

City University of Hong Kong
Course Syllabus

offered by School of Energy and Environment
with effect from Semester B 2019/20

Part I Course Overview

Course Title:	Urban Sustainability
Course Code:	SEE3205
Course Duration:	One semester
Credit Units:	3
Level:	B3
Proposed Area: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: <i>(Course Code and Title)</i>	SEE1003 Introduction to Sustainable Energy and Environmental Engineering
Precursors: <i>(Course Code and Title)</i>	Nil
Equivalent Courses: <i>(Course Code and Title)</i>	Nil
Exclusive Courses: <i>(Course Code and Title)</i>	Nil

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course aims to provide the students with a basic understanding of key concepts and methodologies concerning urban sustainability and enhance their ability to address actual urban sustainability issues by incorporating environmental, technological, social and policy dimensions. The students will participate in field trips and on-site discussions with practitioners from industry and the public sector to better understand the challenges associated with the built environment. In the course, the students will work together in teams on one of the urban sustainability challenges (i.e., energy distribution, water and wastewater treatment, green building, and waste management) and to propose policy-focused solutions for the problem. Each group is required to demonstrate their progress on the project through a series of in-class presentations. Every group member will have to present at least once during the course of the semester and will be evaluated based on their ability to illustrate their understanding of the structure of the challenge and suggest possible solutions to improve the urban sustainability.

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 [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Describe key challenges for urban sustainability through lectures, field trips and site visits		√		
2.	Explain major factors affecting urban sustainability		√	√	
3.	Describe potential solutions to urban sustainability challenges		√	√	
4.	Develop proposals for public policies that would promote urban sustainability in Hong Kong			√	√
5.	Present and defend the proposed policy-focused sustainability solutions				√
		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	
Lecture	Acquire basic understanding of key urban sustainability challenges. The major concepts and methodologies covered in this course include energy distribution, water and wastewater treatment, green building, and waste management, and policy-oriented solution.	√	√	√	√	√	
Field Trip	Learn actual practices in dealing with urban sustainability challenges through field visits.	√	√	√		√	
Group work and Presentation	Analyse urban sustainability challenges in Hong Kong as teams and present proposals for policy-oriented solutions with guidance by the course leader.	√	√	√	√	√	

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: <u>100</u> %							
Assignments	√	√	√	√		25%	Related to field trips
Group Report			√	√	√	25%	Related to the Project
Presentations	√	√	√	√	√	50%	Series of presentations
Examination: <u>0</u> % (duration: N/A, if applicable)							
* The weightings should add up to 100%.						100%	

Examination duration: N/A

Percentage of coursework, examination, etc.: 100% by coursework

To pass a course, a student must do ALL of the following:

- 1) obtain at least 30% of the total marks allocated towards coursework (combination of assignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);
- 2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and
- 3) meet the criteria listed in the section on Assessment Rubrics.

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)
1. Assignments	Ability to summarize and critique the existing solutions of urban sustainability observed during field trips and site visits.	High	Significant	Moderate	Basic	Not even reaching marginal level
2. Group Report	1. Ability to analyse the basic structure of an urban sustainability challenge in Hong Kong. 2. Ability to propose policy-focused sustainability solutions to one of the urban sustainability challenges.	High	Significant	Moderate	Basic	Not even reaching marginal level
3. Presentations	Ability to present an urban sustainability challenge and respective policy-focused sustainability solutions effectively and convincingly.	High	Significant	Moderate	Basic	Not event reaching marginal level

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

1. Keyword Syllabus

(An indication of the key topics of the course.)

Urban Sustainability, Energy Distribution, Water and Wastewater Treatment, Green Building, Waste Management, and Sustainable Solutions

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.	Planning Department of Hong Kong SAR Government. 2016. Hong Kong 2030+: A Smart, Green and Resilient City Strategy. (https://www.hk2030plus.hk/document/Hong%20Kong%202030+%20A%20SGR%20City%20Strategy_Eng.pdf)
2.	Development Bureau and Planning Department of Hong Kong SAR Government. 2016. Hong 2030+: Towards a Planning Vision and Strategy Transcending 2030. (https://www.hk2030plus.hk/document/2030+Booklet_Eng.pdf)
3.	Harris, Paul G. 2012. Environmental policy and sustainable development in China: Hong Kong in global context, Bristol: Policy.
4.	Planning Department of Hong Kong SAR Government. 2000. Sustainable development in Hong Kong for the 21st century: Second stage consultation: public consultation report, Prepared by Environmental Resources Management (H.K. Govt. Documents - HC470.3.Z9 E735 2000).

This will develop from specific readings necessary for the challenge the students choose to examine.

2.2 Additional Readings

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

1.	Environment Bureau, 2017. Hong Kong's Climate Action Plan 2030+. https://www.enb.gov.hk/sites/default/files/pdf/ClimateActionPlanEng.pdf
2.	Glaeser, Edward. 2011. Triumph of the City, Introduction: Our Urban Species, Penguin Press.
3.	Gottlieb, Paul and Simon Ng. 2017. Global Cities: Urban Environments in Los Angeles, Hong Kong, and China, MIT Press.
4.	Svara, James H. 2011. Local Government Action to Promote Sustainability: A Preliminary Examination. (https://www.transformgov.org/articles/local-government-action-promote-sustainability)
5.	Weber, M., 2015. A Puzzle for the Planet. Scientific American, 312(2), pp.63-67.