

City University of Hong Kong
Course Syllabus

offered by Division of Building Science and Technology
with effect from Semester A 2018 /19

Part I Course Overview

Course Title: Building and Environmental Control

Course Code: BST13162

Course Duration: 1 Semester

Credit Units: 3

Level: A1

Proposed Area: ☐ Arts and Humanities
(for GE courses only) ☐ Study of Societies, Social and Business Organizations
 ☐ Science and Technology

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) BST12162, BST13767, BST13768

Exclusive Courses:
(Course Code and Title) Nil

Part II Course Details

1. Abstract

The course aims to develop the ability of students to understand and apply statutory and non-statutory requirements on control mechanism, development density, fire safety control and environmental issues for new and existing buildings.

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.	Understand the mechanism of development control on new and existing buildings.	25%	√	√	
2.	Apply Building (Planning) Regulations to explore development density.	25%	√	√	
3.	Apply fire safety control to explore building design.	25%	√	√	
4.	Understand statutory and/or non-statutory requirements for control on health, safety and environmental issues of new and existing buildings.	25%	√	√	
		100%			

* If weighting is assigned to CILOs, they should add up to 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	
Lecture (Average class size: no more than 100 students)	<p>Lecture is an in-class activity.</p> <p>The activity involves oral presentation by the lecturer(s) explaining the relevant theories, concepts and procedures related to building and development control.</p> <p>The presentation will be supported by briefings, demonstrations and guidance through lecture notes, on-line information and/or guest lecturing.</p>	√	√	√	√	3 hours/week
Case study review	Case study review is an in-class activity. The activity involves student discussion and/or oral presentation.	√	√	√	√	

4. Assessment Tasks/Activities (ATs)

(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: <u>40%</u>						
Assignments	√	√	√	√	40%	
Examination: <u>60%</u> (duration: 2.5 hours)						
Examination	√	√	√	√	60%	
* The weightings should add up to 100%.					100%	

Note: A student must obtain a minimum mark of 35 in both coursework and examination components and an overall mark of 40 to pass the course.

Assignments (report and/or presentation and/or in-class exercise): The assignments are in the form of group assignment with individual assessment where appropriate which require students to apply statutory and/or non-statutory requirements for exploration of discovery in control mechanism / development density / design / fire safety / health and environment in buildings via case study. Students are required to submit written report and/or conduct oral presentation in group with solutions for the assignment(s).

Closed and/or open book in-class exercise(s) where appropriate is/are in the form of short/long/multiple choice questions will be set to assess the students' understanding on the lecture topics.

Examination: Closed book examination is in the form of essay type, computation questions or multiple choices questions will be set to assess the students' learning outcomes.

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-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Assignments	Ability to apply statutory and/or non-statutory requirements for exploration of discovery in control mechanism / development density / design / fire safety / health and environment in buildings	High	Significant	Moderate	Basic	Below marginal
2. Examination	Ability to address the questions with comprehensive and in-depth knowledge of building and environmental control.	High	Significant	Moderate	Basic	Below marginal

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.)

Building control: Buildings Ordinance; Building (Administration) Regulations; Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP)

Development density: Building (Planning) Regulations; Site classification; Site coverage; Plot ratio; Gross floor area (GFA); GFA concession

Fire safety control: Code of Practice for Fire Safety in Buildings including Means of escape, Means of access, Fire resisting construction, fire properties of construction elements etc.

Control on existing buildings: Mandatory building/window inspection scheme, Minor works control system, statutory orders under the Buildings Ordinance

Health and safety: Refuse storage; Sanitary fitments; Lighting; Ventilation; Open space; Barrier free access

Environmental issues: Environmental laws; Environmental Impact Assessment Ordinance; Noise Control Ordinance; Air Pollution Control Regulations

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. HKSAR Government. *Buildings Ordinance, Chapter 123*, HKSAR Government Printer
2. HKSAR Government. *Building (Administration) Regulations, Chapter 123A*, HKSAR Government Printer
3. HKSAR Government. *Building (Planning) Regulations, Chapter 123F*, HKSAR Government Printer
4. HKSAR Government. 2012. *Code of Practice for Fire Safety in Buildings 2011*. Buildings Department, Hong Kong
5. HKSAR Government. *Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulations, Chapter 123H*, HKSAR Government Printer
6. HKSAR Government. *Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations, Chapter 123I*, HKSAR Government Printer
7. HKSAR Government. 2008. *Design Manual: Barrier Free Access 2008*. Buildings Department, Hong Kong
8. HKSAR Government. *Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Contractors*, Buildings Department, Hong Kong

2.2 Additional Readings

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

1. Lai W.C., Ho C.W. & Leung H.F. 2004. *Change in Use of Land: a Practical Guide to Development in Hong Kong*, Hong Kong University Press
2. Li L.H. 2006. *Development appraisal of land in Hong Kong* (Rev. Ed.), Chinese University Press, HK
3. Poon, T. and Chan, E. 1998. *Real Estate Development in Hong Kong*, Hong Kong: Pace Pub
4. HKSAR Government. 2012. *Code of Practice for Minimum Fire Service Installations and Equipment 2012*. Fire Services Department, Hong Kong