City University of Hong Kong
Course Syllabus

offered Division of Building Science & Technology
with effect from Semester B 2017/18

Part I Course Overview

Course Title:	Construction as One of the Founding Stones of Modern Hong Kong
Course Code:	GE2314
Course Duration:	1 semester
Credit Units:	3 credits
Level:	A2, B2
Proposed Area: *(for GE courses only)*	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☑ 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)*	Nil
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

Hong Kong was considered an advanced international city since mid 20th Century. She was a very outstanding UK colony partly depended on her advantageous location as the entrance gate to Far East and China. Similar to other colonies, Hong Kong had inherited an efficient system to oversee the basic operation of the city with a delicate balance between various interests and parties. The construction industry was without exception.

Upon the economic take-off led by the light industries of Hong Kong since 1960s, the construction industry had a challenge to up-raise herself in order to face various demands from the community. Obviously, the old system and way of practice could no longer fulfil such needs at then.

Less than half a century Hong Kong is now a leading global city where construction and engineering profession are one of our core economies. The construction industry has a well-recognized capability to deliver highly complex, high-end and high-quality products to satisfy challenging requirements requested by demanding clients worldwide. What had Hong Kong done in the past decades to advance professionalism of the industry to meet challenges? How is the sophisticated system working behind now? What Hong Kong has achieved and how it will position herself in the global economy? This course aims to adopt a non-technical approach to enable participants to realize the meaning and development process behind where the role of construction industry in Hong Kong has been playing.

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*	Discovery-enriched curriculum related learning outcomes		
			A1	*A2*	*A3*
1	Identify the background leading to different stages of upraises of the construction industry since WWII and the role of government contributes to the modernization process	10	√		√
2	List the characteristic and professional structure of the construction industry	10	√	√	
3	Explain fundamental concepts/methods to construct various types of buildings and infrastructure projects in Hong Kong	30	√	√	√
4	Explain the ways to manage, operate and implement various forms of construction projects.	30	√	√	
5	Describe the essential elements and ways to provide quality living environment for buildings and the community.	20	√	√	√
	** If weighting is assigned to CILOs, they should add up to 100%.*	100%			

 # Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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 (approx..)
		1	2	3	4	5	
Lecture	Regular class meeting with detail explanation/elaboration of the topics in the form of lecture (usually with class size up to 60-80 students)	√	√	√	√	√	2.5 hour/week
Seminar	Usually external experts with recognized experience and knowledge in a particular field will be invited for talks and sharing.		√	√	√		2 or 3 seminars per semester

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	5	6		
Continuous Assessment: 40%								
Coursework	√	√	√	√	√	√	40%	At least 3 coursework, in the form of • mini-project for a specific topic • class-test answering short questions.
Examination: 60% (duration: 2 hours; written examination covering the major areas within the course contents).								
** The weightings should add up to 100%.*							100%	

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

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. Coursework	Ability to describe the principles and knowledge about the structure and operation of the construction profession/industry.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Written Examination	Do, but on a broader base to cover all the course topics	High	Significant	Moderate	Basic	Not even reaching marginal levels

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.)

The upraises of the construction industry since the WWII and milestones that signify the technological development and structural reformation in the construction industry to cater for the modern world.

Role of government and other related professions in construction.

Typical construction process, from project inception, planning, construction up to completion stages, including managing and operating construction jobs, from typical to mega-size projects.

Project procurement for various types of construction projects

Construction technology – highlight of techniques from the construction of simple and traditional buildings to modern, complex, super-highrise, and other infrastructure projects.

Common structural forms for various type of buildings and complex structures

Training and professional education system to develop competent workforce for the construction industry. Relation between construction, engineering and other building related professions

Ways to beautify buildings, both internally and externally and to make buildings more comfortable for users and environmental friendlier.

Hong Kong construction industry merging in the globalization process and beyond.

Some other soft elements that influence the performance of the construction industry.

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.)

For Course Content	Referencing materials
Organization of the construction industry and recent developments to enhance the professionalism of the industry to cater for the modern world.	Rowlinson, S. M. & Walker, A., *The Construction Industry in Hong Kong*, Longman Cheng, A. K. F. and Law C. H., *Public Policy Working Paper: Working Situations of Subcontractors and Their Employees under the Multi-layer Subcontracting of Construction Works and Its Impacts on the Construction Industry*, Hong Kong Democratic Party. Ho Pui-yin, *Challenges for an Evolving City,* The Commercial Press, HK, 2004
The role of government and other related professions in construction.	Thomas N. T. Poon, Edwin H. W. Chan, *Real Estate Development in Hong Kong,* PACE Publishing Ltd. S.M. Rowlinson & A. Walker, *The construction industry in Hong Kong*, Longman, Hong Kong, 1995 Building Ordinance and Building Regulations, relevant issues, HKSAR
Typical construction process and project life-cycle of various forms of projects.	Bennett, F. L. *The Management of Construction: A Project Lifecycle Approach*, F., Butterworth-Heinemann, 2003.

Different procurement systems for construction projects	Franks, J. *Building Procurement Systems – A client's guide*, 3rd edition, Longman, 1998
Construction technology highlight – construction of simple and traditional buildings.	Wong, W S., *Building Materials and Technology in Hong Kong*, All Arts Ltd. R. Chudley, C*onstruction Technology,* Longman, UK
Common structural forms for various types of buildings and complex structures.	BST, *Building Design and Development in Hong Kong,* City University of HK Press Foster, J. S., *Structure & Fabric*, Longman Chudley, P., *Construction Technology*, Longman
Construction technology highlight – modern, complex, super-highrise, and other infrastructure projects.	Wong, R. W. M., *15 Most Outstanding Projects in HK*, China Trend Building Press, Hong Kong 1998. Roy Holmes, *Introduction to Civil Engineering Construction*, the College of Estate Management, University of Reading. Various issues, Construction & Contract News.
Training and professional education system for the construction industry and the relation between related professions.	Chan H. W. Edwin , Mok, K. W. Peter & Scott, D., *Statutory Requirements for Construction Professionals*, The Hong Kong Institute of Construction Managers, The Hong Kong Polytechnic University
Ways to beautify buildings – architectural design and building finishes.	HKIA, *Masterpieces of Hong Kong top architects,* A U Publishing Ltd., HKIA, *Vice versa : displacing acts, lives & thresholds of a hyper city* - HK Arts Development Council and HKIA
Concept on more users and environmentally friendly buildings.	Buildings Department of HKSAR Government, *Buildings Department Environmental Report 2008* Chow, T. T. et al, *Development Trends in Building Services Engineering*, BST, City University of Hong Kong Press Civil Engineering Development Department, *Green Master Plan*, HKSAR Building Department, *Joint Practice Notes,* HKSAR Environment Protection Department, *Environment Hong Kong*
Hong Kong construction industry merging in the globalization process and beyond.	Dainty, A. R. J., Qin, J., Carrillo, P.M. (2005) HRM Strategies for Promoting Knowledge Sharing within Construction Project Organizations: *A Case Study, Knowledge Management in Construction Industry,* Idea Group Publishing. Ofori, G. (1994) Construction industry development: role of technology transfer, *Construction Management & Economics*
Some other soft elements that influence the performance of the construction industry.	Dicthter D., D. Dicher, R. Husbands, A. Areson and M. Frey (1988) *A Guide to Technology Transfer for Small and Mediul-Sized Enterprises*, Gower, Aldershot Frisby, T. N. (1990) *Survival in the construction business: checklists for success*. Kingston, Mass, R.S. Means Construction Industry Review Committee (CIRC) (2001) *Construct for Excellent*, Hong Kong SAR. Sai On Cheung, *Trust in Co-operative Contracting in Construction, City University of Hong Kong Press, 2007*

2.2 Online Resources

Other Web-based reference/packages to substantiate teaching and learning

The following web-based information will be used to supplement/substantiate the lecture content:

1. Personal homepage of Raymond Wong under CityU server:

   http://personal.cityu.edu.hk/~bswmwong/,

   http://personal.cityu.edu.hk/~bswmwong/index_new.html

2. e-learning resource under homepage of Div. of Building Science & Technology :

   http://bst1.cityu.edu.hk/e-learning/building_info_pack/index.html

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:

GE PILO	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, 2, 3, 4, & 5
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	1, 2, 3, 4, & 5
PILO 3: Demonstrate critical thinking skills	2, 3, 4, & 5
PILO 4: Interpret information and numerical data	1, 2, 4, & 5
PILO 5: Produce structured, well-organised and fluent text	1, 2, 3, 4, & 5
PILO 6: Demonstrate effective oral communication skills	2, 3, 4, & 5
PILO 7: Demonstrate an ability to work effectively in a team	2, 3 & 4
PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues	1, 2, 4, & 5
PILO 9: Value ethical and socially responsible actions	2, 3, 4, & 5
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	2, 4, & 5

GE course leaders should cover the mandatory PILOs for the GE area (Area 1: Arts and Humanities; Area 2: Study of Societies, Social and Business Organisations; Area 3: Science and Technology) for which they have classified their course; for quality assurance purposes, they are advised to carefully consider if it is beneficial to claim any coverage of additional PILOs. General advice would be to restrict PILOs to only the essential ones. (Please refer to the curricular mapping of GE programme: http://www.cityu.edu.hk/edge/ge/faculty/curricular_mapping.htm.)

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.

Selected Assessment Task
Written Examination