

City University of Hong Kong
Course Syllabus

offered by School of Energy and Environment
with effect from Semester B 2018/19

Part I Course Overview

Course Title:	Urban Sustainability
Course Code:	SEE3204
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>	SEE2201 Fundamentals of 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 lectures by researchers in academia, field trips and on-site discussions with practitioners from industry and the public sector to better understand the contemporary challenges in Hong Kong. In the course, the students will work together in teams on one of the urban sustainability challenges (i.e., air pollution, energy, water, housing, and waste management) and to propose policy-focused solutions for the problem. Hands-on workshop on technological innovations in urban sustainable technology (e.g., citizen science project) will also be introduced to widen students' horizon. At the end of the course, each group is required to make a poster presentation for illustrating their understanding of the structure of the challenge and suggesting 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 in Hong Kong.		√		
2.	Explain major factors affecting urban sustainability.		√	√	
3.	Describe potential solutions to urban sustainability challenges.		√	√	
4.	Develop a citizen science project to address one of the urban sustainability challenges.			√	√
5.	Develop proposals for public policies that would promote urban sustainability in Hong Kong.			√	√
6.	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	6	
Lecture	Acquire basic understanding of key urban sustainability challenges in Hong Kong. The major concepts and methodologies covered in this course include air pollution, energy, water security, housing, and waste management, and policy-oriented solution.	√	√	√	√	√	√	
Field Trip	Learn actual practices in dealing with urban sustainability challenges through field visits (e.g., Housing Authority Exhibition Center, Kai Tak District Seawater Cooling System, Energize Kowloon East Office, T-PARK and Wetland Park).	√	√	√		√	√	
Workshop	Hands-on workshop for citizen science project				√			
Analysis	Analyse urban sustainability challenges and develop proposals for policy-oriented solutions in group discussions with guidance by the lecturers and instructors.	√	√	√	√	√	√	

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	6		
Continuous Assessment: <u>100</u> %								
Assignment	√	√	√	√			16%	
Group Work			√	√	√	√	34%	
Poster Presentation	√	√	√	√	√	√	50%	
Examination: <u>0</u> % (duration: N/A, if applicable)								
							100%	

* The weightings should add up to 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.

This course will be offered jointly with Arizona State University or members of Global Consortium for Sustainability Outcomes for a joint summer school. So the entire course is only 2 weeks.

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. Assignment	Ability to summarize and critique the existing solutions of urban sustainability	High	Significant	Moderate	Basic	Not even reaching marginal level
2. Group Work	1. Ability to analyse the basic structure of an urban sustainability challenge in Hong Kong and write an opinion-editorial (op-ed) article on the urban sustainability challenge. 2. Ability to develop a citizen science project to address one of the urban sustainability challenges.	High	Significant	Moderate	Basic	Not even reaching marginal level
3. Poster Presentation	Ability to propose policy-focused sustainability solutions and present them 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, air pollution, energy, water, housing, waste management, and policy-oriented solution

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.	Harris, Paul G. 2012. Environmental policy and sustainable development in China: Hong Kong in global context, Bristol: Policy.
2.	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.	Glaeser, Edward. 2011. Triumph of the City, Introduction: Our Urban Species, Penguin Press.
2.	Gottlieb, Paul and Simon Ng. 2017. Global Cities: Urban Environments in Los Angeles, Hong Kong, and China, MIT Press.
3.	Melnick, Rob. 2013. The New City: A Perspective, Commissioned by Arizona State University Foundation.
4.	Svara, James H. 2011. Local Government Action to Promote Sustainability: A Preliminary Examination.
5.	Webber, Michael E. 2015. A Puzzle for the Planet, Scientific American, pp. 63-67.