SEE3205: URBAN SUSTAINABILITY

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Urban Sustainability

Subject Code
SEE - School of Energy and Environment
Course Number
3205

Academic Unit
School of Energy and Environment (E2)

College/School
School of Energy and Environment (E2)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
SEE1003 Introduction to Sustainable Energy and Environmental Engineering

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
SEE3204 Urban Sustainability

Part II Course Details

Abstract
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.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe key challenges for urban sustainability through lectures, field trips and site visits		x		
2	Explain major factors affecting urban sustainability		x	x	
3	Describe potential solutions to urban sustainability challenges		x	x	
4	Develop proposals for public policies that would promote urban sustainability in Hong Kong			x	x
5	Present and defend the proposed policy-focused sustainability solutions				x

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 real-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.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Students will develop a 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.	1, 2, 3, 4, 5	

2	Field Trip	Students will be exposed to actual practices in dealing with urban sustainability challenges through field visits.	1, 2, 3, 5	
3	Group work and Presentation	Students will analyse urban sustainability challenges in Hong Kong as teams and present proposals for policy-oriented solutions with guidance by the course leader.	1, 2, 3, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Assignments	1, 2, 3, 4	25	Related to field trips	Yes
2	Group Report	3, 4, 5	25	Related to the Project	Yes
3	Presentations	1, 2, 3, 4, 5	50	Series of presentations	Yes

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

30

Additional Information for ATs

Examination duration: N/A Percentage of continuous assessment, examination, etc.: 100% by continuous assessment To pass a course, a student must do ALL of the following: 1) obtain at least 30% of the total marks allocated towards continuous assessment (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.

Assessment Rubrics (AR)

Assessment Task

1. Assignments

Criterion

Ability to summarize and critique the existing solutions of urban sustainability observed during field trips and site visits.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal level

Assessment Task
2. Group Report

Criterion
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.

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal level

Assessment Task
3. Presentations

Criterion
Ability to present an urban sustainability challenge and respective policy-focused sustainability solutions effectively and convincingly.

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not event reaching marginal level

Part III Other Information

Keyword Syllabus

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

Reading List

Compulsory Readings

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

Additional Readings

	Title
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.