	Universitas Negeri Surabaya Faculty of Engineering, Cosmetology Education Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses		CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Statistics		8321303116		T=3	P=0	ECTS=4.77	3	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	Nia Kusstianti, S.Pd., M.Pd.

Learning model	Case Studies

Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**
	Program Objectives (PO)
	PLO-PO Matrix
	P.O
	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

Short Course Description	Conduct studies and provide an understanding of the role of statistics through learning that is adapted to the curriculum structure in the field of cosmetology. Learning statistics consists of: descriptive statistics such as: understanding statistics, the role of statistics, data presentation, centralization measures, deviations, population models. Population, sample, and sampling techniques, data homogeneity tests, and inferential statistics such as: hypothesis testing, difference tests, correlation tests, and influence tests. The assessment is carried out during the learning process with participation during face-to-face, USS, and UAS. Learning is carried out by applying a combination of scientific approaches, cooperative and classical learning models. The learning activity ended with a paper presentation on the application of statistics in the field of cosmetology.

References	**Main :**

1. Bahan Ajar mata kuliah Statistika, untuk kalangan sendiri,
2. Sudjana. 2010. Metoda Statistika. Bandung: Tarsito
3. Sugiyono, Eri Wibowo. 2004. Statistika untuk Penelitian dan Aplikasinya dengan SPSS. Bandung: Alfabeta
4. Rosner, Bernard. 1986. Fundamental of Biostatistics, second edition.Massachusetts: PWS Publishers

	Supporters:

Supporting lecturer	Dra. Hj. Suhartiningsih, M.Pd. Dra. Dewi Lutfiati, M.Kes.

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	Able to understand the basic concepts of statistics, and the role of statistics in research	1. Master the basic concepts of statistics and statistics, the scope of statistics 2. Explain the role of statistics in research	**Criteria:** Each question item has a weight of 3	Lectures, discussions 3 X 50			0%

2	Able to understand the concept of descriptive statistics	1. Explain the meaning of descriptive statistics 2. Explain various types of data presentation 3. Discuss measures of central tendency 4. Discuss measures of location 5. Discuss measures of dispersion 6. Explain population models 7. Discuss moment, skewness and kurtosis	**Criteria:** If answered correctly, the score is 10	Brainstorming, Discussion and reflection 3 X 50			0%
3	Able to understand the concept of normal distribution and apply normal curves	1. explain the meaning of a normal curve 2. calculate cases using a normal curve 3. Applying the Normality Test	**Criteria:** If answered correctly, the score is 10	Lectures, discussions, presentations 3 X 50			0%
4	Able to understand the concepts of POPULATION, SAMPLE, and SAMPLING TECHNIQUES	1. discuss the meaning of population, sample and sampling techniques 2. discuss types of sampling techniques 3. give examples of probability sampling techniques 5. create examples of non-probability sampling techniques	**Criteria:** If answered correctly, the score is 10	Lectures, discussions, presentations 3 X 50			0%
5	Understand the basic concepts of hypothesis testing	1. Explain the basic concept of hypothesis testing 2. Explains three forms of hypothesis formulation, both descriptive, comparative and associative hypotheses 3. Explain the meaning of error rate in a hypothesis 4. Apply descriptive hypothesis testing	**Criteria:** If done correctly, the score is 10	Lectures, exercises and Assignments 3 X 50			0%
6	Understanding one-sample descriptive hypothesis testing (nonparametric)	1. Explain the meaning of non-parametric one-sample descriptive hypothesis testing 2. Explain the binomial test 3. Explain and perform the chi Square test	**Criteria:** If done correctly, score 10	Lectures, exercises and assignments 3 X 50			0%

7	Understand comparative hypothesis testing of two samples	1. Explains comparative hypothesis testing for two samples 2. Carrying out comparative hypothesis testing of two correlated samples	**Criteria:** If answered correctly then the score is 10	Discussion, question and answer and presentation 3 X 50			0%
8	Can do UTS questions	Can do UTS questions	**Criteria:** If answered correctly, the score is 100	3 X 50 test			0%
9	Understanding two-sample comparative hypothesis testingUnderstanding k-sample hypothesis testing	1. Can carry out comparative hypothesis testing of two samples 2. Can carry out hypothesis testing for k samples	**Criteria:** If done correctly, you get a score of 100	discussion, exercises and assignments 3 X 50			0%
10	Explain and test the parametric associative hypothesis. Explain and test the Product Moment correlation	1. Can perform parametric associative hypothesis testing 2. Can carry out Product Moment correlation testing	**Criteria:** If done correctly	Exercises and assignments 3 X 50			0%
11	Understand non-parametric associative hypothesis testing	1. Explaining non-parametric associative statistics 2. Explain and determine the contingency coefficient 3. Explain and determine spearman rank	**Criteria:** If you do everything correctly, you get a score of 100	Practice and solve 3 X 50 problems			0%
12	Understand simple linear regression analysis	1. Explain the meaning of simple linear regression 2. Mention an example of a simple linear regression calculation 3. Carrying out regression linearity tests 4. Calculate the prices of a and b 5. Drawing up a regression equation 6. Create a regression line	**Criteria:** If you do everything correctly, you get a score of 100	Lectures and Practice Questions 3 X 50			0%

13	Understand multiple regression analysis	1. Explains multiple regression analysis for two predictors 2. Explains regression analysis of three predictors	**Criteria:** If answered all correctly, score 100	Lectures and Practice Questions 3 X 50			0%
14	Understand testing the validity and reliability of question items	1. Explain the meaning of instrument validity testing 2. Explain construct validity testing 3. Explain content validity testing 4. Explain external validity testing 5. Explain instrument reliability testing	**Criteria:** If you do everything correctly, you get a score of 100	Questions and answers, Practice questions 3 X 50			0%
15	Understanding k sample comparative hypothesis testing (Non Parametric)	Able to carry out comparative hypothesis testing k samples (Non Parametric)	**Criteria:** If you do everything correctly, you get a score of 100	Practice questions 3 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.