City University of Hong Kong Course Syllabus

offered by Department of Architecture and Civil Engineering with effect from Semester A 2024 / 2025

Part I Course Overview	w
Course Title:	Green Building, Architecture and People
Course Code:	CA8609
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:	R8
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)	BC8609 Green Building, Architecture and People
Exclusive Courses:	Nil

(Course Code and Title)

Part II Course Details

1. Abstract

To study the importance of environmental protection through the design and construction of green buildings.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs	Weighting	Discov	ery-eni	riched
		(if	curricu	lum re	lated
		applicable)	learnin	g outco	omes
			(please	tick	where
			approp	riate)	
			AI	A2	A3
1.	understand the concepts of green buildings and			✓	
	sustainability as encouraged by the Buildings Department,				
	HKSAR Government and case study;				
2.	understand the relationship between architectural concerns			✓	
	and the requirements of occupants with the actual building				
	design;				
3.	implement an assessment on buildings from an				\
	architectural, interior design, landscape design and				
	environmental protection points of view;				
4.	understand the definitions of a green building, and green			√	
	building assessment.			•	
		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 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.

3. Learning and Teaching Activities (LTAs)

LTA	Brief Description		O No.		Hours/week	
		1	2	3	4	(if applicable)
Lectures	Mass Lecture on explaining history of architecture; man's behavior in varying built environment; urban versus rural development; alternative definitions of green buildings; assessment of green buildings; architects' approaches to green building design; green buildings in Hong Kong; technologies for green buildings; energy efficient and intelligent buildings; sustainability of buildings; financial viability of green buildings; harmony between human beings and the built environment.	✓	✓ 			
Tutorials	Scenario-type tutorial class – Case-studies related to harmony between human beings, the built environment and green buildings should be discussed; green building assessment by using Hong Kong BEAM plus with real case studies should be applied.			√	✓	

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (2); Tutorial (1); Laboratory (0)

4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.				Weighting	Remarks
	1	2	3	4		
Continuous Assessment: 100%						
Assignment (Individual Report)	✓	✓	✓	✓	70%	
Test	✓	✓		✓	30%	
Examination: 0%						
					1000/	

100%

5. Assessment Rubrics

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Assignment (Individual Report)	2.1 CAPACITY to DISCUSS the architects' approaches to green building design; energy efficient and intelligent buildings; sustainability of buildings; financial viability of green buildings; harmony between human beings and the built environment. ABILITY to USE the green building criteria and APPLY green building assessment to the question project/case.	High	Significant	Moderate	Basic	Not even reaching marginal levels
Test	CAPACITY to EXPLAIN the different green building criteria and APPLY green building assessments	High	Significant	Moderate	Basic	Not even reaching marginal levels

Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

Assessment Task	Criterion	Excellent	Good	Marginal	Failure
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)
Assignment (Individual Report)	2.1 CAPACITY to DISCUSS the architects' approaches to green building design; energy efficient and intelligent buildings; sustainability of buildings; financial viability of green buildings; harmony between human beings and the built environment. ABILITY to USE the green building criteria and APPLY green building assessment to the question project/case.	High	Significant	Basic	Not even reaching marginal levels
Test	CAPACITY to EXPLAIN the different green building criteria and APPLY green building assessments.	High	Significant	Basic	Not even reaching marginal levels

Part III Other Information

1. Keyword Syllabus

History of architecture; man's behaviour in varying built environment; urban versus rural development; alternative definitions of green buildings; assessment of green buildings; architects' approaches to green building design; green buildings in Hong Kong; technologies for green buildings; energy efficient and intelligent buildings; sustainability of buildings; financial viability of green buildings; harmony between human beings and the built environment.

2. Reading List

2.1 Compulsory Readings

1. BEAM Plus New Buildings & Existing Buildings, HKGBC, 2014.

2.2 Additional Readings

1.	European Commission, Directorate General XVII for Energy, 1999. A Green Vitruvius:
	Principles and Practice of Sustainable Architectural Design, James & James, London.
2.	Sustainable Building Technical Manual: Green Building Design, Construction and Operations,
	Public Technology, Inc., Washington, D.C., 1996.
3.	Kibert, C. J., Sustainable construction: green building design and delivery, Hoboken, N.J.:
	John Wiley, 2005.
4.	Kibert, C. J., Sendzimir, J. and Guy, G. B., Construction ecology: nature as the basis for green
	buildings, London; New York: Spon Press, 2002.
5.	Green buildings and Sustainable Architecture
	http://www.arch.hku.hk/research/BEER/sustain.htm and other education lectures and further
	links.
6.	Environmental Design Library - Green Design / Sustainable Architecture: Resources
	http://www.lib.berkeley.edu/ENVI/GreenAll.html.
7.	Building Department Environmental Reports
	http://www.bd.gov.hk/english/documents/index_env.html
8.	Nano-building materials and new building technologies for green buildings -e.g. solar resistant
	paint, concrete treated with water proofing liquid
	http://www.formulahk.com/english/building/nanocoasting/index.html.