City University of Hong Kong Course Syllabus

offered by Department of Architecture and Civil Engineering with effect from Semester A 2021/22

Part I Course Overview

| Course Title: | Integrated Studio - High-Rise Buildings (Topic 3) |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course Code: | CA29133 |
| Course Duration: | 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.) |
| Credit Units: | 6 |
| Level: | A2 |
| 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) | CA29112 Integrated Studio - Medium-Scale Buildings (Topic 1); or CA29122 Integrated Studio - Medium-Scale Buildings (Topic 2); or CA29132 Integrated Studio - Medium-Scale Buildings (Topic 3); or CA29102 Integrated Studio - Medium-Scale Buildings; or BST21082 Integrated Studio - Medium-Scale Buildings |
| Precursors: (Course Code and Title) | Nil |
| Equivalent Courses: (Course Code and Title) | CA29103 Integrated Studio - High-Rise Buildings; BST21083 Integrated Studio - High-Rise Buildings; CA29113 Integrated Studio - High-Rise Buildings (Topic 1); CA29123 Integrated Studio - High-Rise Buildings (Topic 2) |
| Exclusive Courses: (Course Code and Title) | Nil |

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course aims to reinforce students' understanding of the integration of social, structural, statutory and other technical considerations in building design relating to the development of a high-rise building. Through a specific topic selected by the studio tutor, students will explore various themes relating to the development of a spatial configuration based on predetermined design intentions.

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) | | | |
|------|------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------|----------|----------|--|
| | | | Al | A2 | A3 | |
| 1. | Review information from various sources to facilitate the solving of preparation of design proposals. | | ✓ | | | |
| 2. | Integrate the requirements of building and development control legislations into the design of a high-rise building project. | | | √ | | |
| 3. | Integrate various sustainable strategies into the design and development of a building project. | | | √ | | |
| 4. | Develop architectural design proposals to satisfy the functional and technical requirements of a high-rise building project. | | | | ✓ | |
| 5. | Formulate solutions for various problems relating to high-rise building development. | | | | ✓ | |
| * 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 / | | | | |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------------------|--|
| | | 1 | 2 | 3 | 4 | 5 | week (if applicable) | |
| Design Project | Design Project engages students in the production of an integrated proposal for a building design of a specific topic in response to a set of constraints and requirements. Teaching and learning are conducted through regular studio classes in which students will develop their individual design proposals under the facilitation of a studio tutor. | √ | √ | √ | √ | √ | 8 hrs / week | |

| Semester Hours: | 8 hours per week | | | | |
|----------------------------------|-------------------------------------------|--|--|--|--|
| Lecture/Tutorial/Laboratory Mix: | Lecture (0); Tutorial (0); Laboratory (0) | | | | |
| | Studio: 8 hrs / week | | | | |

4. Assessment Tasks/Activities

(ATs are designed to assess how well the students achieve the CILOs.)

| Assessment Tasks / Activities | |) No. | | | | Weighting* | Remarks | |
|--------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|------------|---------|--|
| | 1 | 2 | 3 | 4 | 5 | | | |
| Continuous Assessment: 100% | | | | | | | | |
| 1. Interim Presentation (Design development sketches and models) | ✓ | ✓ | | | | 30% | | |
| 2. Final Presentation (Synthesis of analysis and development into a design solution) | | | √ | √ | √ | 50% | | |
| 3. Portfolio (Documentation of overall design process and outcomes) | | | | ✓ | ✓ | 20% | | |
| Examination: 0% | | | | | | | | |
| * The weightings should add up to 100%. | | | | | | 100% | | |

Students must attain a minimum mark of 30 in all assessment components 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)/ Pass (P) on P/F basis | Failure (F) |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|------------------------|----------------------------------------------|-------------------------------------------|
| 1. Interim Presentation (Design development sketches and models) | 1.1 Review relevant information from required plus additional sources. Thorough attempt to classify the various types of information to facilitate the preparation of design proposals. 1.2 Demonstrate the ability of comprehensive and essentially accurate integration of the requirements of building and development control legislations into the design of a high-rise building project. | High | Significant | Moderate | Basic | Not even reaching marginal level |
| 2. Final Presentation (Synthesis of analysis and development into a design solution) | 2.1 Demonstrate ability to develop design strategies incorporation of innovative environmental and sustainable technologies into the design of a high-rise building project. 2.2 Production of innovative architectural design proposals for a high-rise project. Thorough and skilful integration of all aspects of the design to satisfy the environmental and technical requirements. 2.3 Formulation of in-depth and coherent solutions for various problems relating to high-rise building development. | High | Significant | Moderate | Basic | Not even reaching marginal level |
| 3. Portfolio (Documentation of overall design process and outcomes) | 3.1 Compile a comprehensive document that presents clearly the synthesis and design process of the creative solution using text, graphics and other presentation techniques. | High | Significant | Moderate | Basic | Not even reaching marginal level |

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.)

Architectural design: High-rise building development; office buildings; residential buildings; sustainable strategies in design.

Design integration: Building and development control legislations in design; integration of high-rise structural systems; selection of building envelope systems and materials; detailing of advanced building components. Communication: Advanced graphic and verbal presentation.

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. Bailey, S. (1990). Offices. London: Butterworth Architecture.
- 2. Chandler, R. [et al.] (2005). Building type basics for housing. Hoboken: J. Wiley & Sons.
- 3. Eisele, J. and Kloft, E. [ed.] (2003). High-rise manual. Basel: Birkhauser.
- 4. Foster, J.S. (2007). Structure and fabric Part 2 (7th ed). New York: Pearson/Prentice Hall.
- 5. Kohn, A.E. and Katz, P. (2002). Building type basics for office buildings. New York: John Wiley & Sons.
- 6. Marmot, A. and Eley, J. (2000). Office space planning: designing for tomorrow's workplace. New York: McGraw-Hill.
- 7. Poon, T. and Chan, E. [ed.] (1998). Real Estate Development in Hong Kong. Hong Kong: Pace Publishing Ltd.
- 8. BD (Latest Edition). Codes of Practice and Design Manuals. Buildings Department Hong Kong.
- 9. BD (Latest Edition). Practice Notes for AP and RSE. Buildings Department Hong Kong.
- 10. Statute Laws of Hong Kong Chapter 123 (Latest Edition). Buildings Ordinance and Regulations.

2.2 Additional Readings

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

| 1. Nil |
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