City University of Hong Kong Course Syllabus

offered by Department of Architecture and Civil Engineering with effect from Semester A 2022/23

Part I Course Overview

Course Title:	Advanced Topics in Sustainable Urban Development
Course Code:	CA6242
Course Duration:	1 Semester (Some courses offered in Summer Term may start a few weeks earlier than the normal University schedule. Please check the teaching schedules with CLs before registering for the courses.)
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	Nil
Precursors: (Course Code and Title)	Nil
Equivalent Courses: (Course Code and Title)	Nil
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

To understand the key concepts for the sustainable design of buildings, landscapes, and cities including concepts that form the core of internationally recognized sustainability rating and accreditation systems (e.g. U.S Green Building Council rating system (LEED) and the Hong Kong Green Building Council rating system (BEAM)); To examine sustainability issues of concern to built environment designers, such as resource conservation, urban growth, environmental justice, industrial development, social equity, sustainable agriculture, and economic development. The course emphasizes the student's ability to formulate special study areas in sustainable and urban development and conduct case studies or special studies of the subject matter.

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)		
			Al	A2	A3
1.	Discover various issues for sustainability issues of concern to built environment professionals;		\checkmark		
2.	Discover the sustainable design of buildings, cities and landscapes;			\checkmark	
3.	Understand principles of rating methods (e.g. LEED, BEAM and etc.);			\checkmark	
4.	Critically discuss issues of urbanization and sustainability, and their relationships.		\checkmark		
		100%			

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	CILO No.			Hours /
		1	2	3	4	week (if applicable)
Lectures and seminars	Sustainable design methods of buildings, cities and landscapes; assessing sustainability	\checkmark	\checkmark	\checkmark		
Lectures and seminars	Urbanization and sustainability	\checkmark	\checkmark	\checkmark	\checkmark	

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (3); Tutorial (0); Laboratory (0)

4. Assessment Tasks/Activities

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

Assessment Tasks / Activities	CILO No.	Weighting	Remarks
	1 2 3 4		
Continuous Assessment: 100%			
Assignments	\checkmark \checkmark \checkmark \checkmark	100%	
Examination: 0%			
		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)	Marginal (B-, C+, C)	Failure (F)
Assignments	Ability to analyse issues of urbanization and sustainability Accomplishment to demonstrate characteristics of urbanization and sustainability Ability to measure urbanization and sustainability in built environments Accomplishment to demonstrate essential knowledge of urbanization and sustainability	Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter evidence of extensive knowledge base	Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature	Sufficient familiarity with the subject matter to enable the student to progress without repeating the course	

Applicable to students admitted in Semester A 2022/23 and thereafter

Applicable to students admitted before Semester A 2022/23

Assessment	Criterion	Excellent	Good	Fair	Marginal	Failure
Task		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)/ Pass	(F)
					(P) on P/F	
					basis	
Assignments	Ability to analyse issues	Strong	Evidence of	Student who	Sufficient	Little
	of urbanization and	evidence of	grasp of	is profiting	familiarity	evidence
	sustainability	original	subject, some	from the	with the	of
	Accomplishment to	thinking;	evidence of	university	subject	familiarity
	demonstrate	good	critical	experience;	matter to	with the
	characteristics of	organization,	capacity and	understanding	enable the	subject
	urbanization and	capacity to	analytic	of the subject;	student to	matter;
	sustainability	analyse and	ability;	ability to	progress	weakness
	Ability to measure	synthesize;	reasonable	develop	without	in critical
	urbanization and	superior	understanding	solutions to	repeating	and
	sustainability in built	grasp of	of issues;	simple	the course	analytic
	environments	subject	evidence of	problems in		skills;
	Accomplishment to	matter	familiarity	the material		limited, or
	demonstrate essential	evidence of	with literature			irrelevant
	knowledge of	extensive				use of
	urbanization and	knowledge				literature
	sustainability	base				

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.)

Key concepts for the sustainable design of buildings and landscapes; U.S Green Building Council rating system (LEED) and the Hong Kong Green Building Council rating system (BEAM); LEED, BEAM and other accreditation systems; sustainability issues concerning planners, architects and engineers; resource conservation, urban growth, environmental justice, industrial development, social equity, sustainable agriculture, and economic development.

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. Nil

2.2 Additional Readings

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

1.	John Lund Kriken with Philip Enquist and Richard Rapaport. City building: nine planning principles for the twenty-first century. New York: Princeton Architectural Press, c2010.
2.	Asif Syed. Advanced building technologies for sustainability. Hoboken, N.J. : John Wiley & Sons, c2012.
3.	Charles Bloszies. Old buildings, new designs: architectural transformations /foreword by Hugh Hardy. New York: Princeton Architectural Press, c2012.
4.	Urban sustainability and governance: new challenges in Nordic-Baltic housing policies / Arild Holt-Jensen and Eric Pollock, editors. New York: Nova Science Publishers, c2009.
5.	Urban sustainability in the context of global change: towards promoting healthy and green cities / editors, R.B. Singh. Enfield, N.H.: Science Publishers, c2001.
6.	Achieving sustainable urban form / edited by Katie Williams, Elizabeth Burton and Mike Jenks. London: New York: E & FN Spon, 2000.