

**City University of Hong Kong  
Course Syllabus**

**offered by Department of Architecture and Civil Engineering  
with effect from Semester A in 2016/17**

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**Part I Course Overview**

<b>Course Title:</b>	Sustainable Urban Development
<b>Course Code:</b>	CA6242
<b>Course Duration:</b>	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.)
<b>Credit Units:</b>	3
<b>Level:</b>	P6
<b>Medium of Instruction:</b>	English
<b>Medium of Assessment:</b>	English
<b>Prerequisites:</b> <i>(Course Code and Title)</i>	Nil
<b>Precursors:</b> <i>(Course Code and Title)</i>	Nil
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	Nil
<b>Exclusive Courses:</b> <i>(Course Code and Title)</i>	Nil

## Part II Course Details

### 1. Abstract

To understand the key concepts for the sustainable design of buildings and landscapes, including concepts that form the core of the U.S Green Building Council rating system (LEED) and the Hong Kong Green Building Council rating system (BEAM); to explore the LEED, BEAM and other accreditation systems; to examine sustainability issues of concern to planners, such as resource conservation, urban growth, environmental justice, industrial development, social equity, sustainable agriculture, and economic development.

### 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.	Discover the sustainable design of buildings and landscapes;			✓	
2.	Apply rating methods, LEED, BEAM and etc, for analyzing sustainability of buildings;			✓	
3.	discover various issues for sustainability issues of concern to planners;				✓
4.	Criticize urbanization and sustainability.				✓
		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 No.				Hours / week (if applicable)
		1	2	3	4	
Lectures and tutorials	Sustainable design methods of buildings and landscapes Rating methods of sustainability	✓	✓	✓		
Case studies	Urbanization and sustainability	✓	✓	✓	✓	

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (2); Tutorial (1); 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%						
Project/ assignment	✓	✓	✓	✓	80%	
Quiz	✓	✓	✓	✓	20%	
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, B-)	Adequate (C+, C, C-)	Marginal (D)/ Pass (P) on P/F basis	Failure (F)
Project/ assignment	Ability to analyse issues of urbanization and sustainability Accomplishment to demonstrate characteristics 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	Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material	Sufficient familiarity with the subject matter to enable the student to progress without repeating the course	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature
Quiz	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	Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material	Sufficient familiarity with the subject matter to enable the student to progress without repeating the course	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature

**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
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**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.
7.	<a href="http://www.hkgbc.org.hk/chi/beampractitioners.aspx">http://www.hkgbc.org.hk/chi/beampractitioners.aspx</a>
8.	<a href="http://www.usgbc.org/Default.aspx">http://www.usgbc.org/Default.aspx</a>