# FAKULTAS TEKNIK UNIVERSITAS DIPONEGORO JURUSAN ARSITEKTUR

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# GBPP&SAP VERSI BAHASA INGGRIS

UPT-DUSTAK-UNDIP

No. Daft: 0212/BA/FT/ey

Tol. : 249-7-109

TITLE OF SUBJECT

: BEHAVIOR IN ARCHITECTURE

CODE NUMBER / SKS / SEMESTER

: TKA 130 / 2 / 5

#### A. Short Description and the Relation with other Subjects

The subject of Behavior in Architecture is basic knowledge which studies about human psychology related to architecture fund (spatial) that later it can be used to decide a new space organization or critical to the present spaces.

#### **B.** General Instructional Purposes

In the end of the course, hopefully students will be able to understand and explain some methods of approach especially for human behavior method as the user which is implicated in the architecture design in a series. Design approach thought in certain elements both inside of the building space element and outside.

No	SIP	Topics	Sub-Topics	Week	Lecturer
<b>Primare</b>	Students will be able to understand span order in the subject of behavior in architecture comprehensively	Subject Planning for 1 semester	<ul><li>Schedule of the lesson</li><li>Material</li><li>Lecturers</li><li>Span order</li></ul>	1	Ir. Djoko Indrosaptono, MT
2	It is able to explain and understand about human psychology & contribution of architecture design planning in macro	Definition of behavior relation to the design	<ul> <li>Definition of human psychology</li> <li>The relationship of human attribute with spaces</li> <li>Definition of setting</li> </ul>	2 & 3	Ir. Djoko Indrosaptono, MT
3	It is able to understand the differences some methods of approach all at once the relation of methods and examples	Some methods of specific approach	<ul> <li>Person center mapping</li> <li>Place center mapping</li> </ul>	4 & 5	Ir. Djoko Indrosaptono, MT
4	It is able to explain and solve the human problems as	Implication/ application of the	• Gather the data of human as the	6	Ir. Djoko Indrosaptono, MT

	11	7 - L - L - C			
ou u u distribution projet	the user with circulation stressing inter intended spaces with the examples	method of person center mapping	actors  Gather the data human behavior related to the setting		
5	It is able to explain and solve the problems of human attribute as the user with setting property stressing of intended specific spaces with the examples	Attribute relation with the factors of space property	<ul> <li>Serial of subject target with spaces</li> <li>Factors of space property</li> </ul>	7	Ir. Djoko Indrosaptono, MT
6	Students will be able to explain some given theories	Mid-term test	Theory     evaluation	8	
7	It is able to understand human activities likes signs of human track result as the actor/user of space setting in furniture and the examples	The importance of signs of human track study which appear in the space element	<ul> <li>Definition of human activities track former</li> <li>Space element relation</li> </ul>	9	Ir. Djoko Indrosaptono, MT
8	It is able to gather the data in the field both secondary data and primary data completed with photography/sketch	The importance of data presentation in the I studies of 1st assignment	<ul> <li>The process of data gathering</li> <li>Data techniques</li> </ul>	10	Ir. Djoko Indrosaptono, MT and Ir. Siti Rukayah, MT
9	It is able to solve data analysis, make actor activity mapping and present the field result systematically	2 <sup>nd</sup> Studied 2 <sup>nd</sup> Assignment	<ul> <li>Data analysis techniques</li> <li>Mapping techniques of human behavior</li> <li>Techniques</li> </ul>	11	Ir. Djoko Indrosaptono, MT and Ir. Siti Rukayah, MT
10	It is able to make an analysis inter data with support theory of actor activities and present systematically	3 <sup>rd</sup> Studies 3 <sup>rd</sup> Assignment	<ul> <li>Techniques of human attribute seeking</li> <li>Analysis techniques to</li> </ul>	12	Ir. Djoko Indrosaptono, MT and Ir. Siti Rukayah, MT

			the theory • Techniques of presentation		
11	It is able to seek the attribute of intended actor activities all at once reveal the present properties and present systematically and also make a guideline	4 <sup>th</sup> studies 4 <sup>th</sup> assignment	• Techniques to link the attribute with the property	13	Ir. Djoko Indrosaptono, MT and Ir. Siti Rukayah, MT
12	It is able to understand and explain case application in the field completely	2 <sup>nd</sup> Mid- term test	Case evaluation	14	

#### D. Evaluation

Used instrument: mid-term test and assignment to make a guideline and design concept complete with the sketch. Examination is substituted with presentation in every first step into the final step which is conducted by students by finishing observation result and analysis process up to the concept decision of new design which has a purpose to score the students' absorption about the subjects learned.

#### E. Bibliography

- Zeisel, John, Inquiry By Design: Tool for Environment Behavior Research, Cambridge University Press.
- Lang, John, Creating Architectural Theory, Van Nostrand Reinhold Company
- Moore, Gary, T., 1985, Pengkajian Lingkungan Perilaku dalam Synder, 8 Sarwono, S. Wirawan, 1992, Psikologi Lingkungan, PT. Gramedia Widiasarana, Jakarta
- Holahan, CJ, 1982, Environmental Psychology, Random House, New York

TITTLE OF SUBJECT

: CONSTRUCTION MANAGEMENT &

COST

CODE NUMBER / SKS/ SEMESTER: TKA 129 / 2 / 5

#### A. Short Description

The subject of Construction Management and Cost for 5<sup>th</sup> Semester is the basic knowledge of Development Management of a physic projects. It supports the subject of Management for Architects and Field Work

# **B.** General Instructional Purposes

After join the course of Construction Management and Cost, hopefully students will be able to know, explain and implement in their field work

Week	SIP	Topics	Sub-Topics	Lecturers
1	Students will be able to understand the course system of Construction Management and Cost	Subjects in the 1 <sup>st</sup> semester	<ul> <li>Schedule of the Lesson</li> <li>Subjects</li> <li>Lecturers</li> <li>Evaluation system</li> </ul>	Eddy Hermanto
2	Students will be able to explain the basic definition	Basic Definition	<ul><li>Definition of the Project</li><li>Project Management</li></ul>	Eddy Hermanto
3	Students will be able to explain the basic definition	The Basic Definition of Construction Management & Cost	<ul> <li>The definition of project</li> <li>Trilateral relationship</li> <li>Fund source</li> </ul>	M. Sahid Indraswara
4,5	Students will be able to explain the definition	Economics- Techno	<ul><li>Selecting criteria</li><li>Return of investment</li></ul>	Suzana RS Satrio N
6	Students will be able to explain the definition	Contract	<ul> <li>The definition of contract</li> <li>Type of contract</li> <li>Anatomy of contract</li> </ul>	Satrio Nugroho
7	Students will be able to explain the	Regulations	<ul> <li>Scope of Macro</li> </ul>	Satrio Nugroho

	definition		Scope of     Micro	
8,9	Students will be able to explain the definition	Planning Equipments and Control	<ul><li>Barchart</li><li>Network</li><li>S Curve &amp; Naker</li></ul>	Suzana Ratih Sari
10	Students will be able to explain the definition	Construction Management	<ul> <li>Definition</li> <li>Scope</li> <li>Assignment of         <ul> <li>Construction</li> <li>Management</li> </ul> </li> </ul>	M. Sahid Indraswara
11	Students will be able to explain the definition	Construction Management & traditional	<ul> <li>Process of Project</li> <li>Function of organization</li> <li>Other relationship</li> </ul>	Sukawi
12	Students will be able to explain the definition	Control in Construction Management	<ul><li>Cast control</li><li>Span control</li><li>Quality control</li></ul>	Sukawi
13	Preliminary Examinations	Total	• Total	Lecturers team
14	Optional	Total	• Total	Lecturers team

#### D. Scoring System

Students will be permitted to take the examination if they have joined the course at least for 9 sessions (75% X 12 sessions). Scoring system is conducted by Preliminary Examinations & Examination.

#### E. Bibliography

Adrian James J. "The Construction Management Process" Prentice-Hall 1980

Donald, Barie & Paulson Boyd C. "Professional Construction Management" Mc GrawHill 1980

Ferguson: "Successful Cost Control" John Wiley 1982

Jw Niron: "Rencana Anggaran Biaya" Gunung Tuan 1980

LPPM: "Manajemen Proyek" LPPM Jakarta 1982

Kodoatie, Robert: "Ekonomi Teknik" Kanisius Yogya 1997

Regulation number 18 year of 1999

President decision number 18 year of 2000

Letter of decision of Cipta Karya General Directorate (issued in every year)

Collective letter of decision of Finance Ministry and the Chief of National Planning Board

**BOW** Analysis

# F. Lecturers

- Ir. Eddy Hermanto, MSA (Coordinator)
- Ir. Satrio Nugroho, M.Si
- Ir. Suzana Ratih Sari, MM
- M. Sahid Indraswara, ST,MT

TITLE OF SUBJECT : PLANNING & DESIGN OF SITE &

LANDSCAPE

CODE NUMBER / SKS / SEMESTER : TKA 128 / 3 / 5

A. Short Description

It discusses about site design process and area by using site design principles

**B.** General Instructional Purposes

After students join the subject of Site Design, they will understand and explain the problems of building site design and area based on site design principles

No	Specific Instructional Purposes	Topics	Sub-Topics	Week	Lecturer
<b>1</b>	Students will understand the lecture system in the subject of Site Design II	Subject	<ul> <li>Schedule of the Lesson</li> <li>Subject</li> <li>Lecturer</li> <li>Examination System</li> </ul>	1	
2.	Students will be able to explain the definition of area site	Definition of Area Site	Meaning of     Area Site	2 & 3	
3.	Students will be able to explain the influential factors of area site design	Influential factors of area design	<ul> <li>Requirements of Site Physic</li> <li>Site Form</li> <li>Site Condition</li> <li>Site Demand</li> <li>Site of National, Regional Scale, City and Environment</li> <li>Climate Influence</li> </ul>	4 & 5	
4.	Students will be able to explain regulation aspect in area site design	Local Regulation Aspect that should be noticed	Land     Allocation     According to     the Function:     Recreation,     Sports,	6 & 7	

			Tourism		
5.	It is able to gather secondary and primary data in the field, and visual data of photography and sketch	DESIGN ASSIGNMENT	<ul> <li>Explanation of assignment</li> <li>Prepare field data equipments</li> </ul>	8	
6.	Students will be able to explain vegetation aspect of site design	The Importance of Vegetation Aspect of Site Design	<ul> <li>Vegetation     Function</li> <li>Kinds of     Vegetation</li> <li>Green Area /     Open</li> </ul>		
7.	Students will be able to explain the Circulation of Area Site Design	Site Circulation	<ul> <li>Introduction</li> <li>Elements of Circulation</li> <li>Building approach</li> </ul>		
8.	Students will be able to explain the criteria of area site selection	Criteria of area site design	<ul> <li>Introduction</li> <li>Determination of criteria</li> <li>Determination of criteria quality</li> <li>Type/criteria to site assessment</li> <li>Cases of project/design</li> </ul>		
9	Students will be able to explain the problems and application of case example	Criteria in site design for certain area function	<ul> <li>Site for housing (real estate)</li> <li>Site for specific area</li> <li>Site for city scale</li> </ul>		
10.	Preliminary Examinations		•	16	

#### D. Scoring System

Students will be permitted to take the examination if they have joined the course at least for 8 sessions (75% X 12 sessions). Scoring system is conducted by Preliminary Examinations & Examination, if the score of preliminary examinations > B, therefore students will be permitted not to join the examination, but if the score of preliminary examination < B, then students must sit for the examination

#### E. Bibliography

Ashihara, Yoshonobu, 1982, Merancang Ruang, Terj: Exterior Design in Architecture, Dian Surya, Jakarta

Gold, Sm, 1980, Recreation Planning and Design, Mc Graw Hill, New York

Laurie, M, 1976, An Introduction to Landscape Architecture, London Lynch, Kevin, 1972, Site Planning, MIT Press, Cambridge Rutledge, Aj, 1971, Anathomy of a Park, Mc Graw Hill, New York Simon, JO, 1983, Landscape Architecture, Mc Graw Hill, New York Unteman, Richard & Small Robert, 1983, Perencanaan Tapak untuk Perumahan (terj.) Department of Landscape & Architecture, University of Washington

TITLE OF SUBJECT

: CONTINUED INTERIOR DESIGN

CODE NUMBER / SKS / SEMESTER

: TKA 148/3/6

# A. Short Description

It discusses about interior design process / interior of public building, by using the principle of interior design which includes structural aspects, architecture and utility.

# **B.** General Instructional Purposes

After join the subject of Interior Design of 4<sup>th</sup> semester, students will be able to understand, explain and conduct interior design (public building) based on the principle of interior design.

No	Specific	Topics	Sub Topics	Week	Lecturers
	Instructional		**************************************		
	Purposes				
1	Students will be	Introduction	• Subjects	1	Ir.
	able to	Lecture	• Schedule of		Bambang
	understand		the lesson		Supriyadi
	lecture system,		<ul> <li>Assignment</li> </ul>		
	material and		and		
	schedule of 1		Examination		
	semester		Lecturer		
2	Students will be	Unsure of	• Floor	2	Ir.
	able to	space shaper	surface		Bambang
	understand the		<ul> <li>Wall surface</li> </ul>		Supriyadi
	unsure of		Ceiling		
	interior shaper		surface		
3	Students will be	circulation	Hall system	3	Ir.
	able to		Corridor		Bambang
	understand		<ul> <li>Space into</li> </ul>		Supriyadi
	about the		space in a		
	circulation in the		variety types		
	building		of building		
4	Students will be	Explanation of	• Type of	4	Ir.
	able to	semester	assignment		Bambang
	understand the	assignment	that should		Supriyadi
	assignment that		be done by		
	should be done		the students		
	in 1 semester as		Schedule of		
	the requirement		the lesson		

	to take the				
	examination				
5	Students will be able to explain about furniture layout	furniture	<ul> <li>Furniture layout</li> <li>Ex.core</li> <li>Bullpen, open plan, etc</li> <li>Partition system</li> </ul>	5	Ir. Bambang Supriyadi
6	Students will be able to explain about furniture design	furniture	<ul><li>Furniture design</li><li>Form, size</li><li>Material</li><li>Color, etc</li></ul>	6	Ir. Bambang Supriyadi
7	Students will be able to explain about variety of utility types which is related to interior design	utility	<ul> <li>System of air conditioning (AC)</li> <li>System of sound</li> <li>Lighting</li> <li>System of fire danger protection</li> <li>Safety system</li> </ul>	7	Dr. Ir. Gagoek H
8	Students will be able to explain about plafond design process	Plafond design	<ul><li>Form</li><li>Size</li><li>Material</li><li>Color, etc</li></ul>	8	Ir. Bambang Supriyadi
9	Students will be able to understand its inadequacy and weakness	1 <sup>st</sup> evaluation of semester assignment	Concept     Design     presentation	9	Ir. Bambang Supriyadi
10	Students will be able to explain about color characteristics of building	Color of interior (architecture)		10	Ir. Moedjiono
11	Students will be able to understand and explain various problems of interior in some building cases	Design case review/building	<ul><li>Layout</li><li>Circulation</li><li>Material</li><li>Color</li><li>Furniture</li></ul>	11	Ir. Bambang Supriyadi

12	Students will be able to explain about material specification, construction step & its maintenance	material	<ul> <li>Specification construction step</li> <li>Maintenance step</li> </ul>	12	Ir. Bambang Supriyadi
13	Students will be able to explain various kinds of decorative unsure in interior	Decorative unsure	<ul><li>Sculpture</li><li>Plants</li><li>Statue</li><li>Painting</li><li>Light, etc</li></ul>	13	Ir. Moedjiono
14	Students will be able to understand their ability in the end of semester	2 <sup>nd</sup> evaluation of semester assignment	<ul><li>Design</li><li>Presentation</li><li>Assignment remedial</li></ul>	14	Ir. Bambang Supriyadi

#### D. Scoring System

Students will be permitted to take the examination if they have joined the course at least for 9 sessions (75% of 15 sessions) and the assignment has been accepted/fulfill the requirements. Scoring system is conducted by assignment and semester examination

#### E. Bibliography

- 1. Alan R.G, Isaae: Approach to Architectural Design
- 2. Edward T, White: Concept Sourcebook
- 3. Francis D.K Ching: Architecture: Form, Space and Order
- 4. Egon Schirmbek: Idec, Form and Architecture
- 5. Sid Del Mar leach, ASID: Techniques of Interior Design, Rendering and Presentation
- 6. Kenneth Smithies: Principles of Design in Architecture
- 7. Alvin Palmer: Planning the Office Landscape
- 8. Budi, Jasin, Mauro: Teknik Prosentasi Gambar Arsitektur
- 9. Sharmi Ranti: Tropikal House

TITLE OF SUBJECT : URBAN DESIGN & INDUSTRY

BUILDING

CODE NUMBER / SKS / SEMESTER : TKA 151 / 3 / 7

# A. General Instructional Purposes

After finishing the course hopefully students will be able to explain about the ins and outs of industry buildings, the procurement and its problems (physic and non-physic), and also propose some solving alternatives in the process of design and architecture planning

No	Topics		Sub Topics	Week	Lecturers
	The introduction of industry building	HPULP PROPERTY AND SEPARATE STATES OF THE SEP	Definition of industry and industry building in generally to the type and classification both industry manufacture or service		
2	The introduction of continued industry building	•	Definition of industry and industry building in generally to the type and classification both industry manufacture or service		
3	The history of industry building		Situation and condition of industry building procurement History of development in industry building procurement		
4	The history of continued industry building	•	Situation and condition of industry building procurement History of development in industry building procurement		

5	Definition of production		Definition,	T	
,	Definition of production		transformation		
	recommens		process and		<u> </u>
	as a survivorante		4	[	Parameter and the second secon
	4444mm1444		production system		
		•	Low of production,		
			definition and its		
			relation to the site	ļ	
	:		plan machine layout		
			or map in the		
			industry building		
		•	Warehousing,		
			definition of		
			building quantity of		
			row material or		
			finished material,		
			loading and		
			unloading system,		
			etc. System of		
			storage / removal		
			(lifo, fifo method)		
			and introduction of		
			order system (eoq)		
			which is related to		
			space requirements		
			in the industry		
			building		
6	Definition of production	•	Definition,		
			transformation		
			process and		
			production system		
		•	Low of production,		
			definition and its		1
			relation to the site		
			plan machine layout		
	**************************************		or map in the		
			industry building		
		•	Warehousing,		n-presentation in the second i
			definition of	]	
			building quantity of		
			row material or		
			finished material,		
			loading and		
			unloading system,		**************************************
			etc. System of	vareve	
			storage / removal		
			(lifo, fifo method)		
			and introduction of		
			order system (eoq)		
			and introduction of		

		,			····
			which is related to	***************************************	
			space requirements	ĺ	
			in the industry		
7	Site theory related to the	•	building Requirements for		
'	location/site selection	•	area of industry,		
	location site selection		zone of industry and		
			environment of		
			industry		
			Application and		
			implementation in		
			the area of industry		
			(if it is possible to		
			conduct field work)		
8	Site theory related to the		Requirements for		
	location/site selection		area of industry,		
			zone of industry and		
			environment of		
			industry		
		•	Application and		
			implementation in		
			the area of industry		
		:	(if it is possible to		
		ļ	conduct field work)		
9	Design application and	•	Types and forms of		
	structure for industry		foundation (sub		
	building		structure) for upper structure		
		_			
		•	Types and forms of upper structure		
			Types of structure of		
			machine activities		
			(dynamic or static)		
10	Design application and	•	Types and forms of		
~	structure for industry		foundation (sub		
	building		structure) for upper		
			structure		
		•	Types and forms of		
			upper structure		
		•	Types of structure of		
			machine activities		
			(dynamic or static)		
11	Field assignment	<u> </u>			
12	Safety factors and work	•	Management system		
	health (management		of industrial waste		
	system of industrial waste	•	Utility system		
13	Safety factors and work		Management system		
	health (management		of industrial waste		

	system of industrial waste	•	Utility system		
14	Safety factors and work	•	Management system		
	health (management		of industrial waste		
	system of industrial waste	•	Utility system		
15	Safety factors and work	•	Management system		
	health (management		of industrial waste	A-100000	
	system of industrial waste	•	Utility system		THE CONTRACTOR OF THE CONTRACT
16	Evaluation				

# C. Bibliography

- Munce, James F. Industrial Architecture, FW Dodge Corporation, New York
- Schuller, Wolfgang. Horizontal Span Building Structure
- Holmes, Burton H. Materials and Methods in Architecture. Reinhold Publishing Corp., New York (1954)
- Etc