4.	The global environment (Video Recording), London: BBC, 1990 Call No.: TD170 .G56 1990

5.	停車熄匙 (Video Recording), 時事追擊, 香港:亞洲電視, 21/02/2009 Call No.: <u>DS796.H7 S55 2009</u>
6.	塑膠購物袋徵費計劃 (Video Recording), 時事追擊, 香港:亞洲電視, 11/07/2009 Call No.: <u>DS796.H7 S55 2009</u>
7.	冷凍之都, 新聞透視 (Video Recording), 香港:電視廣播有限公司, 20/08/2005 Call No.: <u>DS796.H7 X55 2005</u>
8.	綠化香港 (Video Recording),新聞透視, 香港:電視廣播有限公司, 12/16/2000 Call No.: <u>DS796.H7 X55 2000</u>
9.	垃圾圍城 (Video Recording), 時事追擊, 香港:亞洲電視, 02/07/2005 Call No.: <u>DS796.H7 S55 2005</u>
10.	環保代價 (Video Recording),新聞透視, 香港:電視廣播有限公司, 30/03/2006 Call No.: <u>DS796.H7 X55 2006</u>
11.	環境保護與可持續發展 (Video Recording), 中國人民大學出版社:中國人民大學音像出版, 社, 2004 Call No.: <u>HC21 .S54 2004 v.10</u>
12.	環保實錄. 飲水思源 (Video Recording), 時事追擊, 香港:亞洲電視, 05/09/2009 Call No.: <u>DS796.H7 S55 2009</u>

A summary in English can be prepared for non-Cantonese speaking students if necessary.

**Resource Planning and Consultation:** Refer to the Explanatory Notes

*(Please indicate the requirements and planning for special resources to support the course offering, and consult expertise in other related disciplines if the proposal covers content beyond your own discipline.)*

Video equipment

Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

<b>GE PILO</b>	<b>Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)</b>
PILO 1: Demonstrate the capacity for self-directed learning	ALL CILOs
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	ALL CILOs
PILO 3: Demonstrate critical thinking skills	CILOs 4 to5
PILO 4: Interpret information and numerical data	CILOs 4 to5
PILO 5: Produce structured, well-organised and fluent text	CILOs 1 to 5
PILO 6: Demonstrate effective oral communication skills	CILOs 1 to 5
PILO 7: Demonstrate an ability to work effectively in a team	CILOs 1 to 5
PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues	CILOs 1 to 5
PILO 9: Value ethical and socially responsible actions	CILOs 6
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	CILOs 1 to 5

*GE course leaders should cover the mandatory PILOs for the GE area (Area 1: Arts and Humanities; Area 2: Study of Societies, Social and Business Organisations; Area 3: Science and Technology) for which they have classified their course; for quality assurance purposes, they are advised to carefully consider if it is beneficial to claim any coverage of additional PILOs. General advice would be to restrict PILOs to only the essential ones. (Please refer to the curricular mapping of GE programme: [http://www.cityu.edu.hk/edge/ge/faculty/curricular\\_mapping.htm](http://www.cityu.edu.hk/edge/ge/faculty/curricular_mapping.htm).)*

- A. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

<b>Selected Assessment Task</b>
<p>Group Presentation</p> <p>Group Project Essay</p>