



**Universitas Negeri Surabaya  
Faculty of Engineering  
Civil Engineering Undergraduate Study Program**

Document Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>																																										
<b>Building structure</b>	2220102111		T=2 P=0 ECTS=3.18	1	July 17, 2024																																										
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>																																											
	.....		.....	Yogie Risdianto, S.T., M.T.																																											
<b>Learning model</b>	Project Based Learning																																														
<b>Program Learning Outcomes (PLO)</b>	PLO study program which is charged to the course																																														
	Program Objectives (PO)																																														
	PLO-PO Matrix																																														
		P.O																																													
<b>Short Course Description</b>	PO Matrix at the end of each learning stage (Sub-PO)																																														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 5%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> </table>														P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																															
<b>References</b>	<p><b>Main :</b></p> <ol style="list-style-type: none"> <li>1. Benny Puspantoro. 1996. Konstruksi Bangunan Gedung Tidak Bertingkat. Yogyakarta: Universitas Atma Jaya</li> <li>2. Benny Puspantoro. 1996. Konstruksi Bangunan Gedung Bertingkat Rendah. Yogyakarta: Universitas Atma Jaya</li> <li>3. Tamrin A. 2008. Teknik Konstruksi Bangunan Gedung. Jakarta: Depdiknas</li> <li>4. Dian Ariestadi. 2008. Teknik Struktur Bangunan. Jakarta: Depdiknas</li> <li>5. Suparno. 2008. Teknik Gambar Bangunan. Jakarta: Depdiknas</li> </ol> <p><b>Supporters:</b></p>																																														
<b>Supporting lecturer</b>	Krisna Dwi Handayani, S.T., M.MT., M.T.																																														
<b>Week-</b>	<b>Final abilities of each learning stage (Sub-PO)</b>	<b>Evaluation</b>		<b>Help Learning, Learning methods, Student Assignments, [ Estimated time]</b>		<b>Learning materials [ References ]</b>	<b>Assessment Weight (%)</b>																																								
		<b>Indicator</b>	<b>Criteria &amp; Form</b>	<b>Offline ( offline )</b>	<b>Online ( online )</b>																																										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)																																								

1	Brick Bonding	Explaining the shapes of walls Explaining the requirements for brick bonding Identifying various types of brick bonding Drawing various types of brick bonding	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lecture, Question and Answer, Discussion 2 X 50			0%
2	Wood joints	1.Explain the requirements for wood connections 2.Students are able to explain the various types of wood connections 3.Draw various types of wood joints	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lecture, Question and Answer, Discussion 2 X 50			0%
3	Door and window frames	Students are able to identify door and window frame materials Wood Aluminum Concrete Steel Explain various types of doors and windows Draw various types of doors and windows Students are able to identify various types of hanging and locking devices	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lectures, Questions and Answers, Discussions, 2 X 50 Drawing Workshop			0%
4	Foundation	Students are able to: Define the meaning of foundation. Explain direct foundation. Explain indirect foundation. Draw direct and indirect foundations	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lecture, Question and Answer, Discussion 2 X 50			0%
5	Palate	Students are able to: Explain the meaning of a ceiling. Explain the function of a ceiling. Identify types of ceiling covering materials. Explain about ceiling frames. Draw ceiling frames.	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lectures, Questions and Answers, Discussions, 2 X 50 Drawing Workshop			0%
6	floor	Students are able to: Identify various types of floor coatings/accessories Understand floor installation patterns Explain things related to floor structures Draw installation patterns and floor structures	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lectures, Questions and Answers, Discussions, 2 X 50 Drawing Workshop			0%
7	Stair shape	Students are able to describe various forms of stairs. Explain various types of stairs (concrete, steel, wood and stone) Draw stairs (concrete, steel, wood and stone)	<b>Criteria:</b> Full marks are obtained if you do all the questions correctly	Lecture, Question and Answer, Discussion 2 X 50			0%
8	U.S.S			2 X 50			0%
9	Roof	Students are able to explain the various shapes of roofs		Lecture, Question and Answer, Discussion 2 X 50			0%
10	Roof	Students are able to explain the various shapes of roofs		Lecture, Question and Answer, 1 X 1 Discussion			0%

11	Gutter	Students are able to: Identify materials for making water gutters Explain the requirements for water gutters Explain various forms of gutter construction Draw various forms of gutter construction		Lecture, Question and Answer, Discussion 2 X 50			0%
12	Formwork	Students are able to: Define the meaning of formwork Explain formwork requirements Identify formwork materials Explain matters related to beam, column and plate formwork Draw beam, column and plate formwork		Lectures, Questions and Answers, Discussions, 2 X 50 Drawing Workshop			0%
13	Bathroom	Students are able to: Explain bathroom construction requirements Explain types of bathrooms Dry bathrooms Wet bathrooms Wet Dry bathrooms Draw dry, wet and wet dry bathrooms		Lectures, Questions and Answers, Discussions, 2 X 50 Drawing Workshop			0%
14	Septic tank	Students are able to: Understand the meaning of a septic tank. Explain the requirements for bathroom construction		Lecture, Question and Answer, Discussion 2 X 50			0%
15	Sanitary	Students are able to: Identify sanitary pipe materials Identify sanitary equipment/equipment Explain sanitary networks		Lecture, Question and Answer, Discussion 2 X 50			0%
16							0%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

#### Notes

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- Forms of assessment:** test and non-test.
- Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.

