	Universitas Negeri Surabaya Vocational Faculty, D4 Civil Engineering Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Applied Statistics	99992240102011	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	3	April 29, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Suparji	Suparji	Puguh Novi Prasetyono, S.Pd., M.T.

Learning model	**Case Studies**

Program Learning Outcomes (PLO)

PLO study program which is charged to the course

PLO-11	Able to apply knowledge of mathematics, natural and/or materials science, civil engineering information technology to gain a thorough understanding of the principles and methods of civil engineering in the field of building construction.

Program Objectives (PO)

PLO-PO Matrix

P.O	PLO-11

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	This course provides an understanding of basic statistical theory and types of data, presentation and analysis of data to support the preparation of a thesis using both descriptive and inferential statistics (parametric and non-parametric). Learning is carried out using a direct teaching model by applying a constructivist approach. The learning activity ends with practice analyzing and presenting research data. Evaluation of learning with written tests.

References

Main :

1. Suparji, Palupi, A.E. dan Mulyono, W.D. (2020). Statistik untuk Penelitian Pendidikan. Surabaya:Prima Abadi Jaya
2. Sujana. 1989. Metoda Statistik . Bandung: Tarsito
3. Sugiono. 1994. Metoda Penelitian Administratif . Bandung: Alfabete
4. Djarwanto & Subagyo.1994. Statistik Induktif . Yogyakarta:BPFE.

Supporters:

1. Sukardi. (2011). Metode Penelitian Pendidikan, Kompetensi dan Praktiknya. Jakarta:Bumi Aksara

Supporting lecturer	Prof. Dr. Suparji, 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 understand the material, assessment system for 1 semester.	Students can explain the main material, assignments and assessment system for 1 semester.	**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 50, so the total score is 100.	Lectures 2 X 50			0%
2	Students can present data in various forms.	1. Students can: Explain the various types of data presentation. 2. Presenting data with various presentation models	**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 50, so the total score is 100.	Lectures, discussions and questions and answers 2 X 50			0%
3	Students can calculate measures of centering (mean, median, and mode)	1. Students can: Explain the meaning of mean, median and mode. 2. Calculate the mean, median, and mode.	**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 50, so the total score is 100.	Lectures, discussions, exercises 2 X 50			0%
4	Students can calculate location measurements (quartiles, deciles and percentiles)	1. Students can: Explain the meaning of quartiles, deciles and percentiles. 2. Calculate quartiles, deciles and percentiles.	**Criteria:** Full marks are obtained if you do all the questions correctly, with the weight of questions 1 and question 2 being 30, question 3 being 40, so the total score is 100	Lectures, discussions, exercises 2 X 50			0%
5	Students can calculate Standard Deviation, measure of slant and measure of sharpness (kurtosis)	1. Students can: Explain the meaning of Standard Deviation / Standard Deviation, measure of skewness and measure of sharpness (kurtosis) 2. Calculating Standard Deviation / Standard Deviation, measure of slant and measure of sharpness (kurtosis)	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 2 X 50			0%
6	Students can understand the meaning and use of the normal curve	1. Students can: Explain the normal distribution function 2. Calculate the area using the z table 3. can read z table	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 2 X 50			0%

7	Students can understand probability, permutations and combinations	1.-Students can: understand opportunities, permutations and combinations 2.calculate probability values, permutations and combinations	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100	-Lectures, discussions and 2 X 50 exercises			0%
8	UTS		**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 25, so the total score is 100.	2 X 50			0%
9	Students can 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.	**Criteria:** Full marks are obtained if you do all the questions correctly, with the weight of questions 1 and question 2 being 30, question 3 being 40, so the total score is 100	Lectures, discussions and questions and answers 3 X 50			0%
10	Students can use the t test to test hypotheses	1.Students can: Explain the use of the t test 2.Using the t test to test the hypothesis	**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 25, so the total score is 100.	Lectures, discussions and questions and answers 3 X 50			0%
11	Students can calculate correlation	1.Students can: Explain the meaning of correlation 2.Calculating correlation	**Criteria:** Full marks are obtained if you do all the questions correctly, with each question having a weight of 25, so the total score is 100.	Lectures, discussions, exercises 3 X 50			0%
12	Students can calculate a single regression	1.Students can: Explain the meaning of single regression 2.Calculating a single regression	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 3 X 50			0%
13	Students can calculate multiple regression	1.Students can: Explain the meaning of multiple regression 2.Calculating multiple regression	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 3 X 50			0%
14	Students can calculate multiple regression	1.Students can: Explain the meaning of multiple regression 2.Calculating multiple regression	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 3 X 50			0%
15	Students can calculate anava	1.Students can: Explain the meaning of anava 2.Calculating anava	**Criteria:** Full marks are obtained if you do the questions correctly, with a total score of 100.	Lectures, discussions, exercises 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.