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

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Occupational Health and Safety (K3) and Environment	99993940103032	Transportation	**T=2**	**P=1**	**ECTS=4.77**	5	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Dr. Ir. Dadang Supriyatno, MT.,IPU.,ASEAN Eng.	.....	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.

Program Objectives (PO)

PO - 1	Students know how to assess risk in public transportation service companies

PLO-PO Matrix

P.O	PLO-5
PO-1	

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PO-1																

Short Course Description	Definition and classification of accidents, factors causing accidents, data collection and methods of analyzing accident data, accident statistics, corrective actions, safety aspects of road users/traffic actors, road lighting, characteristics of road users, road safety education and campaigns

References

Main :

1. ----------. 1999. Prosiding Simposium I, Forum Studi Transportasi antar Perguruan Tinggi . Bandung: ITB.
2. F.H.A. 1978. Railroad Highway Grade Crossing Handbook . Washington DC: Federal Highway Administration..
3. Gunawan, JKR. et al. Analisis Kecelakaan Lalu Lintas dengan Menggunakan Program MAAP . Prosiding FSTPT II. Surabaya: ITS.
4. Pignataro, Louis J. 1983. Traffic Engineering – Theory and Practice . New Jersey: Prentice Hall Inc.
5. Azwar, A. 1993. Pengantar Ilmu Kesehatan Lingkungan . Mutiara, Jakarta.
6. Sulistio, H. (2012). Kajian Program Aksi Keselamatan Transportasi Jalan di Kota Malang. Malang : Universitas Brawijaya.

Supporters:

1. Pengamatan dilapangan pada perusahaan-perusahaan Bus dan angkutan umum perkotaan

Supporting lecturer	Dr. Ir. H. Dadang Supriyatno, M.T. Dr. Ir. H. Soeparno, 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 and master the definition and scope of accidents	1. Explain the definition of an accident 2. Explain the scope of the accident	**Criteria:** The assessment can be 100% if you complete all the questions and comply with the substance criteria **Form of Assessment** : Test	Oral questions and answers Group discussion 2 X 50		**Material:** Potential dangers of accidents in public transportation related to infrastructure. **Reference:** *Sulistio, H. (2012). Study of the Road Transportation Safety Action Program in Malang City. Malang: Brawijaya University.*	0%
2	Understand and master accident classification and transportation safety	Students can understand the classification of accidents. and transportation safety	**Criteria:** - **Form of Assessment** : Test	Oral questions and answers Group discussion 2 X 50		**Material:** The importance of providing human resources to drivers regarding road safety elements. **Reference:** *Pignataro, Louis J. 1983. Traffic Engineering – Theory and Practice. New Jersey: Prentice Hall Inc.* **Material:** Accident analysis is linked to assessing the danger/risk of accidents on the highway. **Reference:** *Gunawan, JKR. et al. Traffic Accident Analysis Using the MAAP Program. Proceedings of FSTPT II. Surabaya: ITS.*	0%
3	Students understand the factors that cause accidents	Able to explain the factors that cause accidents to improve transportation safety	**Criteria:** -	Oral questions and answers Group discussion 2 X 50		**Material:** Aspects of driver health and road safety **Reference:** *Azwar, A. 1993. Introduction to Environmental Health Science. Mutiara, Jakarta.*	0%

4	Students understand the meaning of the environment regarding the development of transportation	Able to explain the meaning of the environment regarding the development of transportation	**Criteria:** -	Oral questions and answers Group discussion 2 X 50		**Material:** Application of public transportation companies in implementing Safety Management Systems in the divisions of the company **Reference:** *Sulistio, H. (2012). Study of the Road Transportation Safety Action Program in Malang City. Malang: Brawijaya University.*	0%
5	Students understand the relationship between the environment and transportation safety	Students can explain the interaction of environmental components on transportation safety	**Criteria:** -	Oral questions and answers Group discussion 2 X 50		**Material:** Application of safe transportation theory & safe roads. **Reference:** *FHA 1978. Railroad Highway Grade Crossing Handbook. Washington DC: Federal Highway Administration..*	0%
6	Students understand the procedures for creating a healthy environment to support the creation of safe transportation and sustainable transportation	Explain the procedures for creating a healthy environment to support the creation of safe transportation and sustainable transportation	**Criteria:** - **Form of Assessment** : Test	Oral questions and answers Group discussion 2 X 50		**Material:** Conducting field studies by auditing safety management systems in public transportation companies. **Reference:** *Field observations in bus and urban public transportation companies*	0%
7	Students are able to carry out the process of collecting accident data in the field based on applicable procedures	Able to explain the stages of collecting accident data in the field.	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
8	UTS	-	**Criteria:** -	- 2 X 50			0%
9	Understand and master the procedures for processing accident data that has been obtained from the field	Able to process data that has been obtained in the field	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
10	Students are able to understand the process of creating safety statistics and accident statistics every year	Able to explain the process of creating safety statistics and accident statistics every year.	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
11	Students are able to calculate accident rates and black spots	Calculating accident rate and black spots.	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%

12	Students are able to explain the characteristics of road users	Students are able to explain the characteristics of road users	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
13	Students understand and master the procedures for creating standard environmental health in creating environmental safety	Explain standards in creating environmental safety	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
14	Students are able to explain accident models using computer software (Regression and correlation)	Explaining accident models with computer software (Regression and correlation)	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
15	Students are able to explain handling aspects in minimizing the occurrence of accidents	Explain the handling aspects in minimizing the occurrence of accidents	**Criteria:** -	Oral questions and answers Group discussion 2 X 50			0%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

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.