

GE2261: URBAN SUSTAINABILITY IN HONG KONG

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Urban Sustainability in Hong Kong

Subject Code

GE - Gateway Education

Course Number

2261

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

GE Area (Primary)

Area 2 - Study of Societies, Social and Business Organisations

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to nurture critical thinking and to equip future generation of professionals with skills necessary for answering the grand call for forming collective actions towards sustainability. It introduces scientific, economic, social and political considerations in addressing sustainability challenges. Adopting a problem-driven and learning by doing approach, students will incorporate both scientific reasoning and deliberation in localized solution finding for a specific sustainability challenge faced by Hong Kong society. By taking the course, the students are prepared to discover and deliberate on value judgments integral to decision-making, to work with diversity, and to engage in debating contemporary sustainability issues from an informed and analytical perspective.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understanding key concepts, assumptions and value judgements concerning urban sustainability	30	x		
2	Critically applying stakeholder analysis and cost-benefit analysis in role playing and deliberation	30	x	x	x
3	Creating problem statement and action plan in a visual / oral / written form cultivating professional accountability and developing leadership skills	40		x	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	Acquire basic understanding of key urban sustainability challenges in Hong Kong. The major topics covered in this course include air pollution, energy efficiency, water security, housing, waste management, climate mitigation and adaptation. The following methods will be introduced: cost-benefit analysis, multi-criteria analysis, stakeholder analysis, and deliberation.	1, 2	
2	Video shooting	Students will form groups (6-8 students per group). Each group of students will select a sustainability challenge in Hong Kong for conducting case analysis.	1, 2, 3	
3	Deliberation	Each group of students will conduct teacher guided deliberation in class, discussing and developing an action plan.	1, 2, 3	
4	Action plan	Students will develop an action plan and demonstrate the domain knowledge on selected sustainability challenges, abilities in conducting stakeholder analysis and cost-benefit analysis, and sensitivity to value and ethical considerations.	1, 2, 3	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Video shooting	1, 2, 3	40	-	Yes
2	Deliberation	1, 2, 3	20	-	Yes
3	Action plan	1, 2, 3	40	-	Yes

Continuous Assessment (%)

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

This course will be offered jointly with Arizona State University for a joint summer school, hence there will be no individual assessment.

Faculty members will evaluate each group's performance in the 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 ; 2) meet the criteria listed in the section on Assessment Rubrics.

Assessment Rubrics (AR)

Assessment Task

1. Video

Criterion

critically apply stakeholder analysis and cost-benefit analysis

Excellent (A+, A, A-)

Excellent ability to conduct stakeholder analysis and cost-benefit analysis.

Good (B+, B, B-)

Good ability to conduct stakeholder analysis and cost-benefit analysis.

Fair (C+, C, C-)

Fair ability to conduct stakeholder analysis and cost-benefit analysis.

Marginal (D)

Marginal ability to conduct stakeholder analysis and cost-benefit analysis.

Failure (F)

Fail to conduct stakeholder analysis and cost-benefit analysis.

Assessment Task

2. Deliberation

Criterion

members in a same group will divide the work to play the role of the stakeholders and represent their interests during the deliberative discussion. Each student is expected to engage with real persons who he/she will represent.

Excellent (A+, A, A-)

Excellent role play and deliberation

Good (B+, B, B-)

Good role play and deliberation

Fair (C+, C, C-)

Fair role play and deliberation

Marginal (D)

Marginal role play and deliberation

Failure (F)

Fail to do role play and deliberation

Assessment Task

3. Action plan

Criterion

Students will demonstrate the domain knowledge on selected sustainability challenges, abilities in conducting stakeholder analysis and cost-benefit analysis, and sensitivity to value and ethical considerations. It is preferable to integrate the output from stage 1 and 2 to form the action plan.

Excellent (A+, A, A-)

Excellent understanding of concepts, relevance and integration of materials, and excellent ability to solve selected sustainability challenges in Hong Kong.

Good (B+, B, B-)

Good understanding of concepts, relevance and integration of materials, and good ability to solve selected sustainability challenges in Hong Kong.

Fair (C+, C, C-)

Fair understanding of concepts, relevance and integration of materials, and fair ability to solve selected sustainability challenges in Hong Kong.

Marginal (D)

Marginal understanding of concepts, relevance and integration of materials, and marginal ability to solve selected sustainability challenges in Hong Kong.

Failure (F)

Fail to understand concepts, relevance and integration of materials, and fail to solve selected sustainability challenges in Hong Kong.

Part III Other Information**Keyword Syllabus**

Urban sustainability, air pollution, energy, water, housing, waste management, climate change, cost-benefit analysis, multiple criteria, stakeholder analysis, deliberation

Reading List**Compulsory Readings**

Title	
1	OECD. 10 June 2020. Innovative citizen participation and new democratic institutions. Organisation for Economic Cooperation and Development (Paris). https://www.oecd-ilibrary.org/content/publication/339306da-en .
2	United Nations. 2015. Sustainable Development Goals – 17 goals to transform our world. Accessible at http://www.un.org/sustainabledevelopment/# .

3	McGartland, Al, Richard Revesz, Daniel A. Axelrad, et al. 2017. "Estimating the health benefits of environmental regulations." Science no. 357 (6350):457-458. doi: 10.1126/science.aam8204.
4	Chan, Chung-Shing. 2017. "Health-related elements in green space branding in Hong Kong." Urban Forestry & Urban Greening no. 21:192-202. doi: 10.1016/j.ufug.2016.12.009.
5	Council for Sustainable Development. 2020. Report on public engagement on long-term decarbonisation strategy. Hong Kong.

Additional Readings

Title	
1	Nil

Annex (for GE courses only)

A. 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:

Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)

PILO 1: Demonstrate the capacity for self-directed learning

1

PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology

2

PILO 3: Demonstrate critical thinking skills

3

B. 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.