



Universitas Negeri Surabaya
Faculty of Engineering,
Undergraduate Study Program in Informatics Engineering

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																																																		
Probability and Statistics	5520203079		T=3 P=0 ECTS=4.77	4	July 17, 2024																																																																		
AUTHORIZATION	SP Developer		Course Cluster Coordinator	Study Program Coordinator																																																																			
	Aditya Prapanca, S.T., M.Kom.																																																																			
Learning model	Case Studies																																																																						
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																																						
	Program Objectives (PO)																																																																						
	PO - 1	Able to understand the concept of probability																																																																					
	PO - 2	Able to create and calculate the concept of calculating frequency distribution tables, central symptom size and location size, deviation size, moment-skewness and kurtosis, probability theory, sampling, hypothesis testing, regression and correlation analysis and non-parametric statistics.																																																																					
	PLO-PO Matrix																																																																						
		<table border="1" style="margin: auto;"> <tr><td>P.O</td></tr> <tr><td>PO-1</td></tr> <tr><td>PO-2</td></tr> </table>				P.O	PO-1	PO-2																																																															
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PO-1																																																																							
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PO Matrix at the end of each learning stage (Sub-PO)																																																																							
	<table border="1" style="margin: auto;"> <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> </tbody> </table>				P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2																
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Short Course Description	This course provides an understanding of the basic theory of statistics and types of data, presentation and analysis of data to support the preparation of a thesis both in statistical analysis, both descriptive and inferential statistics (parametric and non-parametric). Learning is carried out by applying a constructivist approach. The learning activity ends with practice analyzing and presenting research data.																																																																						
References	Main :																																																																						
	<ol style="list-style-type: none"> 1. Sujana. 1989. Metoda Statistika. Bandung: Tarsito. 2. Sugiono. 1994. Metoda Penelitian Administrasi. Bandung: Alfabeta 3. Djarwanto & Subagyo. 1994. Statistik Induktif. Yogyakarta: BPFE. 4. Furqon. 2011. Statistika Terapan untuk Penelitian. Bandung: Alfabeta. 5. Sugiyono. 2013. Statistika untuk Penelitian. Bandung: Alfabeta. 																																																																						
	Supporters:																																																																						
Supporting lecturer	Dr. Yeni Anistiyasari, S.Pd., M.Kom.																																																																						

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 material, assessment system for 1 semester	explains the main material, assignments, and assessment system for 1 semester		Lectures 2 X 50			0%
2	Present data in various forms.	1.Students can: Explain the various types of data presentation. 2.Presenting data with various presentation models		Lectures, discussions and questions and answers 2 X 50			0%
3	calculate the mean, median, and mode	1.Students can: Explain the meaning of mean, median and mode. 2.Calculate the mean, median, and mode.		Lectures, discussions, exercises 2 X 50			0%
4	calculate SD, moments, skewness, and kurtosis	1.Students can: Explain the meaning of SD, moment, skewness, and kurtosis. 2.Calculates SD, moments, skewness, and kurtosis.		Lectures, discussions, exercises 2 X 50			0%
5	calculate probabilities, permutations, combinations, and expectations	1.Students can: Explain the meaning of probability, permutation, combination and expectation. 2.Calculating probabilities, permutations, combinations, and expectations.		Lectures, discussions, exercises 2 X 50			0%
6	calculate probabilities, permutations, combinations, and expectations	1.Students can: Explain the meaning of probability, permutation, combination and expectation. 2.Calculating probabilities, permutations, combinations, and expectations.	Form of Assessment : Participatory Activities	Lectures, discussions, exercises 2 X 50			40%
7	UTS	UTS		2 X 50 test			0%

8	determine the sample size using the Krijcie table and King's nomogram	1.Students can: Explain the meaning of population and sample. 2.Determining the sample size using the Krijcie table and King's nomogram		Lectures, discussions, exercises 2 X 50			0%
9	state descriptive, comparative and associative hypotheses and test these hypotheses.	1.Students can: Explain the hypothesis. 2.State descriptive, comparative and associative hypotheses. 3.Explain how to test a hypothesis.		Lectures, discussions and questions and answers 2 X 50			0%
10	use the t test to test the hypothesis	1.Students can: Explain the use of the t test 2.Using the t test to test the hypothesis		Lectures, discussions and questions and answers 2 X 50			0%
11	calculate correlation	1.Students can: Explain the meaning of correlation 2.Calculating correlation		Lectures, discussions, exercises 2 X 50			0%
12	calculate a single regression	1.Students can: Explain the meaning of single regression 2.Calculating a single regression	Form of Assessment : Participatory Activities	Lectures, discussions, exercises 2 X 50			40%
13	calculating multiple regression	1.Students can: Explain the meaning of multiple regression 2.Calculating multiple regression		Lectures, discussions, exercises 2 X 50			0%
14	calculating multiple regression	1.Students can: Explain the meaning of multiple regression 2.Calculating multiple regression		Lectures, discussions, exercises 2 X 50			0%
15	calculating anava	1.Students can: Explain the meaning of anava 2.Calculating anava	Form of Assessment : Participatory Activities	Lectures, discussions, exercises 2 X 50			20%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	100%
		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** 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.
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.