

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 - Medium-Scale Buildings
Course Code:	CA29102
Course Duration:	1 Semester
No. of Credit Units:	6
Level:	A2
Medium of Instruction:	English
Prerequisites:	BST11081 Integrated Studio - Small-Scale Buildings; or CA19101 Integrated Studio - Small-Scale Buildings
Precursors:	Nil
Equivalent Courses:	BST21082 Integrated Studio - Medium-Scale Buildings
Exclusive Courses:	Nil

Part II

1. Course Aims:

This course aims to develop your understanding of building design and technology, with emphasis on an integrated approach to the problems of design relating to medium-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>Organise</i> information from various sources to facilitate the solving of problem cases and preparation of design proposals.	1
2.	<i>Outline</i> the essential information of a problem solution and design proposal through written, graphic and verbal means.	1
3.	<i>Incorporate</i> environmental and sustainable technologies into the design of a medium-scale building project.	2
4.	<i>Integrate</i> structural and facade systems with the spatial and functional aspects of a medium-scale project.	2
5.	<i>Develop</i> architectural design proposals to satisfy the environmental and technical requirements of a medium-scale project.	3
6.	<i>Formulate</i> solutions for various problems relating to medium-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 supported by a series of seminars and runs in conjunction with a number of subject area courses (CA19202 Communication Studies – Digital Media and Presentation, CA29052 Technical Studies – Building Envelope Systems and CA29401 Environmental Studies – Sustainable Design and Building 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	Supervision	Seminar	Total (hrs)
CILO 1	4	2			6
CILO 2	4	2			6
CILO 3	11	2			13
CILO 4	10.5	2	0.5		13
CILO 5	16.5	2	0.5	1	20
CILO 6		20			20
Total (hrs)	46	30	1	1	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.
2. 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 **Supervision** is an individual learning activity complementary to the design project of the integrated studio, in which you will discuss your design proposal with a studio tutor on an individual basis.
4. 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.
2. 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.
7. 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	Organise information from various sources to facilitate the solving of problem cases and preparation of design proposals.
A+/A/A-	Organisation of relevant information from all required plus additional sources. Thorough attempt to arrange the various types of information to facilitate the solving of problem cases and preparation of design proposals.
B+/B/B-	Organisation of relevant information from all required sources. Adequate attempt to arrange the various types of information to facilitate the solving of problem cases and preparation of design proposals.
C+/C/C-	Organisation of relevant information from most required sources. Limited attempt to arrange the various types of information to facilitate the solving of problem cases and preparation of design proposals.
D	Partial organisation of relevant information from a limited number of sources for the solving of problem cases and preparation of design proposals.
F	Inability to organise relevant information for the solving of problem cases and preparation of design proposals.
CILO 2	Outline the essential information of a problem solution and design proposal through written, graphic and verbal means.
A+/A/A-	Clear and comprehensive outline of the essential information of a problem solution and design proposal. Thorough attempt to explain and illustrate the various types of information through written, graphic and verbal means.
B+/B/B-	Clear outline of the essential information of a problem solution and design proposal. Adequate attempt to explain and illustrate the various types of information through written, graphic and verbal means.
C+/C/C-	Adequate outline of the essential information of a problem solution and design proposal. Limited attempt to explain and illustrate the various types of information through written, graphic and verbal means.
D	Partial outline of some essential information of a problem solution and design proposal through written, graphic and verbal means.
F	Inability to outline the essential information of a problem solution and design proposal through written, graphic and verbal means.
CILO 3	Incorporate environmental and sustainable technologies into the design of a medium-scale building project.
A+/A/A-	Comprehensive incorporation of innovative environmental and sustainable technologies into the design of a medium-scale building project.
B+/B/B-	Adequate incorporation of environmental and sustainable technologies into the design of a medium-scale building project.
C+/C/C-	Partial incorporation of environmental and sustainable technologies into the design of a medium-scale building project.
D	Minimal incorporation of environmental and sustainable technologies into the design of a medium-scale building project.
F	Inability to incorporate environmental and sustainable technologies into the design of a medium-scale building project.
CILO 4	Integrate structural and facade systems with the spatial and functional aspects of a medium-scale project .
A+/A/A-	Thorough and skilful integration of the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project. Comprehensive synthesis of all aspects into a coherent form.
B+/B/B-	Good integration of the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project . Adequate synthesis of all aspects into a coherent form.
C+/C/C-	Limited integration of the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project . Partial synthesis of all aspects into a coherent form.
D	Minimal integration of the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project . Inadequate synthesis of all aspects into a coherent form .
F	Inability to integrate the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project .
CILO 5	Develop architectural design proposals to satisfy the environmental and technical requirements of a medium-scale project.
A+/A/A-	Development of innovative architectural design proposals for a medium-scale project. Thorough and skilful integration of all aspects of the design to satisfy the environmental and technical requirements.
B+/B/B-	Development of workable architectural design proposals for a medium-scale project. Adequate integration of all aspects of the design to satisfy the environmental and technical requirements.
C+/C/C-	Development of largely resolved architectural design proposals for a medium-scale project. Partial integration of aspects of the design to satisfy the environmental and technical requirements.
D	Development of partially resolved architectural design proposals for a medium-scale project. Minimal integration of aspects of the design to satisfy the environmental and technical requirements.
F	Inability to develop coherent and feasible architectural design proposals to satisfy the environmental and technical requirements of a medium-scale project.

CILO 6	Formulate solutions for various problems relating to medium-scale building development.
A+/A/A-	Formulation of in-depth and coherent solutions for various problems relating to medium-scale building development.
B+/B/B-	Formulation of coherent solutions for various problems relating to medium-scale building development.
C+/C/C-	Formulation of largely coherent solutions for various problems relating to medium-scale building development.
D	Formulation of partial solutions for various problems relating to medium-scale building development.
F	Inability to formulate coherent solutions for various problems relating to medium-scale building development.

Part III

Keyword Syllabus:

Architectural design: Medium-scale building development; institutional buildings; incorporation of environmental factors in design; basic architectural programming.

Design integration: Environmental and sustainable strategies in design; integration of structural and facade systems.

Communication: Intermediate graphic and oral presentation.

Recommended Reading:

Text(s):

1. Foster, J.S. (2007). *Structure and fabric part 1 (7th ed)*. New York: Pearson/Prentice Hall.
2. Kumlín, R. (1995). *Architectural programming: creative techniques for design professionals*. New York: McGraw-Hill.
3. Laseau, P. (2001). *Graphic thinking for architects & designers (3rd ed)*. New York: J. Wiley.
4. Neufert, N. (2000). *Architects' data (3rd ed)*. Malden, MA: Blackwell Science.
5. Tutt, P. and Adler, D. (1988). *New metric handbook (Rev. ed)*. London: Butterworth Architecture.

Online Resources:

1. Course Blackboard site.