



**Universitas Negeri Surabaya
Vocational Faculty,
D4 Transportation Study Program**

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date																																																	
Transportation System	99993940102032		T=2	P=0	ECTS=3.18	1	July 16, 2024																																																	
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator																																																		
			Dr. Anita Susanti, S.Pd., M.T.																																																		
Learning model	Case Studies																																																							
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																							
	PLO-5	Have devotion to God Almighty, independence, nationalism and social sensitivity.																																																						
	PLO-8	Able to apply logical, critical, innovative, quality and measurable thinking in identifying, implementing and evaluating independently and coordinating groups to solve technical and non-technical problems and able to communicate verbally and in writing.																																																						
	PLO-9	Able to apply the principles of mechanics, mathematics and engineering concepts to the technical design process, drawing measurement results, and designing in the field of land transportation engineering technology																																																						
	PLO-11	Able to internalize ethics, norms and laws in carrying out work.																																																						
	Program Objectives (PO)																																																							
	PO - 1	Able to form experts in the field of land transportation, especially road transportation.																																																						
	PLO-PO Matrix																																																							
		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>P.O</td> <td>PLO-5</td> <td>PLO-8</td> <td>PLO-9</td> <td>PLO-11</td> <td></td> <td></td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						P.O	PLO-5	PLO-8	PLO-9	PLO-11			PO-1																																									
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PO-1																																																								
PO Matrix at the end of each learning stage (Sub-PO)																																																								
	<table border="1" style="width: 100%; text-align: center;"> <tr> <td rowspan="2">P.O</td> <td colspan="16">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> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>						P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																
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PO-1																																																								
Short Course Description	This course is an introduction to the meaning, objectives and forms of transportation, the role and development of transportation, components of the transportation system, modes of transportation in the transportation system, the concept of transportation networks, land use and the environment, transportation terminals for people and goods, queuing theory in transportation systems, parking , transportation planning (trip generation/trip generation, trip distribution/trip distribution, split mode/mode selection, trip assignment/traffic loading), transportation and the environment, environmental impact of transportation, sustainability of transportation, integration of transportation. Learning is carried out by applying a constructivist approach. The learning activity ends by making a written report about the Transportation System, along with Problems and alternative solutions.																																																							
References	Main :																																																							
	<ol style="list-style-type: none"> 1. 1. Widayanti, Ari. 2013. Sistem Transportasi.Surabaya: Unesa 2. 2. Morlok, E. K., (1985), Pengantar Teknik dan Perencanaan Transportasi, Erlangga, Jakarta. 3. 3. Abubakar, Iskandar. 1995. Menuju Lalu Lintas dan Angkutan Jalan yang Tertib. Jakarta: Dirjenhubdat. 4. 4. Tamin, Ofyar Z. 2000. Perencanaan dan Pemodelan Transportasi. Bandung: ITB. 5. 5. Munawar A, 2005, Dasar-Dasar Teknik Transportasi, Penerbit Beta Offset, Yogyakarta. 6. 6. Nasution, H.M, 2003, Manajemen Transportasi, Ghalia, Jakarta 7. 7. Miro, Fidel. Perencanaan Transportasi untuk Mahasiswa, Perencana, dan Praktisi. Jakarta: Erlangga. 2012 8. 8. Hariyono, D. W. dan Prawesthi, W. "Penyelenggaraan Angkutan Orang dengan Kendaraan Umum di Surabaya. Jurnal Manajemen Transportasi & Logistik (JMTransLog) - Volume. 02 No. 02, Juli 2015. 9. 9.Direktorat Jendral Perhubungan Darat Kementerian Republik Indonesia. (http://hubdat.dephub.go.id/). Diakses pada 28 Februari 2016 10. 10. Dinas Perhubungan Jawa Barat. (http://dishub.jabarprov.go.id/). Diakses pada 28 Februari 2016 																																																							
	Supporters:																																																							

Supporting lecturer		Dr. Anita Susanti, S.Pd., M.T. R. Endro Wibisono, S.Pd., M.T. Fitri Rohmah Widayanti, S.Pd., 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	Understand the meaning, purpose and forms of transportation.	Mention the meaning of purposes and forms of transportation.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Presentations, discussions and questions and answers. 2 X 50		Material: Definition of Transportation System References: 1. Widayanti, Ari. 2013. <i>Transportation System</i> . Surabaya: Unesa [4]. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%
2	Understand the role and development of transportation.	Mention the role and development of transportation.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Discussion presentation and question and answer. 2 X 50		Material: Definition of Transportation Planning References: 2. Morlok, EK, (1985), <i>Introduction to Transportation Engineering and Planning</i> , Erlangga, Jakarta.	0%
3	Get to know the components of the transportation system.	Mention the components of the transportation system.	Criteria: Full marks are obtained if you do all the questions correctly.	Presentations, discussions and questions and answers. 2 X 50		Material: Definition of Transportation Components References: 2. Morlok, EK, (1985), <i>Introduction to Transportation Engineering and Planning</i> , Erlangga, Jakarta.	0%
4	Understand the types of transportation modes.	Mention the types of transportation modes.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Presentations, discussions and questions and answers. 2 X 50		Material: Transportation Planning Techniques and Components References: 2. Morlok, EK, (1985), <i>Introduction to Transportation Engineering and Planning</i> , Erlangga, Jakarta.	0%
5	Understand the concept of transportation networks.	Make a concept analysis of transportation networks.	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: Transportation Network Concepts References: 4. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%

6	Understand land use and the environment.	Mention the relationship between environmental land use and transportation systems.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Presentations, discussions and questions and answers. 2 X 50		Material: Relationship between Land Use and Transportation Systems References: 4. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%
7	Understand the types of terminals.	State the terminal classification of people and goods.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Discussion presentation and question and answer. 2 X 50		Material: Terminals for People and Goods in the Transportation System References: 6. Nasution, HM, 2003, <i>Transportation Management</i> , Ghalia, Jakarta	0%
8	Midterm exam	-	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Test	- 2 X 50			0%
9	Transportation Network Distribution includes operation, design, maintenance, and planning.	Able to understand Transportation Distribution which includes operation, design, maintenance and planning.	Criteria: Full marks are obtained if you do all the questions correctly. Form of Assessment : Participatory Activities	Presentations, discussions and questions and answers. 2 X 50		Material: Types of Transportation Distribution Reference: 6. Nasution, HM, 2003, <i>Transportation Management</i> , Ghalia, Jakarta	0%
10	Understanding queuing theory in transportation systems.	Applying queuing theory in transportation systems.	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: Types of queues References: 4. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%
11	Types of Parking	Create Parking analysis.	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: Types of Parking and Their Calculations Reference: 7. Miro, Fidel. <i>Transportation Planning for Students, Planners, and Practitioners</i> . Jakarta: Erlangga. 2012	0%
12	Understand transportation planning (trip generation/trip distribution/trip distribution).	Carry out transportation planning (trip generation/trip distribution/trip distribution).	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: 4 Stage Modeling Concept References: 4. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%
13	Understanding split mode/mode selection.	Carry out split mode analysis/mode selection.	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: 4 Stage Modeling Concept References: 4. Tamin, Ofyar Z. 2000. <i>Transportation Planning and Modeling</i> . Bandung: ITB.	0%

14	Understanding Trip assignment/traffic loading).	Make Trip assignment/traffic loading calculations).	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50		Material: 4 Stage Modeling Concept References: 4. Tamin, Ofyar Z. 2000. Transportation Planning and Modeling. Bandung: ITB.	0%
15	Able to design various multimodal transportation networks.	Make transportation and environmental analyzes and the environmental impact of transportation.	Criteria: Full marks are obtained if you do all the questions correctly.	Discussion presentation and question and answer. 2 X 50			0%
16	Final exams			Offline			0%

Evaluation Percentage Recap: Case Study

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.