



INTRODUCTION TO ARCHITECTURE

INSTRUCTORS

Kelly Chow
chowk@cuhk.edu.hk

Jimmy Ho
jimmyho@cuhk.edu.hk

Wataru Shinji
watarushinji@cuhk.edu.hk

Caroline Wuethrich
carolinebarbarawuethrich@cuhk.edu.hk

Lily Zhang
lilyzhang@cuhk.edu.hk

ISSUE

The process of design is an integral part of daily human life even though we usually think of it as limited to “design problems” exercised by “designers.” To act on human intention is to design; but the process of design is not an abstract one. It must be seen integrally in terms of process. It must be studied and practiced in terms of the products of that process. It must be advanced in terms of skills and knowledge particular to those products – the works of architecture. In education the work is an instrument to mastering the process.

DESCRIPTION

ARCH1001 explores creative process and design practices in viewing, experiencing, reading, and ultimately producing FORM. Skills of representation and fabrication are introduced in the context of the development of each student’s capacity to observe, interpret and translate design concepts into physical form.

Students will explore various tools, instruments, techniques, and processes, relating them to the study of architecture. The aim is to expose the students to a spectrum of design skills and transformations through a precise and rich set of tools and armatures and introduce the art of architecture as a design process and language that activates, mediates and politicizes the built environment and its subjects.

Upon the completion of the course, students will have gained an understanding of architectural design and the nature of design process as a systematic and non-arbitrary method of generating and evaluating architectural form. Students will acquire a method of analysis involving various graphic means and physical model making.

Students will also develop an appreciation for the role of architectural precedent in design thinking and process. At the end of this course, students will be able to employ the basic techniques of planimetric drawing and physical modelling to communicate an architectural concept and design.

COURSE SYLLABUS

TOPIC 1: OBSERVATION + DOCUMENTATION

- Photography
- Freehand Sketching

TOPIC 2: ABSTACTION

- Orthographic Drawings
- Planimetric Drawings
- Structured Drawings

TOPIC 3: FORMATION

- Modelling-massing
- Modelling-assembly

TOPIC 4: TRANSFORMATION

- Collage
- Hybrid Techniques

METHODS

Architecture is by nature a doing word.

Learning to do architecture involves a particular kind of learning. As a mind wishing and willing to take on the challenges and responsibilities of “architecting” we must become a student of the ways in which the minds of fellow architects think and work.

We will use a fundamental element of architecture – THRESHOLD [閾] – as the basis for our learning; as a work of architecture, and as a subject for our exercises.

A threshold defines the limit between one zone and another. Embedded within that definition, a threshold requires more than itself to be discussed; it requires one circumstance and another. The situations can be:

Physical:

inside / outside; up / down; or

Environmental:

light / dark; warm / cool; air flow / no air flow; or

Metaphysical:

public / private; sacred / profane.

Group projects, individual assignments, critiques, discussions, research and studio sessions will provide students an opportunity to work through issues and ideas within a social, cultural and personal context.

The exercises are intended to serve as a basis for learning by observation, experimentation, and discovery.

Each individual student will focus on a specific threshold – a work of architecture – within a larger group context to introduce principles of architectural FORM and DESIGN tools.

Studio / Workshops

Each “class” is a studio session – a workshop where the specific issues and methods will be worked “hands-on.” Most studio sessions will have an in-class exercise to experiment with various transformations that the methods can explore. These are supported by online resources which can be viewed prior to class, that would introduce key concepts and ideas, and would be further elaborated within the studio session. It is therefore important to attend all sessions to get the most out of the class.

In-class work will be maintained in a working portfolio, with submissions to the BlackBoard at the end of each session.

FIELD TRIPS

Architecture, by its very nature, invites the most direct study. We will refer to real world examples of THRESHOLDS through excursions outside of the classroom as appropriate.

DELIVERABLES

- 1_ Photographic Documentation
- 2_ Freehand Sketch Documentation
- 3_ Orthographic Drawing Set
- 4_ Axonometric Drawing Analysis
- 5_ Structured (Freehand) Drawing Set
- 6_ Model1 – mass
- 7_ Model2 – assembly
- 8_ Model Photography
- 9_ Collage
- 10_ Threshold Exploration (Hybrid drawing)
- 11_ Portfolio Submission

LEARNING OUTCOMES

1. To develop an understanding of architectural design as a process involving technique, knowledge and visual perception.
2. To gain a knowledge of the fundamental elements and principles of architectural composition
3. To develop an understanding of space as a medium of architectural design.
4. To develop a method of design process that combines objective reasoning with visual analysis of form.

ASSESSMENT SCHEME

Assessment is based on the evaluation of exercises following the specific criteria outlined in each assignment.

In general, evaluation of all work is based on KNOWLEDGE, SKILL, and FOCUS.

- KNOWLEDGE of architecture
- SKILL in the application of this knowledge in design
- FOCUS in selection of direction and choices in the process of design

SPECIFIC ASSESSMENT

- 00_ Photographic Documentation (5%)
- 01_ Freehand Sketch Documentation (5%)
- 02_ Orthographic Drawing Set (10%)
- 03_ Axonometric Drawing Analysis(10%)
- 04_ Structured (Freehand) Drawing Set (5%)
- 05_ Model1 – mass (5%)
- 06_ Model2 – assembly (5%)
- 07_ Model Photography (5%)
- 08_ Collage (5%)
- 09_ Threshold Exploration(20%)
- 10_ Portfolio Submission (25%)
- Total: 100%**

COURSE FORMAT

1_Teaching Days

1. Students must attend for F2F teaching during these teaching hours.
Teaching Day: Wednesday 2:30 pm – 5:15pm
2. Teaching Venue: Lee Shau Kee Architecture Building 1/F - Exhibition Zones E+F
3. Field trips, lectures, and other learning activities may be scheduled outside of teaching days.

2_Student Study Effort_3 credit course (Total: 140 hrs)

1. Class Contact: 39 hrs (Lecture 10hrs, Tutorial 19hrs, Critique 5hrs, Field Trip 5hrs)
2. Other Student Study Effort: 100 hrs (Studio / Self Study)

3_Important Dates

Review 01: 22 January 2025

Review 02: 26 February 2025

Final Portfolio Submission TBC

IMPORTANT NOTE TO STUDENTS

Expectations for Professional Conduct

The motto of The Chinese University of Hong Kong (CUHK) is “Through learning and temperance to virtue”. This motto places equal emphasis on the intellectual and moral education of students. In addition to pursuing academic excellence, students of CUHK are expected to maintain and uphold the highest standard of integrity and honesty in their academic and personal lives, respect the rights of others and abide by the law. More information on Postgraduate studies can be found in the PG Student Handbook. <https://www.gs.cuhk.edu.hk/>

Attendance

Class attendance is required in all courses. For an excused absence, the instructor must be notified and presented with documentation of illness or personal matter. Please note: **Three (3)** or more unexcused absences may result in a failing grade for the course.

Academic Honesty

The Chinese University of Hong Kong places very high importance on honesty in academic work submitted by students and adopts a policy of zero tolerance on academic dishonesty

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at: <http://www.cuhk.edu.hk/policy/academichonesty/>.

With each assignment, students may be required to submit a statement that they are aware of these policies, regulations, guidelines and procedures.

Third-Party Assistance

All intellectual work essential to the design project must be completed by the student and cannot, under any circumstance, be outsourced to a third party (including, but not limited to a company, consultant, alumni, and/or friend).

In the design studio context, students may utilize external resources, such as printing services for presentation materials, and/or laser cutting and 3D printing services for prototyping purposes. Use of such third-party services constitutes non-intellectual work done by others. It is only permitted with prior written consent from the studio tutor and acknowledgment of such work done by the third party.

Assistance from other students or friends for aspects of project production also constitutes non-intellectual work done by others; this is allowed only if declared and acknowledged in a written statement attached to any such work that has received assistance.

Under all circumstances, students must declare all work done by others by completing the school's designated form before assessment. This form must include a detailed explanation of the third party's identity (name and relationship to the student), when and how they were utilized, and the specific tasks they performed in the project. The completed form, signed by the student, must be endorsed by the tutor and presented during the final review. The school will collect and retain this form for record-keeping purposes.

Failure to follow this code of conduct may be considered a case of academic dishonesty, to be reviewed by a disciplinary board, and possible failure of the course.

Artificial Intelligence

Unless approved by the Programme or School Director, any use of AI tools such as ChatGPT or image generation tools (Midjourney) etc. is strictly prohibited and may result in disciplinary action in accordance with university policy on academic honesty. Students may refer to the CUHK 'Use of Artificial Intelligence tools in Teaching, Learning and Assessments' – A Guide for Students.

Student Work

Submission of studio documentation must be complete and correctly formatted. Missing or incomplete submission of the documentation folder will result in the grade for the course being withheld. This will prevent registration for the following term or delay graduation. In addition, a grade deduction of *one letter grade* will be made.

GRADE DESCRIPTOR

Grade	Descriptor	Criteria	Points
A	Excellent	Outstanding performance on all learning outcomes.	4
A-	Very Good	Generally outstanding performance on all (or almost all) learning outcomes.	3.7
B+	Good	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.	3.3
B			3
B-			2.7
C+	Fair	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses.	2.3
C			2

C-			1.7
D+	Pass	Barely satisfactory performance on a number of learning outcomes.	1.3
D			1
F	Failure	Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.	0

Term 2: 6 January 2025 (Monday) – 19 April 2025 (Saturday)

WEEK 01		
08.01	STUDIO	Introduction
WEEK 02		
15.01	FIELD TRIP	Thresholds in the City
WEEK 03		
22.01	STUDIO PINUP	Review 01
WEEK 04		
29.01	NO CLASS	Chinese New Year
WEEK 05		
05.02	STUDIO	Orthographics – Transformation 01
WEEK 06		
12.02	STUDIO	Planimetrics (axonometrics) – Transformation 02
WEEK 07		
19.02	STUDIO	Structured Hand Drawings – Transformation 03
WEEK 08		
26.02	STUDIO	Review 02
WEEK 09		
05.03	NO CLASS	Reading Week
WEEK 10		
12.03	STUDIO	Model 01 (massing) – Transformation 04
WEEK 11		
19.03	STUDIO	Model 02 (massing) – Transformation 05
WEEK 12		
26.03	STUDIO	Model Photography – Transformation 06
WEEK 13		
02.04	STUDIO	Collage – Transformation 07
WEEK 14		
09.04	STUDIO	Threshold Exploration (FINAL)
WEEK 15		
Meeting by appointment		

Written Feedback to Students

Term: _____

Grade: _____

Course: _____

Date: _____

Assignment: _____

Student Name: _____

Studio Tutor: _____

Student ID: _____

Feedback from Studio Tutor:

Achievements:

Challenges: