# City University of Hong Kong Course Syllabus

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

## Part I Course Overview

Course Title:	Design Creation – Tectonics			
Course Code:	CA19114			
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:	A1			
<b>Proposed Area:</b> (for GE courses only)	<ul> <li>Arts and Humanities</li> <li>Study of Societies, Social and Business Organisations</li> <li>Science and Technology</li> </ul>			
Medium of Instruction:	English			
Medium of Assessment:	English			
<b>Prerequisites:</b> (Course Code and Title)	Nil			
<b>Precursors:</b> (Course Code and Title)	Nil			
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	CA19111 Integrated Studio – Small-Scale Buildings (Topic 1); CA19121 Integrated Studio – Small-Scale Buildings (Topic 2); CA19131 Integrated Studio – Small-Scale Buildings (topic 3) ;			
Exclusive Courses: (Course Code and Title)	Nil			

### Part II Course Details

#### 1. Abstract

(A 150-word description about the course)

This course aims to enhance students' understanding of the principles of architectural creation – tectonics. The emphasis is on introducing elements of design in Architecture and exploring the underlying principles of arts and science in Architectural design. Through small-scale projects, students will explore the mechanisms of architectural design creation.

#### 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)	Discover curriculu learning (please ti appropria	y-enriche m related outcomes ck where ate)	d
			Al	A2	A3
1.	Identify elements of tectonics in Architecture.		$\checkmark$		
2.	Understand and apply design considerations of users, functions, environment and technology in a design project.			$\checkmark$	
3.	Combine simple structural systems with the spatial and functional aspects of architectural design.			$\checkmark$	
4.	Produce design proposals to satisfy basic social and technical requirements of a project.				$\checkmark$
5.	Produce solutions for various problems relating to small-scale building design on a specific topic.				$\checkmark$
* If v	veighting is assigned to CILOs, they should add up to 100%.	100%			

<sup>#</sup> 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		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.	✓	✓			✓ 	6 hrs / week

Semester Hours:	6 hours per week		
Lecture/Tutorial/Laboratory Mix:	Lecture (0); Tutorial (0); Laboratory (0)		
	Studio: 6 hrs / week		

#### 4. Assessment Tasks/Activities

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

Assessment Tasks / Activities	CILO No.				Weighting*	Remarks	
	1	2	3	4	5		
Continuous Assessment: 100%	Continuous Assessment: 100%						
1. Assignments	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	80%	
2. Portfolio	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	20%	
Examination: 0%							
						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. Assignments	<ul> <li>1.1 Demonstrate</li> <li>understandings of elements of tectonics in Architecture,</li> <li>through attempt to incorporate</li> <li>elements of tectonics in the</li> <li>design project.</li> <li>1.2 Demonstrate</li> <li>understandings and</li> <li>incorporate design</li> <li>considerations of users,</li> <li>functions, environment and</li> <li>technology.</li> <li>1.3 Ability to combine simple</li> <li>structural systems with the</li> <li>spatial and functional aspects</li> <li>of architectural design.</li> <li>1.4 Produce design proposals</li> <li>to satisfy basic social and</li> <li>technical requirements of a</li> <li>project of a specific topic.</li> <li>1.5 Formulate solutions</li> <li>relating to small-scale</li> <li>building development of a</li> <li>specific topic.</li> </ul>	High	Significant	Moderate	Basic	Not even reaching marginal level
2. Portfolio	2.1 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.)

Design: Anthropometrics and ergonometric; Scale and proportions; Form and function; Design integration: Design to incorporate general considerations of users, functions, environment and technology;

Communication: Basic graphics, models and oral 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.	Clark, R.H. and Pause M. (1996). Precedents in architecture (2nd ed). New York: Van Nostrand Reinhold.
2.	Ching, F. (2012). A visual dictionary of architecture. (2 <sup>nd</sup> ed). New Jersey: John Wiley & Sons, Inc.
3.	Foster, J.S. (2007). Structure and fabric part 1 (7th ed). New York: Pearson/Prentice Hall.
4.	Ching, F. (2010). Building Construction Illustrated. (4th ed). New Jersey: John Wiley & Sons, Inc.
5.	Unwin, S. (2003). Analysing architecture (2nd ed). New York: Routledge.

#### 2.2 Additional Readings

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

1.	Nil