

THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS
School of Business
BUSI0096 Architectural Design Studio for Business Students

Fall Semester 2010

Instructor: Eve Siu-Tracy AIA, MArch (Harvard), BA Hon (Wellesley/MIT)
Office: Department of Architecture, KB 404
Phone: 2818-9000
Email: siutracy@hku.hk

Studio time: Wednesdays 16:00- 19:00; Fridays 09:30- 12:30
Studio venue: Eliot Hall 130
Consultations: By appointment and email

Honorary Consultant: Lawrence Franklin Adjunct Professor, Stanford Business School, MIT Sloan School, University of Virginia, HKUST, CUHK, University of Tel Aviv, University of Moscow

Pre-requisite: A 'creative spirit' + interest in architecture
Textbook: Francis D.K. Ching, *Architecture: Form, Space and Order*, John Wiley & Sons, Inc, New Jersey 2007

Course Description and Objectives

A comprehensive introduction to architectural literacy, this course is tailored to expose non-professional- degree students to skills germane to the creative process of design.

The course will be conducted as a problem based studio which mimics the core learning process of our professional architectural design studios. By tackling a series of projects in graduating complexity, students learn to sharpen their visual, spatial and ideological acuties and to develop sensitivities to architectural and urban design issues central to the environment.

The roles of various professionals involved in a design team will be discussed. Emphasis however, will be placed on the formulation of design concepts, the critical and analytical skills for actualization of concepts and effective presentations of ideas and designs, literal and graphic.

Objectives:

- 1 To provide students with an understanding of how architects work, from concept to actualization of projects.
- 2 To introduce a paradigm and to reinforce lateral thinking as means to creativity and problem solving in the fields of architectural and urban design.

Expected Course Learning Outcomes

For the course:

CLO0 Acquire basic knowledge in:

- Design methodologies
- Fundamentals in structures
- Fundamentals in construction
- Fundamentals in active and passive environmental control
- Concepts of 'Green' and 'Intelligent' buildings
- Process of design to construction management

CLO1 Able to describe and explain the design process of particular projects

CLO2 To work efficiently individually and in teams

For each exercise or simulation project, able to:

CLO3 Identify specific objective(s) as appropriate

CLO4 Use relevant information vis-à-vis context (historic; current; cultural; environmental; technical) towards design solution(s)

CLO5 Formulate design concepts

CLO6 Test concepts in two and three dimensional media (drawings, physical and/or digital models)

CLO7 Develop chosen design concept to its highest degree of resolution

CLO8 Effectively articulate/communicate/present design solution to different relevant groups

Alignment of Program and Course Outcomes

Program Learning Outcome	Course Learning Outcome
1. Acquisition and internalization of knowledge in key functional areas	CLO0, CLO3, CLO4, CLO5, CLO6, CLO7
2. Application and integration of knowledge	CLO3, CLO4, CLO5, CLO6, CLO7
3. Inculcating professionalism and instilling leadership skills	CLO2, CLO7, CLO8
4. Mastering communication skills	CLO1, CLO2, CLO8

Teaching and Learning Activities

A 'Problem Based Learning' process is the core of this Studio. The methodology is a traditional one in the professional training of an architect, which has been formally adopted as far back as the L'Ecole des Beaux Arts in the 18th, 19th centuries and continued to be practiced in most architectural schools today.

Students will be given a series of projects to work on, accompanied by lectures, group and individual 'critique' and discussion sessions'. Projects are geared in increasing complexity, towards experimentation and exposure of students design 'vocabulary' in the repertoire of skills in the process of creative thinking and design. These are aimed to be both fun and instructive.

Students will be asked to read, sketch, craft models, and to discuss their ideas, both on a one-to-one basis in desk critiques by the Studio professor and in presentation sessions.

The last project will be a simulation building design project which calls for a combination of design knowledge acquired throughout the semester. A final presentation and review session with invited guest architects/designers/consultants will conclude the Studio course.

Assessment

	Teaching and learning activity	Assessment
1. Critical + ‘Lateral’ thinking in a simple task . (CLO1, CLO3, CLO5, CLO8)	Project 1: Space/form composition with paper + one material	(No marks allocated, quality of attempt noted)
2. Experience a ‘Design/Build’ process; learn how to conceptualize, communicate graphically and actual construction with materials; an attempt at the ‘creative process’. (CLO1, CLO3, CLO4, CLO5, CLO6, CLO7, CLO8)	Project 2: Chair Design & Construction	Quality of design+ presentation Preliminary Review: 5% Final Presentation: 25% Total: 30%
3. Experience a ‘design to presentation’ process; towards an understanding of how architects work. (CLO0, CLO1, CLO2, CLO3, CLO4, CLO5, CLO6, CLO7, CLO8)	Project 3: Vacation House in Hydra, Greece	Quality of design+ presentation Preliminary Review: 5% Final Presentation: 35% Total: 40%
4. Introduction to current thinking in the contemporary international architectural scene. (CLO1, CLO3, CLO4, CLO5, CLO7, CLO8)	Attendance of public lectures by architects as offered in semester (Choose to attend at least 3, write report on 1 lecture, be able to discuss the other 2)	10% For attendance and quality of report
5. Basic information in site planning, architectural design. (CLO0, CLO3, CLO4, CLO5, CLO6, CLO7, CLO8)	1 Book Report (of 2 assigned books)	10% For quality of report
6. Practice in group discussions and dynamics. (CLO1, CLO2, CLO3, CLO4, CLO5, CLO8)	Overall contribution at lectures and discussions; effort and progress in projects	10%
		Total: 100%

Standards for assessment

A+	4.0	Superb
A	4.0	Excellent
A-	3.7	
B+	3.3	
B	3.0	Good
B-	2.7	
C+	2.3	
C	2.0	Fair
C-	1.7	
D+	1.3	Pass
D/D-	1.0	Review
F	0.0	Fail

Course Schedule

Week 1

Sept 1, Wed

Introduction and discussion

- 1 *Course structure*
- 2 *Basics: point, line, plane to the duality of Form + Space*
- 3 *Leo Tolstoy's paper, 'What is Art'*
- 4 *On 'art' and 'creative thinking'*

Sept 3, Fri

Lecture: *On graphic communication methods (plans, sections, elevations, perspectives, sketches, models).*

Project 1: Study of Materials and the 'Additive' or 'Assembly' Process:

Work with paper + one other material to create a form/space composition.

What is the nature of plain sheets of 'paper'? What can you do with it? You are allowed to use different types and thickness of paper (no colors please).

What are the dimensional and other limitations with your starting material? (A variety of papers will be offered as sample materials to examine). What is the difference between working with one large sheet of 'paper' and trying to join many individual similar sheets?

What is a 'Joint'? What are some alternative ways to 'join'?

Choose an additional material to work with. What happens when you add another material to your attempt at a composition (homework)? Examine joining two materials in 2-dimensional versus a 3-dimensional compositions. Can you incorporate the '4th dimension' (time) in your composition?

Document your design process (models, sketches, photos ++).
Individual Desk critiques.

Week 2

Sept 8, Wed

Project 1 Pin-Up

Lateral and Critical thinking processes as design investigative method.

Sept 10, Fri

Lecture: On 'Scale' & 'Program'

- 1 *Technical scales used in urban and architectural designs by architects and engineers - what, when, how and the 'professional slangs'*
- 2 *The process – from concept to construction*
- 3 *What is 'Human Scale'? What is 'Context'?*

Project 2: Design and Build a Chair

Preliminary study exercises:

- A Trace or draw the plan, 1 section and 1 elevation of a chair (from catalogs or photos). Repeat at a larger scale. What are the differences in the kind and amount of information that can be conveyed in the two scales?
- B Measure and record the height, arm span, reach etc of 3 people. Sketch or photograph a person and mark dimensions.
- C Measure and record comfortable dimensions for 5 human activities (for example, table height for writing, kitchen counter and cabinet heights for working, width of a corridor for 2, 3 people passing each other, door widths for different types of rooms)

For exercise A, work on tracing paper and present with A3 backing sheets.

Week 3

Sept 15, Wed

Study Exercises Pin Up

(Published anthropomorphic data hand out)

Begin Chair design, desk crits

Sept 17, Fri

Chair design, scaled sketches and sketch models, desk crits

Sept 17

Architecture Department Public Lecture, Knowles 419, 6:30pm
"New Y(W)ork" by Elizabeth Diller & Ricardo Scofidio

Sept 18

Architecture Department Public Lecture, Knowles 419, 6:30pm
"Megaform as Urban Landscape" by Kenneth Frampton

Week 3

Sept 22, Wed

Chair Project Pin-Up

Sept 24, Fri

Chair drawings and construction

Sept 25

Architecture Faculty Forum, Rayson Huang Theatre, 2:30pm
"Architectural Education"

Week 4

Sept 29, Wed

Review of Chair Project (5% of course grade)

Requirements: Scaled sketches and scaled model

Begin final drawings and construction of 1:1 model of Chair

Oct 1, Fri Public Holiday

Week 5

Oct 6, Wed

Presentation of Chair Designs (25% of course grade)

Requirements: scaled drawings, study models and 1:1 construction

Oct 8, Fri

Introduction of Project 3 'A Vacation House on Hydra, Greece'

Oct 8

Architecture Department Public Lecture, Knowles 419, 6:30pm

"China's Forgotten Bridges" by Ronald Knapp

Week 6

Oct 20, Wed

Lecture:

1 Context

2 Public/Semi public/semi private/private space

3 What is 'Circulation'?

4 Basic technical information

Oct 22, Fri

Lecture:

1 Site planning

2 Basic structures for small buildings

Homework for Reading Week:

1 Build a site model (group project) @1:200 to be used for individual designs

2 Begin individual design studies (Choose a site, analyse, do concept sketches)

Oct 26

Architecture Department Public Lecture

"Untitled" by Ai Weiwei, artist

Week 7

Oct 27

Reading/Field Trip Week

Oct 29

Reading/Field Trip Week

Assigned Readings: Kevin Lynch, Frank Ching

(2+ pages book reports 10% of course grade, hand in date Dec 10)

Oct 29

Architecture Department Public Lecture

"VERTicalia" by Liat Margolis, Toronto

Week 9

Nov 2, Wed

House Project working session, group desk crits

Test site and house design concepts @ 1:200 (drawings, sketch models)

Nov 5, Fri

Slide show and discussion: a selection of interesting small houses

Nov 5

Architecture Department Public Lecture

"Plastic FORM" by Greg Lynn, UCLA

Week 10

Nov 10, Wed

Project 3 Hydra Vacation House Pin-Up

Requirements: Site Analysis, Design Concept, Initial sketches and sketch models @1:200 on A2 sheets, vertical format

Nov 12, Fri

Individual help sessions @ 1:100 (plans, sections, elevations, sketches)

Week 11

Nov 17, Wed

Working @ 1:50 (partial plans, partial section/elevations), group session

Nov 19, Fri

Individual help sessions

Week 12

Nov 24, Wed

Interim Project Review (5% of course grade)

Requirements:

Site Plan @1:200

House Plans, Section, Elevation @1:100

Sketch house model @1:200 placed on group site model

Nov 26

Public Lecture

“The Poetry of Things: Pierre Chareau” by Esther da Costa Meyer, Princeton

Nov 28, Fri

Students are encouraged to visit Architecture Dept Student Presentations

Week 13

Dec 1, Wed

Presentation preparations

Dec 3, Fri

Presentation preparations

Week 14

Dec 8, Wed

Project Final Presentation with invited guest critics (35% of course grade)

Requirements:

Site Analysis

Concept Statement

Site Plan @1:200

House model @1:200 placed on group site model

House Plans, Section, Elevation @1:100

Sketches (no scale)

Partial Plan/Section/Elevation @1:50 (Optional)

Dec 10, Fri

Individual Feedbacks and Party at Eve’s House, evening