



SAM RATULANGI UNIVERSITY MANADO
FACULTY OF ENGINEERING, DEPARTMENT OF ARCHITECTURE
Architecture Undergraduate Program

Document Code
RPS/ARS/FT/UNSRAT/ARS-3380

SEMESTER LEARNING PLAN

COURSE (MK)	CODE	COURSE GROUP	CREDIT (SKS)		SEMESTER	UPDATE DATE
5 th Architecture Design Curriculum 2020 (K-2020)	ARS-3380	ALL	T = 3	P = 6	6 (Six)	11 May 2022
Authorization	Developed by:	Course Group Coordinator		Study Program Coordinator		
	Ir. Octavianus H.A. Rogi, ST, MSi	Ir. Julianus A.R. Sondakh, MT		Frits O.P. Siregar, ST, MSc		
Learning Outcomes (LOs)	Expected Learning Outcomes (ELOs) Charged on Course					
	ATTITUDE & VALUES					
	A1	<i>Embodying a behavior setting that includes national patriotism; religious; humanistic; appreciative and tolerant to cultural and religious diversity; sensitive to social and natural environmental issues; obedience to the law; uphold academic ethics; responsible, independent, persevering, thriving and have entrepreneurial spirit.</i>				
	GENERAL SKILLS					
	S1	<i>Able to make decisions, apply or develop science, technology and art with logical, critical, systematic, innovative, creative, qualified and measurable thinking, independently or in group cooperation, based on valid data input and analysis, and well reported and documented.</i>				
	SPECIAL SKILLS					
	S2	<i>Able to perform various architectural communication techniques (mathematical & statistical expression; manual & computer aided drawings; oral & written verbal narratives) to support a design proposition.</i>				
	MAIN WORK ABILITIES					
	S3	<i>Able to apply architectural knowledge and skills to design an architectural object based on a contextual design problems, especially on the coastal and hilly environment, and present the design result through communicative design documents.</i>				
	KNOWLEDGE MASTERY					
	K1	<i>Understand the architectural philosophy, history, criticism, research and design theory / methods, especially in the context of vernacular architecture of the coastal and hilly environment.</i>				
	K2	<i>Understand the aesthetic conception, art and culture, especially in the context of vernacular architecture of the coastal and hilly environment.</i>				
K3	<i>Understand the basic concepts of ecology, biodiversity, energy, water, life cycle of building materials, disaster risk, concepts of comfort in human-environment interaction, concepts and strategies of built environment system in a contextual design problems, especially in the context of vernacular architecture of the coastal and hilly environment.</i>					
K4	<i>Understand the aspects of building statics and mechanics, building materials, structural systems, utility sysetem, and the strategy for their integration in a contextual design problems, especially in the context of vernacular architecture of the coastal and hilly environment.</i>					
K5	<i>Understand the process, methods and strategies of integration of theoretical principles, standards and practice precedents for site planning, landscaping, landscaping, outdoor & interior design, urban and residential / settlement planning & design, especially in the context of vernacular architecture of the coastal and hilly environment.</i>					

	K6 <i>Understand other relevant aspects of the planning, design and physical development of built environment which includes : a) legal aspect, project management & technical documentation, environmental sociology / psychology, professionalism, economics and business administration</i>																																																																		
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<p>Able to carry out architectural design activities with the following scope of contextual problems:</p> <ul style="list-style-type: none"> • The design object is the totality of buildings and outdoor spaces with multiple functions in a tread parcel block. • The basic functional program of the design object is selected / defined as a combination of 3 basic functions which include residential functions, office functions, and commercial functions (services, shopping and recreation). • The site location is selected / determined based on basic criteria as followed: a) located in the area of the city service center, b) has an area of about 3 ha, c) has a special characteristic / genius loci (physical or non-physical aspects), d) can be an undeveloped area or a built area that needs to be “redeveloped” (obsolete land use). • Thematically, the design must prioritize the thematic principle of “building as capital investment” according to Geoffrey Broadbent’s architectural function theory in an integralistic framework with other principles (artistic form, container of activities, climatic modifier, environmental filter, behavior modifier and cultural symbolization).. In addition to the “required theme” above, the design must also apply a certain thematic principle which is optional but has a logical association with the aspects of basic functional program of the object and/or site location. 																																																																			
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Sub-CLO1	Able to select / specify the context of design problems and develop comprehensive knowledge of design which includes; a) the typological context of the design object, b) the context of the site location and its environment, and c) the context of the design theme																																																																		
Sub-CLO2	Able to compile and develop a programmatic concept of design which includes: a) buildings and indoor spaces program, and b) outdoor spaces program,																																																																		
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Correlation Between ELO / CLO & Sub-CLO																																																																			
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	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 10%;">A1</th> <th style="width: 10%;">S1</th> <th style="width: 10%;">S2</th> <th style="width: 10%;">S3</th> <th style="width: 10%;">K1</th> <th style="width: 10%;">K2</th> <th style="width: 10%;">K3</th> <th style="width: 10%;">K4</th> <th style="width: 10%;">K5</th> <th style="width: 10%;">K6</th> </tr> </thead> <tbody> <tr> <td>CLO</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>Sub-CLO 01</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td>√</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sub-CLO 02</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sub-CLO 03</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>Sub-CLO 04</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> </tbody> </table>		A1	S1	S2	S3	K1	K2	K3	K4	K5	K6	CLO	√	√	√	√	√	√	√	√	√	√	Sub-CLO 01	√	√	√	√	√		√				Sub-CLO 02	√	√	√	√	√	√	√				Sub-CLO 03	√	√	√	√	√	√	√	√	√	√	Sub-CLO 04	√	√	√	√	√	√	√	√	√	√
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Short Description of Course	<p>5TH ArchitectureE Design (AR-3380) is one of the core courses in the curriculum of the Undergraduate Architecture Study Program, Faculty of Engineering, Sam Ratulangi University. This course is designed to support the achievement of the main competencies of graduates, especially as prospective architects. This course is characterized by a block course in the sense that it is a course whose learning materials are cross-group and focused on achieving learning outcomes in various categories, both in the form of mastery of knowledge and special skill abilities. As a compulsory subject, this course has other courses as prerequisites, in particular the Basic Architectural Design, Architectural Design 1, Architectural Design 2, Architectural Design 3 and Architectural Design 4 which are hierarchically tiered to form a group of core courses in the curriculum of the study program. This course is also a prerequisite for tiered core courses in the following semesters, namely Pre-Final Final Project and Final Project courses as part of the core courses group in the study program curriculum..</p>																																																																		

Learning Materials	<p>A) Sub-CLO 01 Learning Materials</p> <ol style="list-style-type: none"> 1) Design practice assignment brief for Module 1 2) Performance standards, formats and presentation techniques of design practice assignment Module 1 3) Theoretical review of the logical association of objects, sites and design themes 4) Theoretical review of architectural typology, various building functional types & methods of typological study of architectural object 5) Theoretical review of urban spatial context, urban spatial structure & pattern, zoning regulations, site genius loci and & methods of site analyses. 6) Theoretical review of Broadbent's architecture functionality, especially the principle of 'building as capital investment' as the mandatory design theme, introduction to various other design themes, & methods of architectural design theme implementation study. <p>B) Sub-CLO 02 Learning Materials</p> <ol style="list-style-type: none"> 1) Design practice assignment brief for Module 2 2) Performance standards, formats and presentation techniques of design practice assignment Module 2 3) Review of architectural space programming approaches / methods 4) Review of architectural space standards and system utilization. 5) Review of other relevant architectural space standards <p>C) Sub-CLO 03 Learning Materials</p> <ol style="list-style-type: none"> 1) Design practice assignment brief for Module 3 2) Performance standards, formats and presentation techniques of design practice assignment Module 3 3) Review of methods and references for the synthesis of the site development plan concept. 4) Review of methods and references for the synthesis of the mass configuration concept. 5) Review of methods and references for the synthesis of structure and utility concepts. 6) Review of methods and references for the synthesis of interior spaces concepts 7) Review of methods and references for the synthesis of the building envelope concept 8) Review of methods and references for the synthesis of outdoor spaces concepts <p>D) Sub-CLO 04 Learning Materials</p> <ol style="list-style-type: none"> 1) Design practice assignment brief for Module 4 2) Performance standards, formats and presentation techniques of design practice assignment Module 4 3) Presentation techniques and references for the production of two dimensional design drawings (layout plan, floor plans, sections, views, site plan, etc.) 4) Presentation techniques and references for the production of three dimensional design drawings (axonometry of floor plan, orthogonal section of buildings, perspective drawings, visual spots of indoor / outdoor spaces) 5) Presentation techniques and references for the production of detail engineering drawings (isometry of building structure, layout of utility systems, details of structure / construction and utility components) 6) Presentation techniques and references for the production of three dimensional design simulations (animated videos and/or miniature model)
References	<p>Main Reference :</p> <ol style="list-style-type: none"> 1) Rogi, O.H.A, et al, 2021, Architectural Design 5 Teaching Materials, Undergraduate Architecture Program, Department of Architecture, Faculty of Engineering, Sam Ratulangi University <p>Other References :</p>

	<ol style="list-style-type: none"> 1) Frampton, Kenneth, "Modern Architecture A Critical History", Oxford, 1980 2) Baker, Geoffrey, "Le Corbusier: An Analysis of Form", E. And F.N Spon, 1996 3) Lang, Jon ; "Creating architectural Theory: The Role of Behavioral Sciences in Environmental Design"; Van Nostrand Reinhold; 1987 4) Catanase and Snyder; " Pengantar Arsitektur", Erlangga, 1980 5) Baker Geoffrey, "Design Strategies in Architecture : Formal Approach to the Analysis of Form", ... , 1996 6) Attoe, Wayne, "Architecture and Critical Imagination", John Wiley & Sons, 1978 7) W.R.Spillers, ed., " Basic Question of Design Theory", American Elsevier, 1974 8) Norberg Schulz Christian, "Intentions in Architecture", The M.I.T Press, Cambridge Massachusetts, 1977 9) Lawson, Brian, "How Designers Think", DLL
Lecturers in Charge	Ir. Octavianus H.A. Rogi, ST, MSi, dkk
Prerequisite Courses	Basic Architectural Design, 1 st Architectural Design, 2 nd Architectural Design, 3 rd Architectural Design and 4 th Architectural Design

Week	Sub-CLOs	Evaluation		Forms of Learning, Methods, Student Assignment, & [Time Estimation]		Learning Materials [References]	Weights of Evaluation (%)
		Indicators	Criteria / Forms	Offline	Online		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1-3	Sub-CLO 01 Able to select / specify the context of design problems and develop comprehensive knowledge of design which includes; a) the typological context of the design object, b) the context of the site location and its environment, and c) the context of the design theme	Indikator : - Clarity of argumentation and relevance of selection / determination of contextuality of design problems, with actual problems and scope of assignment - Accuracy of approaches, methods and strategies on conducting the in-depth study of the typological aspects of the design object, location, site and environment as well as the design theme as the defined design context - Completeness and quality of the study on the typological aspects of the design object, location, site and environment as well as the theme as the defined design context	Criteria : - Evaluation Rubrics Forms : - Design Problem Statement (Specification of Design Problem Context) - Scheme of Work Procedures for Design Context Studies - Outcomes of Design Context Studies (Object Typology, Site & Environment, Design Theme)), as the Basis for Design Requirements.	Design Practice Module 1 (on Site & Studio) [3x6x170 minutes] - Module 1 Assignment (Group Task) : Selection / Determination of Design Context Specifications and In-Depth Study of Design Context - Field Observation - Case / Project Based Study - Presentation of Outputs - Group / Class Discussion - Collaborative Learning - Cooperative Learning - Mentoring	Lectures / Tutorials / Responses of Learning Materials Module 1 (on Virtual Class) [3x3x50 minutes] - Lectures / Tutorials - Responses - Group / Class Discussion Structured Assignment (at home) [3x3x60 minutes] - Progress Reporting & Submission of Final Output of Module 1 Assignment Independent Activities (at home) [3x3x60 minutes]	<ol style="list-style-type: none"> 1) Design practice assignment brief for Module 1 2) Performance standards, formats and presentation techniques of design practice assignment Module 1 3) Theoretical review of the logical association of objects, sites and design themes 4) Theoretical review of architectural typology, various building functional types & methods of typological study of architectural object 5) Theoretical review of urban spatial context, urban spatial structure & pattern, zoning regulations, site genius loci and & methods of site analyses 6) Theoretical review of Broadbent's architecture functionality, especially the principle of 'building as capital investment' as the mandatory design theme, introduction to various other design themes, & methods of architectural design theme implementation study. 	15 %

4-6	Sub-CLO 02 Able to compile and develop a programmatic concept of design which includes: a) buildings and indoor spaces program, and b) outdoor spaces program	Indicators : - Accuracy of approaches, methods and strategies on the preparation / development of programmatic design concepts - Completeness and quality of the program (buildings, indoor and outdoor spaces) in accordance with the context of the design problem	Criteria : - Evaluation Rubrics Forms : - Scheme of Work Procedures for the Development of Programmatic Design Concepts - Outputs of Programmatic Design Concepts (Buildings / Indoor Spaces and Outdoor Spaces Program)	Design Practice Module 2 (on Studio) [3x6x170 minutes] - Module 2 Assignment (Group Task) : : Development of Programmatic Design Concepts - Case / Project Based Study - Presentation of Outputs - Group / Class Discussion - Collaborative Learning - Cooperative Learning - Mentoring	Lectures, Tutorials & Responses of Learning Materials Module 2 (on Virtual Class) [3x3x50 minutes] - Lectures / Tutorials - Responses - Group / Class Discussion Structured Assignment (at home) [3x3x60 minutes] - Progress Reporting & Submission of Final Output of Module 2 Assignment Independent Activities (at home) [3x3x60 minutes]	1) Design practice assignment brief for Module 2 2) Performance standards, formats and presentation techniques of design practice assignment Module 2 3) Review of architectural space programming approaches / methods 4) Review of architectural space standards and system utilization. 5) Review of other relevant architectural space standards	15 %
7-11	Sub- CLO 03 Able to compile and develop design concepts which include: a) site development plan, b) mass configuration, c) structure and utility, d) interior layout, e) building envelope and f) outdoor spaces layout.	Indikator : - Accuracy of approaches, methods and strategies on preparation / development of design concepts - Completeness and quality of design concepts including: a) site development plan, b) mass configuration, c) structure and utilities, d) interior spaces layout, e) building envelope and f) outdoor layout, according to the context of the design problem	Criteria : - Evaluation Rubrics Forms : - Scheme of Work Procedures for the Development of Design Concepts - The Outputs of Design Concepts, including: a) Site Development Plan, b) Mass Configuration, c) Structure and Utilities, d) Interior Spaces Layout, e) Building Envelope and f) Outdoor Layout	Design Practice Module 3 (on Studio) [5x6x170 minutes] - Module 3 Assignment (Personal Task) : Development of Design Concepts - Case / Project Based Study - Presentation of Outputs - Class Discussion - Mentoring	Lectures, Tutorials & Responses of Learning Materials Module 3 (on Virtual Class) [5x3x50 minutes] - Lectures / Tutorials - Responses - Class Discussion Structured Assignment (at home) [5x3x60 minutes] - Progress Reporting & Submission of Final Output of Module 3 Assignment Independent Activities (at home) [5x3x60 minutes]	1) Design practice assignment brief for Module 3 2) Performance standards, formats and presentation techniques of design practice assignment Module 3 3) Review of methods and references for the synthesis of the site development plan concept. 4) Review of methods and references for the synthesis of the mass configuration concept. 5) Review of methods and references for the synthesis of structure and utility concepts. 6) Review of methods and references for the synthesis of interior spaces concepts 7) Review of methods and references for the synthesis of the building envelope concept 8) Review of methods and references for the synthesis of outdoor spaces concepts	35 %

12-16	<p>Sub- CLO 04 Able to translate design concepts into definitive designs through mediums of architectural presentation techniques, including: a) two dimensional design drawings, b) three dimensional design drawings, c) detailed engineering drawings, d) three dimensional design simulation (video animation and or miniature model).</p>	<p>Indicators :</p> <ul style="list-style-type: none"> - Accuracy of the approach, method and strategy of translating / concretization the concept into a definitive design - Completeness and quality of the architectural technical presentation medium of the definitive design, which includes: a) two dimensional design drawings, b) three dimensional design drawings, c) detailed engineering drawings, d) tridimensional design simulation (video animation and or miniature model), according to program and design concepts 	<p>Criteria :</p> <ul style="list-style-type: none"> - Evaluation Rubrics <p>Forms :</p> <ul style="list-style-type: none"> - Scheme of Work Procedures for Translating Concepts into Definitive Designs through Various Architectural Presentation Media - Outputs of Definitive Design Results through Various Media of Architectural Technical Presentations including: : a) Two Dimensional Design Drawings, b) Three Dimensional Design Drawings, c) Detailed Engineering Drawings, d) Three Dimensional Design Simulation (Video Animation and or Miniature Model), according to Program and Design Concepts 	<p>Design Practice Module 4 (on Studio) [5x6x170 minutes]</p> <ul style="list-style-type: none"> - Module 4 Assignment (Personal Task) : Design Concretization (Translating Concepts into Definitive Designs through Various Architectural Presentation Media) - Case / Project Based Study - Presentation of Outputs - Class Discussion - Mentoring 	<p>Lectures, Tutorials & Responses of Learning Materials Module 4 (on Virtual Class) [5x3x50 minutes]</p> <ul style="list-style-type: none"> - Lectures / Tutorials - Responses - Class Discussion <p>Structured Assignment (at home) [5x3x60 minutes]</p> <ul style="list-style-type: none"> - Progress Reporting & Submission of Final Output of Module 4 Assignment <p>Independent Activities (at home) [5x3x60 minutes]</p>	<ol style="list-style-type: none"> 1) Design practice assignment brief for Module 4 2) Performance standards, formats and presentation techniques of design practice assignment Module 4 3) Presentation techniques and references for the production of two dimensional design drawings (layout plan, floor plans, sections, views, site plan, etc.) 4) Presentation techniques and references for the production of three dimensional design drawings (axonometry of floor plan, orthogonal section of buildings, perspective drawings, visual spots of indoor / outdoor spaces) 5) Presentation techniques and references for the production of of detail engineering drawings (isometry of building structure, layout of utility systems, details of structure / construction and utility components) 6) Presentation techniques and references for the production of three dimensional design simulations (animated videos and/or miniature model) 	35 %
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DESIGN PRACTICE ASSIGNMENT BRIEF (Module 1) :

Selection / Determination of Design Context Specifications and In-Depth Study of Design Context (Group Task)

COURSE LEARNING OUTCOME (CLO)

Able to carry out architectural design activities with the following scope of contextual problems:

- The design object is the totality of buildings and outdoor spaces with multiple functions in a tread parcel block.
- The basic functional program of the design object is selected / defined as a combination of 3 basic functions which include residential functions, office functions, and commercial functions (services, shopping and recreation).
- The site location is selected / determined based on basic criteria as followed: a) located in the area of the city service center, b) has an area of about 3 ha, c) has a special characteristic / genius loci (physical or non-physical aspects), d) can be an undeveloped area or a built area that needs to be “redeveloped” (obsolete land use).
- Thematically, the design must prioritize the thematic principle of “building as capital investment” according to Geoffrey Broadbent's architectural function theory in an integralistic framework with other principles (artistic form, container of activities, climatic modifier, environmental filter, behavior modifier and cultural symbolization).. In addition to the “required theme” above, the design must also apply a certain thematic principle which is optional but has a logical association with the aspects of basic functional program of the object and/or site location.

Sub CLO 01 : Able to select / specify the context of design problems and develop comprehensive knowledge of design which includes; a) the typological context of the design object, b) the context of the site location and its environment, and c) the context of the design theme

DESCRIPTION OF TASKS & OUTPUTS

Description of Activities: ~Referring to the description of the design context framework set out in the CLO, (basic functional program of the design object, the location of site and the design theme), in groups, students will select and determine the design context specifications and conduct an in-depth study of each substance of the specified context. (typology of object, site and its environment as well as the design theme) comprehensively, so that they have adequate knowledge before making efforts to initiate design concepts.

- ~The selection or determination of the design context specifications is carried out by referring to the identification of actual design problems related to a specific locus, the alternatives of which can be prepared by the lecturer or explored by students in groups.
- ~ The implementation of an in-depth study of each design context must be carried out based on an appropriate and clear work scheme.
- ~The study of object typology needs to be carried out to provide a sufficient understanding of the typological characteristics of the design object, by tracing the function type, geometric type and historical cultural type of the design object. The study of object typology must be carried out using the literature study method and the study of precedents of similar objects.
- ~The study of the location, as well as the site and its environment is carried out to provide sufficient understanding of the potential aspects and constraints of the site and its environment as well as patterns of design responses that are associative with the typology of objects. This site and

environmental study must cover the condition of the physical and non-physical aspects of the site and environment and pay special attention to the genius loci of the site equipped with adequate site and environmental data.

~The study of the design theme is carried out to provide sufficient understanding regarding the meaning, principles and implementation strategies of the theme concerned in its association with the typology of objects as well as the conditions of the site and its environment. The study of this design theme must include the mandatory theme of “building as capital investment” as well as the optional supporting themes that have been selected or defined. The study of the design theme must be carried out through a literature study approach/method as well as a study of precedents on the implementation of the theme on a particular object.

~Periodically, the progress of the task must be reported, consulted with the lecturer as mentor, presented and discussed in class to get feedback.

Outputs

: ~Description / graphic communication of the selection / determination of the design context

~Description / graphic communication of the work scheme to conduct an in-depth study of the design context

~Description / graphic communication of object typology context assesment

~Description / graphic communication of site and its environment context assesment

~Description / graphic communication of the design theme context assesment

ASSESSMENT / EVALUATION TARGETS

- 1) Intensity of Student Participation (in Group) in Presentation and Group / Class Discussion Related to Design Practice Assignment
- 2) Intensity of Consultations with Lecturer as Mentor (per Group) Related to Design Practice Assignment (Minimum Target Number of Consultations: 2 times)
- 3) Completeness and Quality of Task Implementation Outputs

DESIGN PRACTICE ASSIGNMENT BRIEF (Module 2) : Development of Programmatic Concept of Design (Group Task)

COURSE LEARNING OUTCOME (CLO)

Able to carry out architectural design activities with the following scope of contextual problems:

- The design object is the totality of buildings and outdoor spaces with multiple functions in a tread parcel block.
- The basic functional program of the design object is selected / defined as a combination of 3 basic functions which include residential functions, office functions, and commercial functions (services, shopping and recreation).
- The site location is selected / determined based on basic criteria as followed: a) located in the area of the city service center, b) has an area of about 3 ha, c) has a special characteristic / genius loci (physical or non-physical aspects), d) can be an undeveloped area or a built area that needs to be “redeveloped” (obsolete land use).
- Thematically, the design must prioritize the thematic principle of “building as capital investment” according to Geoffrey Broadbent's architectural function theory in an integralistic framework with other principles (artistic form, container of activities, climatic modifier, environmental filter, behavior modifier and cultural symbolization).. In addition to the “required theme” above, the design must also apply a certain thematic principle which is optional but has a logical association with the aspects of basic functional program of the object and/or site location.

Sub CLO 02 : Able to compile and develop a programmatic concept of design which includes: a) buildings and indoor spaces program, and b) outdoor spaces program

DESCRIPTION OF TASKS & OUTPUTS

- Description of Activities:** ~Referring to the outputs of Module 1 assignment, in groups, students develop a programmatic concept of the design which includes the indoor spaces and buildings program as well as the outdoor space program.
- ~ The development of these programmatic concepts must be carried out based on an appropriate and clear work scheme.
 - ~ The buildings and indoor spaces program in question is a plan of indoor spaces provision which includes the list of types of space, organization and grouping of spaces, standard of spaces utilization, capacity and size of spaces and their clustering into the number of building units to be held on site.
 - ~ The outdoor spaces program is a plan to provide outdoor spaces, both in the category of green open spaces and non-green open spaces, which will be the complementary spaces to the buildings and indoor spaces program on the site. The description of the outdoor spaces program includes the type of spaces, the organization and grouping of spaces, the standard of spaces utilization as well as the capacity and size of the spaces.
 - ~ Programmatic concepts must be prepared by taking into account the results of the study in module 1 assignment, which include studies on aspects of building typology, site and environmental aspects and aspects of design themes.
 - ~ Periodically, the progress of the task must be reported, consulted with the lecturer as mentor, presented and discussed in class to get feedback.

Outputs

- : ~Description / graphic communication of the work scheme of the programmatic concepts development
- ~Description / graphic communication of the buildings and indoor spaces program
- ~Description / graphic communication of the outdoor spaces program

ASSESSMENT / EVALUATION TARGETS

- 1) Intensity of Student Participation (in Groups) in Presentations and Group / Class Discussions related to Task Implementation
- 2) Intensity of Consultations with Lecturer as Mentor (per Group) in the Implementation of Tasks (Minimum Target Number of Consultations : 2 times)
- 3) Quality of Work Scheme for Task Implementation
- 4) Completeness and Quality of Task Implementation Outputs

DESIGN PRACTICE ASSIGNMENT BRIEF (Module 3) :

Development of Design Concepts (Individual Task)

COURSE LEARNING OUTCOME (CLO)

Able to carry out architectural design activities with the following scope of contextual problems:

- The design object is the totality of buildings and outdoor spaces with multiple functions in a tread parcel block.
- The basic functional program of the design object is selected / defined as a combination of 3 basic functions which include residential functions, office functions, and commercial functions (services, shopping and recreation).
- The site location is selected / determined based on basic criteria as followed: a) located in the area of the city service center, b) has an area of about 3 ha, c) has a special characteristic / genius loci (physical or non-physical aspects), d) can be an undeveloped area or a built area that needs to be “redeveloped” (obsolete land use).
- Thematically, the design must prioritize the thematic principle of “building as capital investment” according to Geoffrey Broadbent's architectural function theory in an integralistic framework with other principles (artistic form, container of activities, climatic modifier, environmental filter, behavior modifier and cultural symbolization).. In addition to the “required theme” above, the design must also apply a certain thematic principle which is optional but has a logical association with the aspects of basic functional program of the object and/or site location.

Sub CLO 03 : Able to compile and develop design concepts which include: a) site development plan, b) mass configuration, c) structure and utility, d) interior layout, e) building envelope and f) outdoor spaces layout.

DESCRIPTION OF TASKS & OUTPUTS

Description of Activities: ~Referring to the output of module 2 assignments, namely the formulation of programmatic concepts, each student prepares design concepts which include; the concept of site development plan, the concept of building mass configuration, the concept of interior layout / building plan, the concept of structural and utility system application, the concept of building envelope and the concept of outdoor space design.

- ~The development of these design concepts must be carried out based on an appropriate and clear work scheme.
- ~Design concepts must be prepared by taking into account the results of the study of the design context, namely the context of the building typology, the context of the site and the environment as well as aspects of the context of the design theme.
- ~Design concepts must be developed argumentatively from the initial concept to the final concept through an optimization / transformation process that refers to the "image-present-test" mechanism or the "variety generation & reduction " mechanism as an approach/method.
- ~The concept of the site plan includes: zoning of land use, placement of access to and from the site and movement paths within the site.
- ~The concept of building mass configuration includes : the relative placement of the building mass on the site, the geometric configuration of the building mass, and the size of the building mass associated with the size of interior spaces program.

- ~ The concept of interior spaces planning includes : thw placement of access connecting indoor spaces with outdoor spaces, placement of access connecting floor to floor (vertical circulation access zones), circulative space and functional space zones per building floor, zoning of functional space types per floor of the building which is associative with the indoor spaces program, interior finishing (furniture, color, texture, pattern, ornament and decoration) of certain indoor spaces.
 - ~ The concept of structural system application includes: selection of a structural system associative with the configuration of the building mass, determination of structural modules, application of structure dilation, placement of cores and/or shear walls, setting of floor to floor height, and detailed technical plans for specific structural components.
 - ~ The concept of utility system applications includes: electrical systems, water systems, ventilation systems, lighting systems, movement support systems (lifts, escalators, etc.), fire protection systems, sound systems, as well as detailed technical plans for specific utility components.
 - ~ The building envelope concept includes: facade design related to the composition of massive and transparent segments, color schemes, textures, patterns and ornamental / decorative elements, application of secondary skins, as well as detailed technical plans for specific building envelope components.
 - ~ The concept of outdoor spaces design includes: zoning / layout of green open spaces and non-green open spaces, landscaping (arrangement of softscape and hardscape elements), as well as detailed technical plans for specific outdoor components.
 - ~ Design concepts are communicated both verbally and graphically using various alternate techniques (manual or computer-aided sketching / modeling,).
 - ~ Periodically, the progress of the task must be reported, consulted with the lecturer as mentor, presented and discussed in class to get feedback.
- Outputs**
- : ~ Description / graphic communication of the work scheme of the design concepts development
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the site development plan concept
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the building mass configuration
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the indoor space design concepts
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the structure and utility application concepts
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the building envelope concepts
 - ~ Description / graphic communication of the process of initiation, optimization and finalization of the outdoor space design concepts

ASSESSMENT / EVALUATION TARGETS

- 1) Intensity of Student Participation (Individually) in Presentations and Class Discussions related to Task Implementation
- 2) Intensity of Consultations with Lecturer as Mentor (Individually) in the Implementation of Tasks (Minimum Target Number of Consultations : 4 times)
- 3) Quality of Work Scheme for Task Implementation
- 4) Completeness and Quality of Task Implementation Outputs

DESIGN PRACTICE ASSIGNMENT BRIEF (Module 4) :

Design Concretization (Translating Concepts into Definitive Designs through Various Architectural Presentation Media) (Individual Task)

COURSE LEARNING OUTCOME (CLO)

Able to carry out architectural design activities with the following scope of contextual problems:

- The design object is the totality of buildings and outdoor spaces with multiple functions in a tread parcel block.
- The basic functional program of the design object is selected / defined as a combination of 3 basic functions which include residential functions, office functions, and commercial functions (services, shopping and recreation).
- The site location is selected / determined based on basic criteria as followed: a) located in the area of the city service center, b) has an area of about 3 ha, c) has a special characteristic / genius loci (physical or non-physical aspects), d) can be an undeveloped area or a built area that needs to be “redeveloped” (obsolete land use).
- Thematically, the design must prioritize the thematic principle of “building as capital investment” according to Geoffrey Broadbent's architectural function theory in an integralistic framework with other principles (artistic form, container of activities, climatic modifier, environmental filter, behavior modifier and cultural symbolization).. In addition to the “required theme” above, the design must also apply a certain thematic principle which is optional but has a logical association with the aspects of basic functional program of the object and/or site location.

Sub CLO 04 : Able to translate design concepts into definitive designs through mediums of architectural presentation techniques, including: a) two dimensional design drawings, b) three dimensional design drawings, c) detailed engineering drawings, d) three dimensional design simulation (video animation and or miniature model).

DESCRIPTION OF TASKS & OUTPUTS

Description of Activities: ~Referring to the output of module 3 assignment, each student made an effort to concretize / translate the design concept into a final design, and communicate it through various architectural technical presentation media including two-dimensional design drawings (lay out plan, building floor plans, projection views of building and site, section projection of building and site, as well as site plan), three-dimensional design drawings (othogonal section of building, axonometry of building plans, global perspectives, visual spots for outdoor and indoor spaces), technical detail drawings (plan of structural system in isometric view, layout plan of utility system network, detail of structural and construction components, detail of utility component), three-dimensional design simulation (video animation and or mock-up model).

~ This concretization of design from the design concepts must be carried out based on an appropriate and clear work scheme.

~ The production process of each of the presentation media above must be carried out with specific methods, either manual or computer-assisted.

~ Each of the architectural technical presentation media above must meet the criteria for presentation techniques and the specified format.

~ Periodically, the progress of the task must be reported, consulted with the lecturer as mentor, presented and discussed in class to get feedback.

- Outputs**
- : ~Description / graphic communication of the work scheme of the design concretization
 - ~Two-dimensional design drawings (lay out plan, building floor plans, projection views of building and site, section projection of building and site, as well as site plan)
 - ~Three-dimensional design drawings (orthogonal section of building, axonometry of building plans, global perspectives, visual spots for outdoor and indoor spaces)
 - ~Technical detail drawings (plan of structural system in isometric view, layout plan of utility system network, detail of structural and construction components, detail of utility component)
 - ~Three-dimensional design simulation (video animation and or mock-up model)

ASSESSMENT / EVALUATION TARGETS

- 1) Intensity of Student Participation (Individually) in Presentations and Class Discussions related to Task Implementation
- 2) Intensity of Consultations with Lecturer as Mentor (Individually) in the Implementation of Tasks (Minimum Target Number of Consultations : 4 times)
- 3) Quality of Work Scheme for Task Implementation
- 4) Completeness and Quality of Task Implementation Outputs

ASSESSMENT / EVALUATION PLAN

Week	Assesment Stages Per Sub-CLO	Assessment Targets According to the Form of Learning	Assesment Components	Assesment Weight		
				Per Comp.	Per Modul	Total
1-3	Sub-CLO 01	Lectures, Tutorials & Responses of Learning Materials	Intensity of Participation in Group / Class Discussion, related to Learning Materials	20 %	15 %	
		Design Practice (Module 1 Assigment)	Intensity of Participation (in group) in Presentation & Group / Class Discussion Related to Design Practice Assignment	15 %		
			Intensity of Consultation with Lecturer as Mentor (per group) Related to Design Practice Assignment	15 %		
			Completeness and Quality of Task Implementation Outputs : ~ Description / graphic communication of the selection / determination of the design context (15%) ~ Description / graphic communication of the work scheme to conduct in-depth study of the design context (10%) ~ Description / graphic communication of object typology context assesment (25%) ~ Description / graphic communication of site and its environment context assesment (25%) ~ Description / graphic communication of the design theme context assesment (25%)	50 %		
4-6	Sub-CLO 02	Lectures, Tutorials & Responses of Learning Materials	Intensity of Participation in Group / Class Discussion, related to Learning Materials	20 %	15 %	
		Design Practice (Module 2 Assigment)	Intensity of Participation (in group) in Presentation & Group / Class Discussion Related to Design Practice Assignment	15 %		
			Intensity of Consultation with Lecturer as Mentor (per group) Related to Design Practice Assignment	15 %		
			Completeness and Quality of Task Implementation Outputs : ~ Description / graphic communication of the work scheme of the programmatic concepts development (20%) ~ Description / graphic communication of the buildings and indoor spaces program (50%) ~ Description / graphic communication of the outdoor spaces program (30%)	50 %		
7-11	Sub-CLO 03	Lectures, Tutorials & Responses of Learning Materials	Intensity of Participation in Group / Class Discussion, related to Learning Materials	20 %	35 %	
		Design Practice (Module 3 Assigment)	Intensity of Participation (individually) in Presentation & Class Discussion Related to Design Practice Assignment	15 %		
			Intensity of Consultation with Lecturer as Mentor (individually) Related to Design Practice Assignment	15 %		
			Completeness and Quality of Task Implementation Outputs : ~ Description / graphic communication of the work scheme of the design concepts development (10%) ~ Description / graphic communication of the initiation, optimization & finalization of the site development plan concept (15%) ~ Description / graphic communication of the initiation, optimization & finalization of the building mass configuration (15%) ~ Description / graphic communication of the initiation, optimization & finalization of the indoor space design concepts (15%) ~ Description / graphic communication of the initiation, optimization & finalization of structure & utility concepts (15%) ~ Description / graphic communication of the initiation, optimization & finalization of the building envelope concepts (15%) ~ Description / graphic communication of the initiation, optimization & finalization of the outdoor space design concepts (15%)	50 %		

12-16	Sub-CLO 04	Lectures, Tutorials & Responses of Learning Materials	Intensity of Participation in Group / Class Discussion, related to Learning Materials	20 %	35 %	
		Design Practice (Module 4 Assignment)	Intensity of Participation (individually) in Presentation & Class Discussion Related to Design Practice Assignment	15 %		
			Intensity of Consultation with Lecturer as Mentor (individually) Related to Design Practice Assignment	15 %		
			Completeness and Quality of Task Implementation Outputs : ~ Description / graphic communication of the work scheme of the design concretization (20%) ~ Three-dimensional design drawings (20%) ~ Three-dimensional design drawings (20%) ~ Technical detail drawings (20%) ~ Three-dimensional design simulation (20%)	50 %		

ASSESSMENT / EVALUATION RUBRICS

Assesment Components	Hierarchy / Rating Categories & Indicators				
	Excellent (Mark ≥ 80)	Very Good (Mark 70 to 79)	Good (Mark 60 to 69)	Poor (Mark 40 to 59)	Bad (Mark < 40)
Intensity of Participation in Group / Class Discussion, related to Learning Materials	Proportional according to the number of group / individual student attendance to the number of discussion forum in virtual classes during lectures / tutorial / responses per module and notes on group / individual student participation based on discussion minutes				
Intensity of Participation in Presentation & Class Discussion Related to Design Practice Assignment	Proportional according to the number of group / individual student attendance to the number of discussion forum in the studio during design practice activities per module and notes on group / individual student participation based on discussion minutes				
Intensity of Consultation with Lecturer as Mentor Related to Design Practice Assignment	Proportional according to the number of group / individual student consultations to mentor lecturers, to the minimum number of consultation targets per module				
Completeness and Quality of Task Implementation Outputs:	<ul style="list-style-type: none"> • Approaches, Methods & Strategies Used in the Work Scheme are Very Precise & Clear • Very Complete Outputs Quantity • Excellent Outputs Quality • Excellent Presentation Techniques 	<ul style="list-style-type: none"> • Approaches, Methods & Strategies Used in the Work Scheme are Precise & Clear • Complete Outputs Quantity • Good Outputs Quality • Good Presentation Techniques 	<ul style="list-style-type: none"> • Approaches, Methods & Strategies Used in the Work Scheme are Sufficiently Precise and Clear • Outputs Quantity is Complete Enough • Outputs Quality is Fairly Good • Fairly Good Presentation Technique 	<ul style="list-style-type: none"> • Approaches, Methods and Strategies Used in the Work scheme are Not Precise & Clear • Incomplete Outputs Quantity • Outputs Quality Not Good • Poor Presentation Techniques 	<ul style="list-style-type: none"> • Approaches, Methods & Strategies used in the Work Scheme are Very Inappropriate & Unclear • Very Less and Incomplete Outputs Quantity • Bad Ouputs Quality • Bad Presentation Techniques