



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Wood Construction	2220102158	Study Program Elective Courses	T=2	P=0	ECTS=3.18	5	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model	Case Studies																																	
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																	
	Program Objectives (PO)																																	
	PLO-PO Matrix																																	
	<table border="1" style="margin: auto;"> <tr> <td style="width: 50px; height: 30px;">P.O</td> </tr> </table>	P.O																																
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PO Matrix at the end of each learning stage (Sub-PO)	<table border="1" style="margin: auto;"> <tr> <td rowspan="2" style="width: 30px; height: 30px;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 20px;">1</td> <td style="width: 20px;">2</td> <td style="width: 20px;">3</td> <td style="width: 20px;">4</td> <td style="width: 20px;">5</td> <td style="width: 20px;">6</td> <td style="width: 20px;">7</td> <td style="width: 20px;">8</td> <td style="width: 20px;">9</td> <td style="width: 20px;">10</td> <td style="width: 20px;">11</td> <td style="width: 20px;">12</td> <td style="width: 20px;">13</td> <td style="width: 20px;">14</td> <td style="width: 20px;">15</td> <td style="width: 20px;">16</td> </tr> </table>	P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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Short Course Description Understanding of manual and mechanical wood working tools, K3, manual planing, making various straight joints, making wood connections. Make construction models of trusses, tables, frames such as straight, slanted lip joints, etc. Calculating materials The learning model used is a direct learning model. Learning method: Lecture, question and answer, practicum and reporting.

References	Main :	<ol style="list-style-type: none"> 1. Suparji.2007.Buku Panduan Praktikum Kayu. Surabaya:Unipres. 2. Sugiharjo.1984.Gambar-gambar Dasar Ilmu Bangunan.Sugiharjo 3. Dian Ariestasi. 2000.Teknik Struktur Bangunan Untuk SMK bse. Jakarta: Ditmenjur 4. Budi Martono dkk. 2008.Teknik Per kayuan Jilid 1 SMK (K3).Jakarta: Dikbinjur Dirjen Penddikan Dasar dan Menengah 5. Soegiharjo, Sodibyoy.1976.Illmu Bangunan Gedung 2. Jakarta:Dikmenjur 6. Sukardi dan Bernadus. 2012.Bimbingan Teknis Pengelola Laboratorium Juru bengkel SMK Bidang Teknis Permesinan. Jakarta:Direktorat Pembinaan PTK Kementerian Pendidikan dan kebudayaan
	Supporters:	

Supporting lecturer Muhammad Imaduddin, S.T., M.T.
Meity Wulandari, S.T., M.T.

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline (offline)	Online (online)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Get to know manual and mechanical wood working tools	Students can explain manual and mechanical wood working tools	Criteria: Full marks are obtained if you do all the questions correctly Form of Assessment : Participatory Activities	Lectures, discussions, questions and answers, and 4 X 50 exercises		Material: Manual and mechanical woodworking tools. Library: Suparji.2007. Woodworking Practical Guidebook. Surabaya: Unipres.	4%

2	Understanding K3	Students can explain the tools and use of K3	<p>Criteria: Full marks are obtained if you do all the questions correctly</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, discussions, questions and answers, and 4 X 50 exercises		<p>Material: Tools and use of K3 Library: Sukardi and Bernadus. 2012. <i>Technical Guidance for Laboratory Managers of Vocational School Workshop Engineers in the Field of Mechanical Engineering.</i> Jakarta: Directorate of PTK Development, Ministry of Education and Culture</p>	4%
3	Skilled in maintaining tools (planers, chisels, and manual saw teeth)	Students are skilled at maintaining tools (planers, chisels, and manual saw teeth)	<p>Criteria: 1.Full value is obtained if the product: 2. SharpAngularFlatFast</p> <p>Form of Assessment : Participatory Activities</p>	Practical 4 X 50		<p>Material: Tools (planers, chisels and manual saw teeth) Library: Suparji.2007. <i>Wood Practical Handbook.</i> Surabaya: Unipres.</p>	4%
4	Skilled in manual planing	Students are skilled at manual planing	<p>Criteria: 1.Full value is obtained if the product: 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast</p> <p>Form of Assessment : Participatory Activities</p>	Practical 4 X 50		<p>Material: Manual planing Library: Suparji.2007. <i>Wood Practical Guidebook.</i> Surabaya: Unipres.</p>	3%
5	Skilled in manual planing	Students are skilled at manual planing	<p>Criteria: 1.Full value is obtained if the product: 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast</p> <p>Form of Assessment : Participatory Activities</p>	Practical 4 X 50		<p>Material: manual planing Reference: Suparji.2007. <i>Woodworking Practical Guidebook.</i> Surabaya: Unipres.</p>	4%
6	Skilled in making joints such as straight, slanted lip joints, etc.	Students are skilled at making joints such as straight, slanted lip joints, etc.	<p>Criteria: 1.Full value is obtained if the product: 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: straight, slanted lip joints, etc. Library: Suparji.2007. <i>Wood Practical Handbook.</i> Surabaya: Unipres.</p>	3%
7	Skilled in making joints such as straight, slanted lip joints, etc.	Students are skilled at making joints such as straight, slanted lip joints, etc.	<p>Criteria: 1.Full value is obtained if the product: 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: straight, angled lip joints, etc. Reference: Suparji.2007. <i>Woodworking Practical Guidebook.</i> Surabaya: Unipres.</p>	4%

8	Skilled in making joints such as straight, slanted lip joints, etc.	Students are skilled at making joints such as straight, slanted lip joints, etc.	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full value is obtained if the product: <ol style="list-style-type: none"> 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast <p>Form of Assessment : Participatory Activities, Tests</p>	Practical 4 X 20		<p>Material: straight, slanted lip joints, etc.</p> <p>Library: Suparji.2007. Woodworking Practical Guidebook. Surabaya: Unipres.</p>	20%
9	Skilled at planing with mechanical tools	Students are skilled at planing with mechanical tools	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full value is obtained if the product: <ol style="list-style-type: none"> 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: planing with mechanical tools</p> <p>Library: Suparji.2007. Woodworking Practical Guidebook. Surabaya: Unipres.</p>	4%
10	Skilled in designing finished goods	Students are skilled at designing finished goods	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full value is obtained if the product: <ol style="list-style-type: none"> 2.1. Interesting 3.2. Effective 4.3. Evisien 5.4. Easy to work with <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: designing finished goods</p> <p>Reader: Dian Ariestasi. 2000. Building Structure Engineering for BSE Vocational Schools. Jakarta: Directorate of Menjur</p>	3%
11	Skilled in planning cost budgets	Students are skilled at planning cost budgets	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full value is obtained if the product: <ol style="list-style-type: none"> 2.1. Effective 3.2. Evisien <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: planning a budget</p> <p>Reference: Suparji.2007. Wood Practical Guidebook. Surabaya: Unipres.</p>	3%
12	Make models of finished goods, frames, doors, trusses.	Students are skilled at making finished goods: frames, doors, easels.	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full value is obtained if the product: <ol style="list-style-type: none"> 2.1. Flat 3.2. Average 4.3. Elbow 5.4. Not propelling 6.5. Fast <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Materials: models of finished goods, frames, doors, trusses.</p> <p>Reference: Suparji.2007. Woodworking Practical Guidebook. Surabaya: Unipres.</p>	4%
13	Make models of finished goods for frames, doors and trusses.	Students are skilled at making items into frames, doors and frames.	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Full marks are obtained if the oral answer is correct and all the questions are answered correctly and the product is produced: 2. Accurate measurements. Elbow assembly, flat, not propelled. Reports are made correctly on time and not copy pasted <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: Models of finished goods for frames, doors and trusses.</p> <p>Reference: Suparji.2007. Practical Handbook for Wood. Surabaya: Unipres.</p>	3%

14	Make models of finished items such as frames, doors, easels and tables and chairs.	Students are skilled at making finished items such as frames, doors, easels and tables and chairs.	<p>Criteria:</p> <ol style="list-style-type: none"> 1.Full marks are obtained if the oral answer is correct and all the questions are answered correctly and the product is produced: 2.Accurate measurements. Elbow assembly, flat, not propelled. Reports are made correctly on time and not copy pasted <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Material: finished product models of frames, doors, easels, and tables and chairs. Reference: <i>Suparji.2007. Practical Handbook on Wood. Surabaya: Unipres.</i></p>	3%
15	Make models of finished items such as frames, doors, easels and tables and chairs.	Students are skilled at making finished items such as frames, doors, easels and tables and chairs.	<p>Criteria:</p> <ol style="list-style-type: none"> 1.Full marks are obtained if the oral answer is correct and all the questions are answered correctly and the product is produced: 2.Accurate measurements. Elbow assembly, flat, not propelled. Reports are made correctly on time and not copy pasted <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Practical 4 X 50		<p>Materials: Finished models of frames, doors, easels and tables and chairs. Reference: <i>Suparji.2007. Woodworking Practical Guidebook. Surabaya: Unipres.</i></p>	4%
16			<p>Form of Assessment : Participatory Activities, Tests</p>				30%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	59.5%
2.	Practice / Performance	15.5%
3.	Test	25%
		100%

Notes

1. **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.
2. **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.
3. **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.
4. **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.
5. **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.
6. **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.
7. **Forms of assessment:** test and non-test.
8. **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.
9. **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.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **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%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.

