TAYLOR'S UNIVERSITY
Wisdom • Integrity • Excellence

BACHELOR OF SCIENCE (HONOURS) IN ARCHITECTURE

ARCHITECTURE DESIGN STUDIO V
ARC60306

FINAL PROJECT

August 2018

Drawing for Urban Design, Lorraine Farrelly, 2011

TAYLOR'S UNIVERSITY

Wisdom • Integrity • Excellence

SCHOOL OF ARCHITECTURE, BUILDING & DESIGN

Centre for Modern Architecture Studies in Southeast Asia

Bachelor of Science (Honours) in Architecture

ARCHITECTURE DESIGN STUDIO V (ARC60306)

Prerequisite: Architecture Design Studio IV

Final Project

80% of final marks

Submission Weeks 7, 10 and 14

Introduction

From now on, students will concentrate on designing a Learning Centre within an urban infill site. The design of the building is to consist of appropriate architectural responses that address the aspects of the urban street context and user behavioural patterns as discerned and analysed in the Preliminary Studies.

Apart from developing a narrative on architectural strategy in response to the relevant questions pertaining to community and its context, the design should take into consideration a holistic application of structural, spatial, functional and environmental requirements to address the user needs for a Learning Centre. The design development of this project will include an introduction to the legislative restrictions that impact an architectural scheme, the integration of lighting and acoustic design, as well as the design exploration and detailing of the façade and building envelopes that is coherent with the architectural language of the overall design project.

Objectives for the Project

The objectives for this assignment are as follows:

1. To take into consideration key aspects of urban design and context in relation to architecture
2. To develop an awareness and basic compliance to Design Codes and Statutory Requirements
3. To emphasize the importance of elevational context and composition in developing architectural design
4. To implement and explore the conceptual, schematic and design development phases in an architectural design project

Learning Outcomes of this Project

1. Demonstrate the fundamental knowledge of Design Codes and Regulations
2. Explore plan-section and elevational studies to resolve relevant aesthetic, construction and environmental issues in the design development phase
3. Produce a design outcome that encompasses the appropriate site-specific architectural responses through its formal, cultural, legislative, structural and environmental design solutions for specific urban issues.
4. Produce drawings (both 2D and 3D), models and presentations to verbally and visually communicate architectural ideas and scheme

Brief

The studio runs through two projects: project 1: urban study on place making aspects; project 2 comprises of architectural strategy and design development. The site context is Jalan Stesan 1, South Klang. There is a real life scenario to reactivate the urban spaces in order to connect to the urban community. The studio project is collaborative with a research project at Taylor's University and the scenario of the future vision for the area to be a) a place for the community and b) with an active frontage of the streets. The major issue being the fall of spatial connections and engagement to the local community, to the tides of various contemporary forces. The current trend is fading the rich cultural heritage rather than nurturing it. The solution is in design employing critical approach to the notion of 'content' as a purposeful narrative to powerful questions relevant to the context (Low, 2010). To begin with, the question is:

To what extent ***the*** Learning Centre for All ***can be*** connecting to and empowering the urban community, at the street scale?

The above question should be answered by design by exploring various possibilities of relevant sub-questions that suits your interest and exploration from Project 1. For the rest of the semester, you will concentrate on designing a Learning Centre within an urban infill site in South Klang. The design of the building consist of appropriate architectural responses that address the aspects of the urban street context and user behavioural patterns as discerned and analysed in the Preliminary Studies. The final project has two distinctive stages: a) Architectural Strategy and b) Design Development and detailing.

Task

Architectural Design Strategy (weeks 5 – 7)

Aim: to deduct a position for finding architecture and produce architectural design strategy.

By this time of the semester, the students should be able to find their positions to develop the Learning Centre. The students are to individually interpret the idea of 'Learning Centre' and come up with architectural strategy for the same. This will be in-reflection to the issues and inspirations they found in the Project 1 in order to offer to character, continuity and enclose, quality of public realm, ease of movement, legibility, adaptability and diversity in the city. Architecture is about geometry. Exploration on form-typologies such as linear, perimeter and diffused in terms of layering, subtraction, over-lapping etc is compulsory at this stage.

ARCHITECTURAL DESIGN STRATEGY Weeks 05, 06 & 07
Objectives: To establish Learning Centre as a possibility in the context To explore programmatic requirements and spatial layout of the design scheme To explore formal and structural design strategy
Deliverables: Sketches, diagrams, massing study models, orthographic plan-section and elevation exploration and **schematic drawings**, evidence of weekly readings in discussions and references
Interim Submission #1: Pin-up presentation of Ideas and Massing Strategy

Architecture for place-making (weeks 8 – 14)

Aim: to develop an architectural narration for place making in the city.
Architectural strategy should be resolved for form, activity and circulation. They will have to develop architecture FORM and SPACE for

- Positive outdoor space (site layout)
- Animating the edge (Façade design)
- Building size and scale (sections)
- Building for change (space planning/function)
- A thriving public realm (connection to the street)

Architectural design strategy should be resolved for form, activity and circulation. The proposed building should be of an area of minimum 1200 m^2 and a maximum of 1300 m^2 and 3-5 storeys high in the given infill boundaries.

Apart from developing a narrative on architectural strategy in response to the relevant questions pertaining to community and its context, the design should take into consideration a holistic application of structural, spatial, technical and environmental requirements to address the user needs for an urban Learning Centre. This will include a focus on lighting and acoustic design, as well as design of the façade and building envelope that is of a coherent language to the overall design scheme.

DESIGN DEVELOPMENT Weeks 08, 09 & 10
Objectives: To develop and finalize structural, spatial and formal design To explore, develop and incorporate design and details of façade, lighting and acoustic technologies
Deliverables: Orthographic plan-section and elevation drawings, sectional perspective and detail section drawings, sketches, spatial and façade development models, diagrams and evidence of weekly readings in discussions and references
Interim Submission #2 in Week 11: Pin-up presentation of Finalized Spatial Layout and Plans
DESIGN DETAILING AND VISUALISATION Weeks 11, 12, 13, 14
Objectives: To complete production of Presentation Panels and Final Model
Deliverables: floor plans, sections, site elevation(s), diagrams of schematic design, final design development, detail drawings, final model, additional images
Pre-Final Review #1 in Week 13: Pin-up presentation of Presentation Panels. Final Submission & External Review in Week 14: Submission and final presentation of Final Project

About a Learning Centre…

The idea of Learning Centre is recent in the architecture narration. You will have narrow down to a specific need for the community from your urban analysis of project 1; community could mean people sharing the urban location, context and of holding similar interests. Your Learning Centre is

for All, catering to multi user groups. It will be a focus for a diverse variety of cultural, learning and recreational opportunities.

Please refer to Nuefert Architect's Data provided. All areas of the learning must be safe and accessible for all potential users, regardless of any physical or other disability. Circulation should be given careful consideration so that the public and community facilities accessed appropriately. This will influence the design of every part of the building, from convenient drop-off/parking spaces for people with disabilities and barrier-free access to the entrance, right down to the appropriate height and stability of furniture and equipment.

The scheme for the Learning Centre should strictly span a total floor area of minimum 1200 m^2 and maximum of 1300 m^2, and comprise between 3-5 storeys within its infill lot. Sufficient floor area must be allocated for the design of a public realm, circulation and ancillary functions reading, discussion that is required for a Learning Centre of this scale and type.

Following are the space allocation within the proposal

Total built up area	: a minimum of 1200 m^2 to a maximum of 1300 m^2
Learning activities (reading, discussion, etc.)	: 60%
Spaces for Public Realm	: 20%
Services and circulation	: 20%

(Refer to the lecture notes for more details of the schedule of areas)

The design scheme must also take into consideration the appropriate building setbacks and basic fire requirements (i.e. escape distances, stairs and shaft).

Submissions

Interim 1 (10%), Week 7

1 A0 panel

- Design narrative diagrams
- Site plan 1:200
- Floor plans 1:100/ 1:200
- Sections 1:100/ 1:200 to include site boundaries
- Design narrative diagrams, sketches and additional images i.e. 3D renders, diagrams of schematic design and design development strategies and responses
- Massing strategies (models + 3D modelling)

STUDY MODELS: To set within micro-site model *scale 1:200*

Strategy on developing architecture as a narrative to a set of questions	Narrative diagrams Massing strategy **Schematic drawings**

Interim 2 (formative assessment), Week 10

4 to 6 x A1 panels in standardized layouts

- Design narrative diagrams
- Site plan 1:500
- Floor plans 1:100/ 1:200
- Sections 1:100/ 1:200 to include site boundaries and description of lighting and acoustic integration
- Façade design
- Fire run/compliance 1:100 plan
- Wall section in 1:20 details on façade/architectural features
- Diagrams, sketches and additional images i.e. 3D renders(optional), diagrams of schematic design and design development strategies and responses
- Evidence of design development – study models, sketches, images to be compiled for information

STUDY MODELS: To set within micro-site model *scale 1:200*

Resolution of design	Diagrams and representations Building Tech1 & Building Regulations

Final Presentation (70%), Week 14

8 to 10 x A1 panels mounted on A1 foam boards

- Design narrative diagrams
- Site plan 1:500
- Ground Floor plan including context: 1/200
- Floor plans 1:200/ 1:100
- Sections 1:200/ 1:100
- Façade designs 1:200/ 1:100
- Fire run/compliance 1:100 plan
- Wall section in 1:20 details on façade/architectural features
- Final model scale 1:100/ 1:200
- Diagrams/ detail drawings for demonstration of structural, lighting, façade and acoustic integration

- Diagrams, sketches and additional images i.e. 3D renders, diagrams of schematic design and design development strategies and responses
- Physical model
- Design development process folder

Visualisation on design	Diagrams and representations Building Tech 1, Building Science 2 and Services

Note: These requirements are subject to minor revisions that will be briefed by the Module Coordinator ahead of the scheduled interims, reviews and submission deadlines as stipulated in the Module Outline.

References:

References

Main References:

1. Baker, G. 1989. Design Strategies In Architecture (2nd Ed.). New York: Van Nostrand Reinhold.
2. Bentley, I., *et.al.*, 2013, *Responsive Environments: Manual For Designers,* Routledge, London
3. Lynch, K. 1979. The Image Of The City. Cambridge, Massachusetts: The MIT Press.
4. Low, K. M., 2010, *Smallprojects*, Adaptus
5. Llewelyn – Davies, 2001, *Urban Design Compendium 1, Chapter 4 'Facades and Details',*, English Partnerships, the Housing Corporation, London

For Weekly Readings, please refer to the handouts to be provided by the Module Coordinator.

*Note: Students are required to obtain a minimum C grade in this assessment to pass the module.

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Marking criteria

Marks shall be distributed as follows (for final presentation):

ASSESSMENT CRITERIA	% MARKS
DESIGN INTENTION AND EXPLORATION Design expresses and explores students' position/interest in architecture Relating to urban context, i.e., formulation of clear design strategies to respond to the context of the street and city block, socio-behavioural patterns of the people, and building programme of a Learning Centre that enhances the sense of place for an urban community.	**/ 20**

EVIDENCE OF DESIGN Design development drawings that demonstrate design intention and site exploration and design narrative diagrams that translate ideas into the design	**/ 15**
SPATIAL AND FUNCTIONAL PROGRAMMING Relevance and development of programme to the proposed design brief 1200 m^2 to 1300 m^2, 3 – 5 storey Development of the building programme of Learning Centre to address issues of permeability and circulation through multifunctional spaces, interstitial spaces and a public realm that are supported by key ancillary spaces Façade Design (10%) Design development including façade design and architectural expression	**/ 40**
DESIGN COMMUNICATION Presentation drawings that demonstrate clarity of information presented	**/ 15**
LEGISLATIVE REQUIREMENTS Design considers and includes expanded aspects of design e.g. regulatory requirements, boundary setback and fire requirements.	**/ 10**
ENVIRONMENTAL CONSIDERATIONS & TECHNOLOGICAL INTEGRATION Consideration and integration of appropriate structural system, lighting, acoustic and façade systems to suit overall building design.	**Y / N**
TOTAL	**100**

The above criteria will be evaluated at incremental stages via the following assessment types:
FORMATIVE ASSESSMENT: Week 10 Weekly monitoring and feedback on **design process**.
SUMMATIVE ASSESSMENT Final evaluation of **design outcomes/project**.

SCHEDULE

(Subject to change at short notice)

Date/Week	Lecture/Presentation	Discussion/ Tutorial	Self-directed Study
	Hours	Hours	Hours
Mon, 24 September **Thurs, 27 September**	**Project Brief 2 Introduction by Dr suchi** **Lecture 05: Design Exploration & Development Strategies Indrani Vanniasingham & Ar. Fadzwin Hashim** **Lecture 06: Learning Centres by Ar Kenny Chong**	Design strategy Design strategy	Massing explorations
Week 5	2	8	6
Mon, 1 October	**Lecture 07: Content Driven Architecture** **Dr Suchi**	WORKSHOP ON: Developing Relevant Questions and Strategies	Study Models for Massing Exploration

Thurs, 4 October		Architectural strategies	
Week 6	2	8	6
Mon, 8 October **Thurs, 11 October**		Design Development **Final Project - Interim 1 Submission (10%)**	Plan-Section Studies
Week 7	2	8	6
Mon, 15 October **Thurs, 18 October**	**Lecture 08: Regulatory Codes & Compliance by Ar. Hanani Zain**	Quiz activity Design Development: the codes	Plan-Section Studies
Week 8	-	10	6
Mon, 22 October **Thurs, 25 October**	**Lecture 09: Façade Design** **Ar. Patmaselvi Paramarajah**	WORKSHOP ON 'CONSTRUCTION DESIGN' Design Development: Facade	Facade Studies
Week 9	2	8	6
Mon, 29 October **Thurs, 1 November**		Design Development: Facade **Final Project - Interim 2 (Formative assessment)**	Facade Studies
Week 10	2	8	6
Mon, 5 November **Thurs, 8 November**	Reflections on formative feedbacks: online e-learning week	Design Development: Façade Integration	Facade Studies
Week 11	-	10	6
Mon, 12 November **Thurs, 15 November**	**Lecture 10: Presentation Skill – Diagramming for Design Representation** **Hafiz Amirrol** **Final briefing by Dr suchi**	Design Development Design Visualization	Production of Presentation Model and Panels
Week 12	-	10	6
Mon, 19 November **Thurs, 22 November**	Design Visualization Design Visualization	Pre-final Review #1 (progress check) Pre-final Review #2 (progress check)	Production of Presentation Model and Panels
Week 13	-	10	6
26 – 30 November	Production of presentation Final presentation **PIN UP 28 NOVEMEBR 2018** **REVIEW 29 NOVEMBER 2018**	Design Visualization Final Presentation	Production of Presentation Model and Panels

Week 14	-	10	6
3 – 7 December	TGC Portfolio Submission		
-	**STUDY LEAVE**		16
10 – 14 December	-		
-	**EXAMINATION**		

Prepared by:

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Checked by:

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Date: 22/08/2018
Mr. Ahmad Nazmi Anuar
Stream Coordinator
(Design Studies)

Approved by:

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Date: 22/08/2018
Mr Mohd. Adib Ramli
Program Director
BSc. (Hons) in Architecture

Remarks:
1. The Project Brief is to be distributed to the students in the first week of the semester.
2. Any changes to the Project Brief shall be communicated (in writing) to the Programme Director and the approved revised version must be communicated to the students