

**THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS**

**School of Business
IIMT3623 Design Thinking: Concepts and Applications
(6 credits)
2016/2017, Semester 1**

GENERAL INFORMATION

Instructor: Joseph P. H. Chan RIBA, M Arch (HKU), B A Hon (HKU)

(*Course coordinator: Joseph Chan. Please refer to Joseph for any course and project approach enquiries, or project marking requirement.)

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Phone: Joseph: 6480-5430

Honorary Consultant: Eve Siu-Tracy AIA, RA, MArch (Harvard), BA Hon (Wellesley/MIT)

Class & Studio time:

Semester 1 (i.e. from Sep to Dec 2016)

IIMT3623 Design Thinking: Concepts and Applications

Sub-classes: 1A

Class quota: **50 students per sub-class**

Venue: TBC

Consultations: Additional consultations as needed by email and/or appointment

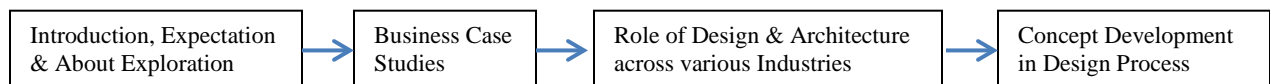
Co-requisite: **IIMT 3624 Design Studio**

Remarks: For students in BDI Major only

Students are required to have a 'creative spirit' + interest in exploration and implementation of design concept

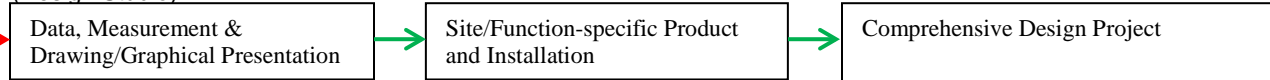
Course Summary Diagram

(Design Thinking: Concepts and Applications)



(Design Studio)

[Group 2 only]



[Group 1 starts in parallel with Theory Class]

→ [Group 1] Studio projects in parallel with Theory lectures: putting learning in practice stage-by-stage (all in 1st Sem.)

→ [Group 2] Studio projects (in 2nd Semester) after completing the theory courses learning (in 1st Semester)

COURSE DESCRIPTION

(Overall IIMT 3623 & IIMT 3624)

The courses aim at developing the students' design mentality and their understanding in design methodologies, emphasizing on 1, how concepts are being developed and implemented, and 2, the process driven by design champions with the awareness and consideration of related stakeholders.

The courses are conducted through theory courses plus concurrent problem-based studios. Architectural and multi-disciplinary designs and its related topics will serve as the media on the learning in these courses of design and concept developments. To enable it, students will be given comprehensive introductions to architectural and other design literacy. The courses are tailored for non-professional degree students to acquire skills germane to the creative process of design and to an understanding of the role of designers in the larger realm of design and construction industries in the 21st century. Our focus is to look at designs, challenges and innovations on programmatic, functional and operational aspects, while the more architecturally spatial 2D/3D arrangements will support the materialization of any design developments.

The two courses IIMT 3623 and 3624 are complementary. IIMT 3623 provides theoretical foundations and knowledge necessary to the workshop (IIMT 3624); while the studio is the backbone to any designer/architect's practice – trials, experiments and deliveries, all of which bring the theories learnt to life. By tackling a series of projects in graduating complexity in 'Studio', students learn to sharpen their visual, spatial and ideological acuties and to develop sensitivities to critical project issues.

(IIMT3623 (Theory))

Design methodology is an enhancement in the business environments. It is closely related to the innovation process within different industry context. This course aims to develop students' design mentality and skillsets - idea conceptualisation, concept development, design process and implementation, as well as project planning and management.

Case studies will be examined to solidify understanding of why and where creative designs are incorporated in industries like retail, education, office workplace, art and cultural industries, and entertainment business. This course will discuss respective historical background and theory behind the innovations introduced.

Students will be challenged to take cross-disciplinary approach to creatively achieve business, social and communal goals in their projects. Studies of innovation will cover architectural and product design, sales and marketing, branding development, in/out-source solutions, and change management.

COURSE OBJECTIVES

(IIMT3623 (Theory))

The courses provide an introduction to design principles and approaches, of which the students will be guided to see the potential of creativity one could bring to different project types. Curiosity and courage in trials, experiments and explorations will be encouraged.

Through both case studies and design proposals, the courses are to challenge students' thinking in a multi-layers way on a multi-disciplinary level (business/corporate/design/architecture).

These courses will be building students' skillsets in capturing inspiration, observation, analysis, creativity and communication. While these skills will also be required and trained in IIMT 3624 studio, the students will learn and practise hybrid capabilities as analyst and creative designer in the courses.

During our studies of design thinking applications and creative propositions, we will look into the definition of creativity, the role of history/experience/convention, considerations of the conditions, as well as the effects to the systems and their transformations

Programme Learning Outcomes

PLO1: Acquisition and internalization of knowledge of the programme discipline

PLO2: Application and integration of knowledge

PLO3: Inculcating professionalism and leadership

PLO4: Developing global outlook

PLO5: Mastering communication skills

COURSE LEARNING OUTCOMES		
Course Learning Outcomes	Aligned Programme Learning Outcomes	
<p>CLO0 Acquire basic knowledge in: Design methodologies – To develop innovative ideas. Fundamentals in design considerations Fundamentals in architectural aspects: structures, construction, environmental control Concepts of ‘Green’ and ‘Intelligent’ buildings Development and Implementation process from design to management International design and management trends and their effects</p> <p>CLO1 Ability to present project specifics lucidly CLO2 Ability to work efficiently individually and in teams</p> <p>Each assignment and project will lead participants to:</p> <p>CLO3 Identify objective(s) at different phases CLO4 Use relevant information vis-à-vis context (historic; current; cultural; environmental; technical) towards design solution(s) CLO5 Formulate creative/appropriate design concepts CLO6 Test concepts in two and three dimensional media (drawings, physical and/or digital models) CLO7 Develop selected concept to highest degree of resolution CLO8 Effectively articulate/communicate solution to different groups</p>	<p>PLO1, PLO3, PLO4, PLO5</p> <p>PLO5 PLO3</p> <p>PLO1, PLO2 PLO1, PLO2</p> <p>PLO1, PLO2 PLO1, PLO2</p> <p>PLO1, PLO2, PLO3 PLO3, PLO5</p>	
COURSE TEACHING AND LEARNING ACTIVITIES		
Course Teaching and Learning Activities	Expected contact hour	Study Load (% of study)
(IIMT3623: Theory – Design Thinking: Concepts and Applications)		
<p>The basic knowledge crucial to the architectural design process will be introduced in lectures, hand out notes and recommended readings. Students are required to work on mini-projects, in group or individually, to reinforce their design thinking in each stage of the design process. Students are also required to attend public lectures by designers and architects, on contemporary issues.</p> <p>Case studies planned for class discussion: Retail and Hypermarket, Workplace and Office, School and Education, Art, Culture and Entertainment Industry. The awareness towards direct and indirect stakeholders, project nature/functions and the evaluation of their short and long term impact will be studied</p> <p>Guest speakers might be invited for their experience sharing.</p>		
T&L1. Lecture with interactive presentation	18 hours	50.0%
T&L2. Reading, Case-based study and analysis	5 + indiv. hrs	13.8%
T&L3. Tutorial and discussions (Individual and group)	4 hours	11.1%
T&L4. Individual and Group Project Development	3 + indiv. hrs	8.3%
T&L5. Presentation	6 hours	16.7%
Total	36 hours + individual hrs.	100% planned + personal effort

Assessment Methods	Brief Description (Optional)	Weight	Aligned Course Learning Outcomes
A1. Learning from different perspectives with ability to evaluate inputs and observations.	<i>Assignment 1:</i> Reports on Exhibition and Public Lecture attended of students' choice on related topics. *****	10%	CLO0, CLO2, CLO8
A2. Analysis of existing situations and the changes that happened, incl. the process and impacts.	<i>Assignment 2:</i> Case Studies *****	10%	CLO0, CLO2, CLO8
A3. Critical + 'Lateral' thinking + Action on specific tasks with particular design skillset	<i>Assignment 3:</i> Exercise on particular skillsets of different design stages *****	30%	CLO1, CLO2 , CLO3, CLO4, CLO5, CLO6, CLO8
A4. Putting knowledge acquired from the courses to practice – to apply design thinking and solutions to achieve specific goals and requirements.	<i>Assignment 4:</i> Aspirations on design and selected topics *****	40%	CLO1, CLO2, CLO3, CLO4, CLO5, CLO6, CLO7, CLO8
A5. Practice in group discussions and dynamics; Class engagements	<i>Overall contribution to class; individual digital portfolio</i>	10%	CLO1, CLO2, CLO3, CLO5, CLO8
Total		100%	

STANDARDS FOR ASSESSMENT

Course Grade Descriptors

A+ (4.3), A (4.0), A- (3.7)	Superb(4.3)/Excellent - Candidate has consistently demonstrated a thorough understanding and original view of the subject as evidenced by exceptionally astute analysis and synthesis. Authentic style has been established and shown in the project development – with innovative and creative idea supported by sufficient trial and experiment to achieve more than expected by the project brief.
B+ (3.3), B (3.0), B- (2.7)	Good - Candidate frequently demonstrated a substantial understanding of the subject and has demonstrated his/her effort in achieving the project brief and requirement.
C+ (2.3), C(2.0), C-(1.7)	Fair - Some of the responses are well organized, clear but with insufficient elaboration – there is significant room for improvement to achieve a more satisfactory level to the project course or project requirement.
D+(1.3), D/D-(1.0)	Pass(1.3)/Review - Solutions to questions and problems containing unstructured but relevant observations. Candidate has shown marginally interest in the subject.
F(0.0)	Fail - Little evidence of basic familiarity with the subject, nor demonstration of sufficient effort to basic project and course requirement.

Assessment Rubrics for Each Assessment

Students' project submission and presentation will be assessed based on requirements set in each brief handed out. In general, these will be of equal importance: relevant and thorough analysis, original idea, development process, quality of design and presentation.

Student to note that relevant trials and experiments are the key of success in this course. Simply submitting the project in the way as checklist 'box-ticking' will not be sufficient.

COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

* Preliminary Schedule based on 2016/17 timetable.
 First Day of Teaching - 01Sep16 (1st Semester)

(IIMT3623: Theory)

Week 1 01 Sep 16 (thur) Week 2 05 Sep 16 (mon) 08 Sep 16 (thur) Week 3 12 Sep 16 (mon) 15 Sep 16 (thur) Week 4 19 Sep 16 (mon) 22 Sep 16 (thur) Week 5 26 Sep 16 (mon) 29 Sep 16 (thur) Week 6 03 Oct 16 (mon) 06 Oct 16 (thur) Week 7 10 Oct 16 (mon) - Holiday 13 Oct 16 (thur) Week 8 17 Oct 16 (mon) - Reading Week 20 Oct 16 (thur) - Reading Week Week 9 24 Oct 16 (mon) 27 Oct 16 (thur)	Week 10 31 Oct 16 (mon) 03 Nov 16 (thur) Week 11 07 Nov 16 (mon) 10 Nov 16 (thur) Week 12 14 Nov 16 (mon) 17 Nov 16 (thur) Week 13 21 Nov 16 (mon) 24 Nov 16 (thur) Week 14 28 Nov 16 (mon) 01 Dec 16 (thur) - Revision Period Week 15 05 Dec 16 (mon) 08 Dec 16 (thur) - Assessment Period Week 16 12 Dec 16 (mon) 15 Dec 16 (thur) - Assessment Period Week 17 19 Dec 16 (mon) 22 Dec 16 (thur) - Assessment Period
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* Date of Final Project presentation will be confirmed at a later date

REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS

- Bachelard, G**, 1969, *The Poetics of Space*, tr. Maria Jolas (Boston: Beacon Press)
- Francis D.K. Ching**, 2007, *Architecture: Form, Space and Order*, John Wiley & Sons, Inc, New Jersey
- Kenneth Frampton**, 1995, *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture*, MIT press, Cambridge
- Paul N. Friga**, 2009, *The McKinsey Engagement: A Powerful Toolkit for More Efficient & Effective Team Problem Solving*, McGraw-Hill
- John Kenneth Galbraith**, 1958, *The Affluent Society*, Houghton Mifflin Co.
- Harries, K**, 1998, *The Ethical Function of Architecture* (Cambridge, MA: MIT Press)
- Rem Koolhaas** 1997, *S,M,L,XL*. Monacelli Press; Subsequent edition, New York
- Rem Koolhaas** 1978, *Delirious New York: A Retroactive Manifesto for Manhattan*: Thames & Hudson, London
- Le Corbusier**, 2000, *The Modular*, Birkhauser
- Neil Leach**, 1997, *Rethinking Architecture*, Routledge, London & New York
- Henri Lefebvre**, 2004, *Rhythm & Analysis*, Bloomsbury Academic
- Henri Lefebvre**, 1992, *The Production of Space*, Wiley-Blackwell
- Littlefield, D**, 2012, *Metric Handbook, Planning and Design Data (Architectural Press)*
- Kevin Lynch**, 1960, *Image of the City*, MIT Press, Cambridge
- Christian Norberg-Schulz**, 2000, *Architecture: Presence, Language and Place*, Skira Editore, Milan
- Steen Eiler Rasmussen**, 1959, *Experiencing Architecture*, First MIT Press
- Aldo Rossi**, 1984, *The Architecture of the City*, MIT Press
- Colin Rowe, Robert Slutzky**, *Transparency: Literal and Phenomenal*
- Salter, P**. 1999, Building in Nature" In *Relating Architecture to Landscape*, edited by Jan Birksted (London: E &FN Spon)
- Richard Sennett**, 1974, *The Fall of Public Man*, W. W. Norton & Company, New York

David Grahame Shane, 2005, *Recombinant Urbanism: Conceptual Modeling in Architecture, Urban Design, and City Theory*, John Wiley & Sons

Robert J. Sternberg, 1988, *The Nature of Creativity: Contemporary Psychological Perspectives*, Cambridge University Press

Bernard Tschumi, 1994, *Event-Cities*, MIT Press, Cambridge

Bernard Tschumi, *The Manhattan Transcript*

Zumthor, P 1998, *Thinking Architecture* (Baden Switzerland: Lars Muller Pubs)

Peter Zumthor, 2006, *Atmospheres – Architectural Environments, Surrounding Objects*, Birkhauser

MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

The SETL questionnaire is one of the ways HKU courses and teaching are evaluated. HKU places significant importance on student learning and on the continuous enhancement of teaching and learning outcomes. Students are asked to complete this evaluation of their learning experiences at the conclusion of each course in which they enrol. Questionnaire items relate to the overall evaluation of the course as well as an evaluation of teaching.

Students are encouraged to talk to the course lecturer anytime if needed.

COURSE POLICY

General requirements in plagiarism, academic honesty and attendance apply. Any lateness or absence to the class needs to have the lecturer(s) officially informed with sound reason – otherwise penalty in the form of mark deduction might apply.

ADDITIONAL COURSE INFORMATION

Further to what has been described in the assessment section, participation and engagement in the class and tutorial is required in this course. Lecturers will help students to see into their own work and to assist to bring it into its fullest manifestation, through an effective and interactive learning.