



Universitas Negeri Surabaya
Faculty of Engineering,
Mechanical Engineering Education Undergraduate Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date
K3 & LABOR LAW	8320302043	Compulsory Study Program Subjects	T=2 P=0 ECTS=3.18	3	July 17, 2024
AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator		
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Learning model	Case Studies
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Program Learning Outcomes (PLO)	<p>PLO study program that is charged to the course</p> <p>PLO-5 Have social competence and personality competence in mechanical engineering education</p> <p>PLO-7 Have an understanding of technopreneurship in the field of automotive/production technology</p> <p>PLO-8 Able to carry out maintenance and repairs in the automotive engineering field (automotive concentration) or able to operate various production equipment and machines in the manufacturing sector (production concentration)</p> <p>Program Objectives (PO)</p> <p>PO - 1 Describes the scope, objectives and functions of K3</p> <p>PO - 2 Classify K3 regulations and accident prevention principles</p> <p>PO - 3 Calculate the danger standard for the Threshold Limit Value (NAB) of human physical factors</p> <p>PO - 4 Plan the handling and relief actions for work accidents</p> <p>PO - 5 Categorizing types and using Personal Protective Equipment (PPE)</p> <p>PO - 6 Analyze the implementation of the Occupational Safety and Health Management System (SMK3) in industry</p> <p>PLO-PO Matrix</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th>P.O</th> <th>PLO-5</th> <th>PLO-7</th> <th>PLO-8</th> </tr> </thead> <tbody> <tr><td>PO-1</td><td></td><td></td><td></td></tr> <tr><td>PO-2</td><td></td><td></td><td></td></tr> <tr><td>PO-3</td><td></td><td></td><td></td></tr> <tr><td>PO-4</td><td></td><td></td><td></td></tr> <tr><td>PO-5</td><td></td><td></td><td></td></tr> <tr><td>PO-6</td><td></td><td></td><td></td></tr> </tbody> </table> <p>PO Matrix at the end of each learning stage (Sub-PO)</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <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> <tr><td>PO-2</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> <tr><td>PO-3</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> <tr><td>PO-4</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> <tr><td>PO-5</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> <tr><td>PO-6</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> </tbody> </table>	P.O	PLO-5	PLO-7	PLO-8	PO-1				PO-2				PO-3				PO-4				PO-5				PO-6				P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2																	PO-3																	PO-4																	PO-5																	PO-6																
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Short Course Description	This course contains a study of the scope and regulations of K3, principles of accident prevention. Measuring threshold values for human physical factors. Able to carry out work accident handling and relief measures, using PPE, implementing SMK3 in industry.
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References	Main :		<ol style="list-style-type: none"> 1. PP No.13 Tahun 2003 dan Undang-undang K-3 2. Suma 19mur. 1995. Keselamatan Kerja dan Pencegahan Kecelakaan 3. Anizar. 2009. Teknik Keselamatan dan Kesehatan Kerja di Industri 4. Banet Silalahi. 1995. Manajemen K-3. 5. UU No. 1 tahun 1970 Tentang keselamatan Kerja 6. Undang-undang (UU) Nomor 13 Tahun 2003 tentang Ketenagakerjaan T.E.U. Indonesia, Pemerintah Pusat 7. ISO 45001 2018 Tentang Sistem Manajemen K3 				
	Supporters:						
	Supporting lecturer		Muamar Zainul Arif, S.Pd., M.Pd. Bima Anggana Widhiarta Putra, S.Pd., M.Pd.				
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	Students are able to describe the scope, b. Students are able to connect purpose and function	<ol style="list-style-type: none"> 1.Accuracy in explaining the scope of K3 2.Accuracy in explaining the relationship between K3 objectives and functions 	Criteria: 100 marks if all answers are correct (100%) 70 marks if there are 30 wrong answers 50 % if there are 50 % wrong answers Form of Assessment : Participatory Activities	Lectures, discussions, questions and answers 2 X 50		Material: Introduction to K3 Literature: Suma 19mur. 1995. Work Safety and Accident Prevention	5%
2	Able to understand K-3 as a Multi-Discipline	Can explain K-3 as Multi-Disciplinary	Form of Assessment : Participatory Activities	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		Material: K-3 as Multi Disciplinary Science Library: Suma 19mur. 1995. Work Safety and Accident Prevention	5%
3	Classifying K3 regulations	Accuracy in ordering K3 rules from highest to lowest	Criteria: Expressing opinions, presentations Form of Assessment : Project Results Assessment / Product Assessment	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		Material: K3 Regulations Reference: Law no. 1 of 1970 concerning work safety	5%
4	a). Describe the principles of accident prevention, b). Compile a job safety analysis	<ol style="list-style-type: none"> 1.Accuracy explains the principles of accident prevention 2.Accuracy in formulating job safety analysis 	Criteria: Able to compile JSA Form of Assessment : Project Results Assessment / Product Assessment	Discussion, questions and answers, and assignments 2 X 50			5%
5	Calculate the danger standard for the Threshold Limit Value (NAB) of human physical factors	Accuracy of calculating NAB frequency radiation, ultraviolet radiation, static magnetic fields	Criteria: Calculating NAV Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, exercises and assignments 2 X 50		Material: NAB Physical Factors Reference: Anizar. 2009. Occupational Safety and Health Engineering in Industry	5%
6	Calculating hazard standards for the Threshold Limit Value (NAB) of human physical factors (Continuation 2)	Accuracy of calculating the NAB of working climate, noise, vibration	Criteria: Calculating NAV Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, exercises and assignments 2 X 50			5%

7	Plan the handling and relief actions for work accidents	<ol style="list-style-type: none"> 1.Accuracy in carrying out first aid measures for work accidents 2.Accuracy in designing work accident relief measures 	<p>Criteria: 100 marks if all answers are correct (100%) 70 marks if 30 % of the answers are wrong Mark 50 if 50 % of the answers are wrong</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: first aid measures for work accidents Library: Suma 19mur. 1995. <i>Work Safety and Accident Prevention</i></p>	10%
8	MIDDLE SEMESTER EXAMINATION (UTS)		<p>Criteria: COMPATIBILITY WITH ANSWER KEY</p> <p>Form of Assessment : Test</p>	MIDDLE SEMESTER EXAMINATION (UTS) 2 X 50			10%
9	Planning work accident handling and relief measures (continued 2)	<ol style="list-style-type: none"> 1.1. Accuracy in describing occupational diseases 2.2. Accuracy of fire handling 	<p>Criteria: understand fire handling procedures</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: Fire management Reference: Suma 19mur. 1995. <i>Work Safety and Accident Prevention</i></p>	10%
10	Plan the handling of chemicals and industrial materials	<ol style="list-style-type: none"> 1.Can explain management and operational policies, work performance and explain unsafe actions and conditions. 2.Accuracy in describing chemicals and industrial materials 3.Accurate handling of chemicals and industrial materials 	<p>Criteria: Expressing opinions, presentations</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: Industrial materials and materials Library: Anizar. 2009. <i>Occupational Safety and Health Engineering in Industry</i></p>	5%
11	Categorizing types and using Personal Protective Equipment (PPE)	Accuracy in describing the types of PPE	<p>Criteria: 100 marks if all answers are correct (100%), 70 marks if there are 30% wrong answers, 50 marks if there are 50% wrong answers</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: PPE Library: Law (UU) Number 13 of 2003 concerning Indonesian TEU Employment, Central Government</p>	5%
12	Categorizing types and using Personal Protective Equipment (PPE) Continued 2	<ol style="list-style-type: none"> 1.Accuracy in selecting PPE 2.Accuracy in carrying out PPE maintenance 	<p>Criteria: 100 marks if all answers are correct (100%) 70 marks if there are 30 wrong answers 50 % if there are 50 % wrong answers</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: PPE Library: Suma 19mur. 1995. <i>Work Safety and Accident Prevention</i></p>	5%
13	Occupational Safety and Health Management System (SMK3)	Accuracy of analyzing the application of SMK3 in industry and workshops	<p>Criteria:</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, discussions, questions and answers, exercises and assignments 2 X 50		<p>Material: K3 management system Reference: ISO 45001 2018 About K3 Management Systems</p>	10%
14	Observation of K3 implementation	Able to analyze the implementation of K3 in industry/workshops	<p>Criteria: 100 marks if all answers are correct (100%) 70 marks if there are 30 wrong answers 50 % if there are 50 % wrong answers</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	assignment 2 X 50			10%

15	Observation of K3 implementation	Able to analyze the implementation of K3 in industry/workshops (continued)	Criteria: 100 marks if all answers are correct (100%) 70 marks if there are 30 wrong answers 50 % if there are 50 % wrong answers Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	assignment 2 X 50		Material: Vocational School system 3 Reference: ISO 45001 2018 Concerning K3 Management Systems	10%
16	FINAL SEMESTER EXAMINATION (UAS)	FINAL SEMESTER EXAMINATION (UAS)	Criteria: ACCORDING TO THE ANSWER KEY IN THE FINAL SEMESTER EXAMINATION (UAS)	FINAL SEMESTER EXAMINATION (UAS) 2 X 50			0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	55%
2.	Project Results Assessment / Product Assessment	25%
3.	Practice / Performance	10%
4.	Test	10%
		100%

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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.