					Document Code

Universitas Negeri Surabaya
Faculty of Economics and Business
Bachelor of Accounting Education Study Program

SEMESTER LEARNING PLAN

Courses		CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
ECONOMIC STATISTICS		8720902124		T=2	P=0	ECTS=3.18	2	July 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 which 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	The material for the research statistics course I discusses descriptive statistics, which relates to how to organize data, process data, present data, sample and confidence intervals. Lectures are carried out using a discussion system, project assignments and reflection.

References	**Main :**

1. DavidM. Levine, et al. 2012. Basic Business Statistics: Concepts and Application, NewJersey: Pearson Education Inc. 2. Lind,Marchal and Wathen. 2007. T eknik-Teknis Statistika dalam Bisnis dan Ekonomi . McGraw Hill. Jakarta: Salemba Empat.
2. Suharyadidan Purwanto. 2004. Statistika: untuk Ekonomi dan Keuangan Modern. Jakarta : SalembaEmpat. 4. Sugiono,2010, Statistik untuk Penelitian, Bandung, Alfabeta.
3. SofyanYamin dan Heri Kurniawan. 2009. SPSS Complete: Teknik Analisis StatistikTerlengkap dengan Software SPSS , Jakarta.
4. SamsubarSaleh. 2004. Statistik Deskriptif. Yogyakarta: UPP AMP YKPN. 7. Algifari. 2003. Statistika Induktif untuk Ekonomi danBisnis , Yogyakarta: UPP AMP YKPN.
5. Sugiono, 2018, Statistik untuk Penelitian, Bandung, Alfabeta.

	Supporters:

Supporting lecturer	Drs. Eko Wahjudi, M.Si. Dr. Luqman Hakim, S.Pd., S.E., M.SA. Dr. Agung Listiadi, S.Pd., M.Ak. Dr. Muhammad Miftah Farid, 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	Able to explain the meaning, classification, function and use and problems of statistics	1. Understand why we study statistics2. Explain what is meant by descriptive statistics and inferential statistics 3. Distinguish between quantitative variables and qualitative variables	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: EssayQuestion **Form of Assessment** : Participatory Activities	Reading and lecture assignments, project based learning (PjBL) 3 X 50 learning model			10%
2	Able to differentiate levels and types of measurement scales	1.Describes nominal measurement levels 2.Explain the ordinal levels of measurement 3.Explains the level of interval measurement 4.Explain the level of ratio measurement	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: EssayQuestion	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%
3	Able to describe data through frequency tables, frequency distributions and graphical presentations	1.Arrange qualitative data into a frequency table 2.Displays categorical data in bar chart form 3.Displays categorical data in the form of a pie chart 4.Displays numerical data in histogram form 5.Displays numerical data in the form of frequency polygons 6.Displays numerical data in the form of a cumulative frequency polygon	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: EssayQuestion **Form of Assessment** : Participatory Activities	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			10%
4	Explain the size of data centralization	1.Calculating the arithmetic average (mean) 2.Calculating the median 3.Calculating mode 4.Calculating quartiles 5.Calculating deciles 6.Calculating percentiles	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: EssayQuestion	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%

5	Explain the size of dispersion (spread)	1.Explain the various sizes of dispersion 2.Explaining the data range (range) 3.Calculating Mean Deviation (average deviation) 4.Calculating Standard Deviation (Standard Deviation) and Variance 5.Explain the relationship between mean, median, mode and measure of skewness 6.Coefficient of Variation	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: EssayQuestion	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%
6	Explain the size of dispersion (spread)	1.Explain the various sizes of dispersion 2.Explaining the data range (range) 3.Calculating Mean Deviation (average deviation) 4.Calculating Standard Deviation (Standard Deviation) and Variance 5.Explain the relationship between mean, median, mode and measure of skewness 6.Coefficient of Variation	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: Question Essay	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%
7	Explain the size of dispersion (spread)	1.Explain the various sizes of dispersion 2.Explaining the data range (range) 3.Calculating Mean Deviation (average deviation) 4.Calculating Standard Deviation (Standard Deviation) and Variance 5.Explain the relationship between mean, median, mode and measure of skewness 6.Coefficient of Variation	**Criteria:** 1.Criteria: Full marks are obtained if you do all questions correctly 2.Form: Question Essay **Form of Assessment** : Participatory Activities	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			10%
8	UTS			2 X 50			0%

| 9 | Able to understand and explain index numbers | 1.Understand the meaning contained in index numbers and their use in the economy
2.Understand and differentiate between simple and weighted index numbers
3. Understanding and explaining index numbers is relatively simple
4.Explaining simple aggregate index numbers
5.Explains weighted index numbers
6.Explain the various indexes
7.Calculates the consumer price index
8.Calculates large trading price index
9.Calculating the farmer's exchange rate index
10.Calculating the productivity index
11.Explain the problem and preparation of index numbers | **Criteria:**
1.Criteria: Full marks are obtained if you do all questions correctly
2.Form: Question Essay | Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model | | | 0% |
| 10 | Able to understand and explain the basic concepts of probability | 1.Defines probability or chance
2.Explains classical, empirical and subjective approaches to probability
3.Explain the terms experiment, outcome, permutations and combination
4.Define the terms conditional probability and joint probability
5.Calculating probability using rules of addition and rules of multiplication | **Criteria:**
1.Criteria: Full marks are obtained if you do all questions correctly
2.Form: Question Essay

Form of Assessment : Participatory Activities | Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model | | | 10% |

| 11 | Able to understand and explain discrete probability distributions | 1. Define the terms probability distribution and random variable
2. Distinguish between discrete probability distributions and continuous probability distributions
3. Calculates the mean, variance, and standard deviation of a discrete probability distribution | **Criteria:**
1. Criteria: Full marks are obtained if you do all questions correctly
2. Form: Question Essay | Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model | | | 0% |
| 12 | Able to understand and explain continuous probability distributions | 1. Understand the difference between discrete and continuous probability distributions
2. Calculating the mean and standard deviation of a uniform distribution
3. Calculates probability using a uniform distribution
4. Mention the characteristics of the normal probability distribution.
5. Define and calculate z values
6. Determines the probability that an observation is between two points on a normal probability distribution | **Criteria:**
1. Criteria: Full marks are obtained if you do all questions correctly
2. Form: Question Essay | Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model | | | 0% |

No							
13	Able to explain and understand sampling methods and the middle limit theorem	1. Explaining why a sample is often the only possible way to learn something about a population 2. Explain the methods for selecting samples 3. Defining and creating a sampling distribution from the sample mean 4. Understand and explain the central limit theorem 5. Uses the intermediate limit theorem to find probabilities and select possible sample means from a given population	**Criteria:** 1. Criteria: Full marks are obtained if you do all questions correctly 2. Form: Question Essay	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%
14	Able to understand estimates and confidence intervals	1. Defines a point estimate 2. Defines the level of trust 3. Create a confidence interval for the population mean if the population standard deviation is known 4. Create a confidence interval for the population mean when the standard deviation is unknown	**Criteria:** 1. Criteria: Full marks are obtained if you do all questions correctly 2. Form: Question Essay **Form of Assessment** : Participatory Activities	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			10%
15	Able to analyze given case studies	Understand and explain the case study given	**Criteria:** 1. Criteria: Full marks are obtained if you do all questions correctly 2. Form: Question Essay	Reading and lecture assignments, project based learning (PjBL) 2 X 50 learning model			0%
16	Final Semester Evaluation / Final Semester Examination			2 X 50			0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	50%
		50%

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.