



**Universitas Negeri Surabaya**  
**Faculty of Mathematics and Natural Sciences**  
**Bachelor of Mathematics Education Study Program**

Document Code

## SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Statistics	8420202004	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	4	January 17, 2024
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
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**Learning model**      **Project Based Learning**

**Program Learning Outcomes (PLO)**      **PLO study program that is charged to the course**

<b>PLO-6</b>	Demonstrate religious and cultural values as academic ethics in carrying out professional duties
<b>PLO-7</b>	Apply basic mathematical principles to solve simple mathematical problems
<b>PLO-10</b>	Make decisions based on data/information in completing assignments that are the student's responsibility and evaluate the work that has been done
<b>PLO-12</b>	Demonstrate mathematical knowledge and insight

**Program Objectives (PO)**

<b>PO - 1</b>	Able to demonstrate mathematical knowledge and insight
<b>PO - 2</b>	Able to implement basic mathematical principles to solve simple mathematical problems

**PLO-PO Matrix**

P.O	PLO-6	PLO-7	PLO-10	PLO-12
PO-1	✓	✓	✓	✓
PO-2	✓	✓	✓	✓

**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	✓	✓														
PO-2																

**Short Course Description**      This course studies data collection, processing, presentation and analysis. The material in the Statistics course consists of basic knowledge of statistics, presenting data in tabular form, presenting data in diagram form, measures of centrality, measures of location and dispersion, normal curves, hypothesis testing, ANOVA, correlation and simple linear regression, goodness of fit tests, and test the independence of individual and group task-based learning.

**References**      **Main :**

1. Weiss, N. A. 2015. Elementary Statistics 9th Edition. Boston: Pearson.
2. Ismail, Fajri. 2018. Statistika Untuk Penelitian Pendidikan dan Ilmu-ilmu Sosial. Jakarta: Prenadarmdia Group.
3. Walpole, M. 2013. Probability and Statistics for Engineers and Scientist : Global Edition (9th Edition). Mumbai : Pearson
4. Weiss, N.A. (2012) Introductory Statistics. 9th Edition, Addison-Wesley Pearson Inc., Boston, 193.

	<b>Supporters:</b>						
<b>Supporting lecturer</b>	Dr. Rini Setianingsih, M.Kes. Dr. Ismail, M.Pd. Affiati Oktaviarina, S.Si., M.Sc. Dr. Heri Purnomo, M.Pd. Sugi Hartono, M.Pd. Danang Ariyanto, S.Si., M.Si. Dr. Yurizka Melia Sari, M.Pd. Dimas Avian Maulana, S.Si., M.Si. Mukhtamilatus Sa'diyah, 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	Understand the meaning of statistics, population, samples, sampling techniques and types of data	1.Explain basic knowledge of statistics, populations and samples. 2.Apply basic knowledge of statistics, populations and samples in everyday life. 3.Explain sampling techniques and the types of data obtained.	<b>Form of Assessment :</b> Practice / Performance	Case Study 2x50			5%
2							0%
3							0%
4							0%
5							0%
6							0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%

15							0%
16							0%

**Evaluation Percentage Recap: Project Based Learning**

No	Evaluation	Percentage
1.	Practice / Performance	5%
		5%

**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.**