City University of Hong Kong Information on a Course

offered by Department of Architecture and Civil Engineering with effect from Semester A in 2014 / 2015

Part I

Course Title: Integrated Studio - Small-Scale Buildings

Course Code: CA19101

Course Duration: 1 Semester

No. of Credit Units: 6

Level: A1

Medium of Instruction: English

Prerequisites: Nil

Precursors: Nil

Equivalent Courses: BST11081 Integrated Studio - Small-Scale Buildings; or

BST11181 Integrated Architectural Studio 1

Exclusive Courses: Nil

Part II

1. Course Aims:

This course aims to introduce you to the various aspects that influence the development of a building, and to develop a basic understanding of building design and technology relating to small-scale building development.

2. Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, you should be able to:

No.	CILOs	Weighting*
1.	<i>Identify</i> information from various sources to facilitate the solving of problem cases and preparation of design proposals.	1
2.	<i>Explain</i> the essential information of a problem solution and design proposal through written, graphic and verbal means.	1
3.	Develop design strategies for architectural design through the study of precedents.	2
4.	<i>Combine</i> simple structural systems with the spatial and functional aspects of architectural design into a coherent whole.	2
5.	<i>Produce</i> architectural design proposals to satisfy basic social and technical requirements of a small-scale project.	3
6.	<i>Produce</i> solutions for various problems relating to small-scale building development.	3

^{*}Weightings are assigned to the CILOs according to their relative importance to the course (3 = most important).

3. Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

This course adopts a Project- and Problem- Based Learning (PPBL) approach and runs in conjunction with a number of subject area courses (BST11011 Communication Studies – Building Integrated Modelling, BST11041 Social Studies – Experiencing Architecture and BST11051 Technical Studies – Structural Systems). It consists of two individual design projects and two problem cases, in which teaching and learning are conducted through a combination of individual, team-based, small-class and large-class activities. You are expected to integrate the knowledge and skills that you have acquired from subject area courses to develop design proposals and solve the problem cases.

- You will achieve CILO 1 through the formation phases (problem formulation, research, discussion, analysis, brief interpretation, schematic design, etc.) of the design projects and problem cases.
- You will achieve CILO 2 through the presentation phases (studio critique, interim and final presentations) of the design projects and problem cases.
- You will achieve CILOs 3 to 5 mainly through the development and production phases (development of design proposal) of the design projects. Knowledge and information acquired from the problem cases and seminars on specific topics will further supplement your learning to facilitate the achievement of these CILOs.
- You will achieve CILO 6 through the small-team problem solving process of the problem cases.

TLAs	Design Project	Problem Case	Seminar	Total (hrs)
CILO 1	4	2		6
CILO 2	4	2		6
CILO 3	10	2		12
CILO 4	12	2		14
CILO 5	16	2	2	20
CILO 6		20		20
Total (hrs)	46	30	2	78

- 1. A **Design Project** engages you in the production of an integrated proposal for a building in response to a set of constraints and requirements. Teaching and learning are conducted through regular studio classes in which you will develop your design proposals with a studio tutor.
- A Problem Case engages you in the solving of a building-related problem. Teaching and learning are conducted through individual research and regular problem classes, in which you will discuss and share information found on a problem under the facilitation of a studio tutor.
- 3. A **Seminar** consists of oral presentations by instructors and/or external guests, which focuses on a selected topic relating to the integrated studio or the various subject area courses.

4. Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

Coursework: 100% (Design project – 40%, Problem cases – 40%, Portfolio 10%, Reflective Journal 5%, Self- / Peer- Assessment 5%)

- You must attain a minimum mark of 35 in all assessment components AND an overall mark of 40 to pass the course.
- Marks are assigned based on your achievement of ILOs according to the defined marking criteria/rubrics.

ATs	Graphic Presentation	Oral Presentation	Model	Report	Portfolio	Reflective Journal	Self- / Peer- Assessment	Wgt*
CILO 1	•			•		•	•	1
CILO 2	•	•		•	•		•	1
CILO 3	•	•	•	•	•		•	2
CILO 4	•	•	•	•	•		•	2
CILO 5	•	•	•	•	•		•	3
CILO 6		•		•		•		3
Total (%)	30	10	5	35	10	5	5	

^{*}Weightings (Wgt) are assigned to the CILOs according to their relative importance to the course (3 = most important).

- 1. This course consists of two design projects, two problem cases, and a reflection/improvement submission at the end of the semester. Submissions for each project stage and problem case include a combination of assessment tasks as tabulated in the above table.
- A Graphic Presentation for the integrated studio can consist of one graphic form or a combination of different forms
 including various types of 2-dimensional and 3-dimensional diagrams, sketches, drawings and renderings produced
 manually or digitally by computer.
- 3. An **Oral Presentation** is a verbal explanation of a design proposal or a problem solution for the integrated studio.
- 4. A **Model** is a scaled physical representation of the whole or part of a design proposal for the integrated studio to illustrate various aspects of the design.
- 5. A **Report** is a bound document containing information relating to a problem solution or selected aspects of a design project for the integrated studio.
- 6. A **Portfolio** is a comprehensive record of your works completed for a design project and consists of a folder containing preliminary, submitted and improvement works done for the design project component of the integrated studio.
- A Reflective Journal is a reflective statement of your own learning and experience of the problem cases of the integrated studio.
- 8. **Self- and Peer- Assessments** are your assessment of the performance of yourself in the design project, and that of your team members in the problem cases based on a number of criteria.

5. Grading of Student Achievement: Refer to Grading of Courses in the Academic Regulations.

CILO 1	<i>Identify</i> information from various sources to facilitate the solving of problem cases and preparation of design proposals.					
A+/A/A-	Identify relevant information from all required plus additional sources. Thorough attempt to classify the various types of information to facilitate the solving of problem cases and preparation of design proposals.					
B+/B/B-	Identify relevant information from all required sources. Adequate attempt to classify the various types of information to facilitate the solving of problem cases and preparation of design proposals.					
C+/C/C-	Identify relevant information from most required sources. Limited attempt to classify the various types of information to facilitate the solving of problem cases and preparation of design proposals.					
D	Identify from a limited number of sources relevant information for the solving of problem cases and preparation of design proposals.					
F	Inability to identify relevant information for the solving of problem cases and preparation of design proposals.					
CILO 2	Explain the essential information of a problem solution and design proposal through written, graphic and verbal means.					
A+/A/A-	Clear and comprehensive explanation of the essential information of a problem solution and design proposal. Thorough attempt to explain the various types of information through written, graphic and verbal means.					
B+/B/B-	Clear explanation of the essential information of a problem solution and design proposal. Adequate attempt to explain the various types of information through written, graphic and verbal means.					
C+/C/C-	Adequate explanation of the essential information of a problem solution and design proposal. Limited attempt to explain the various types of information through written, graphic and verbal means.					
D	Partial explanation of some essential information of a problem solution and design proposal through written, graphic and verbal means.					
F	Inability to explain the essential information of a problem solution and design proposal through written, graphic and verbal means.					
CILO 3	Develop design strategies for architectural design through the study of precedents.					
A+/A/A-	Thorough attempt to develop design strategies for architectural design based on in-depth analysis and understanding of precedents.					
B+/B/B-	Good attempt to develop design strategies for architectural design based on adequate analysis and understanding of precedents.					
C+/C/C-	Limited attempt to develop design strategies for architectural design based on partial understanding of precedents.					
D	Minimal attempt to develop design strategies for architectural design based on partial understanding of precedents.					
F	Inability to develop design strategies for architectural design based on study of precedents.					
CILO 4	Combine simple structural systems with the spatial and functional aspects of architectural design into a coherent whole.					
A+/A/A-	Thorough and skilful combination of the requirements of simple structural systems with the spatial and functional aspects of architectural design. Comprehensive synthesis of all aspects into a coherent form.					
B+/B/B-	Good combination of the requirements of simple structural systems with the spatial and functional aspects of architectural design. Adequate synthesis of all aspects into a coherent form.					
C+/C/C-	Limited combination of the requirements of simple structural systems with the spatial and functional aspects of architectural design. Partial synthesis of all aspects into a coherent form.					
D	Minimal combination of the requirements of simple structural systems with the spatial and functional aspects of architectural design. Inadequate synthesis of all aspects into a coherent form.					
F	Inability to combine and synthesise the requirements of simple structural systems with the spatial and functional aspects of architectural design.					
CILO 5	Produce architectural design proposals to satisfy basic social and technical requirements of a small-scale project.					
A+/A/A-	Production of innovative architectural design proposals for a small-scale project. Thorough and skilful integration of all aspects of the design to satisfy basic social and technical requirements.					
B+/B/B-	Production of workable architectural design proposals for a small-scale project. Adequate integration of all aspects of the design to satisfy basic social and technical requirements.					
C+/C/C-	Production of largely resolved architectural design proposals for a small-scale project. Partial integration of aspects of the design to satisfy basic social and technical requirements.					
D	Production of partially resolved architectural design proposals for a small-scale project. Minimal integration of aspects of the design to satisfy basic social and technical requirements.					
F	Inability to produce coherent and feasible architectural design proposals to satisfy basic social and technical requirements of a small-scale project.					
CILO 6	Produce solutions for various problems relating to small-scale building development.					
A+/A/A-	Production of in-depth and coherent solutions for various problems relating to small-scale building development.					

B+/B/B-	Production of coherent solutions for various problems relating to small-scale building development.		
C+/C/C-	Production of largely coherent solutions for various problems relating to small-scale building development.		
D	Production of partial solutions for various problems relating to small-scale building development.		
F	Inability to produce coherent solutions for various problems relating to small-scale building development.		

Part III

Keyword Syllabus:

<u>Architectural design</u>: Small-scale building development; single-family house; architectonics; precedent study and analysis; principles of spatial organisation.

<u>Design integration</u>: Integration of simple structural systems; selection of building materials; basic assembly of building components.

Communication: Basic graphic and oral presentation.

Recommended Reading:

Text(s):

- 1. Clark, R.H. and Pause M. (1996). *Precedents in architecture* (2nd ed). New York: Van Nostrand Reinhold.
- 2. Ching, F. (1996). *Architecture: form, space, & order* (2nd ed). New York: Van Nostrand Reinhold.
- 3. Davies, C. (2006). Key houses of the twentieth century: plans, sections and elevations. London: Laurence King.
- 4. Foster, J.S. (2007). *Structure and fabric part 1 (7th ed)*. New York: Pearson/Prentice Hall.
- 5. Laseau, P. (2001). Graphic thinking for architects & designers (3rd ed). New York: J. Wiley.
- 6. Pressman, A. (1993). Architecture 101: a guide to the design studio. New York: Wiley.
- 7. Unwin, S. (2003). Analysing architecture (2^{nd} ed). New York: Routledge.

Online Resources:

- 1. Course Blackboard site.
- 2. Great Buildings Online www.greatbuildings.com