



**Universitas Negeri Surabaya
Faculty of Economics and Business
Economic Education Undergraduate Study Program**

**Document
Code**

SEMESTER LEARNING PLAN

| Courses | CODE | Course Family | Credit Weight | SEMESTER | Compilation Date |
|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|------------------|
| STATISTICS | 8720302364 | Compulsory Study Program Subjects | T=2 P=0 ECTS=3.18 | 3 | July 18, 2024 |
| AUTHORIZATION | SP Developer | | Course Cluster Coordinator | Study Program Coordinator | |
| | Albrian Fiky Prakoso, S.Pd., M.Pd | | Widyastuti, S.Si., M.Si | Dr. Retno Mustika Dewi, S.Pd., M.Pd. | |

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| Learning model | Case Studies |
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| Program Learning Outcomes (PLO) | PLO study program which is charged to the course | |
| | Program Objectives (PO) | |
| | PO - 1 | Demonstrate a responsible attitude towards work independently and in groups |
| | PO - 2 | Examining the basic concepts of descriptive and inferential statistics |
| | PO - 3 | Utilizing technology and information in data analysis |
| | PO - 4 | Analyze and interpret the results of data analysis |

PLO-PO Matrix

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| P.O |
| PO-1 |
| PO-2 |
| PO-3 |
| PO-4 |

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 | | | | | | | | | | | | | | | | |
| PO-3 | | | | | | | | | | | | | | | | |
| PO-4 | | | | | | | | | | | | | | | | |

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| Short Course Description | Understanding basic concepts of statistics, Introduction to SPSS, Parametric Tests, Non-Parametric Tests, Proportion Tests, Validity and Reliability, Correlation Analysis and Linear Regression. Lectures are carried out using lecture methods, field observations, practice and presentation of students' written work. |
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|-------------------|--|
| References | Main : |
| | <ol style="list-style-type: none"> 1. Soesatyo, Y., Kurniawan, R. Y., & Prakoso, A. F. 2020. Statistik 1 . Surabaya: Unesa University Press 2. Solimun, Rinaldo, A. A., & Handoyo, S. 2017. Perancangan dan Pengujian Kuesioner serta Transformasi Skor Menjadi Skala Berbasis MSI, SRS dan Rasch Model . Malang: Universitas Brwajaya |
| | Supporters: |
| | <ol style="list-style-type: none"> 1. Nurhasanah, S. 2020. Praktikum Statistika 2 Untuk Ekonomi dan Bisnis. Jakarta: Salemba Empat 2. Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2021. Statistical Techniques in Business and Economics, 16th Edition. McGraw-HillEducation |

| Supporting lecturer | | Muhammad Abdul Ghofur, S.E., M.Pd. Riza Yonisa Kurniawan, S.Pd., M.Pd. Albrian Fiky Prakoso, 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 | Describe the Concept of Statistics | <ol style="list-style-type: none"> 1.Able to describe the concept of Statistics 2.Can describe statistical methods 3.Can describe the types of Statistics 4.Able to describe data summarization 5.Able to describe data presentation | Criteria: Project Results Assessment Form of Assessment : Participatory Activities, Tests | Lectures and reading literature 4 X 50 | | Material: Concepts of Statistics Bibliography: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i> | 5% |
| 2 | Describe the Concept of Statistics | <ol style="list-style-type: none"> 1.Able to describe the concept of Statistics 2.Can describe statistical methods 3.Can describe the types of Statistics 4.Able to describe data summarization 5.Able to describe data presentation | Criteria: test Form of Assessment : Project Results Assessment / Product Assessment, Test | Lectures and reading literature 4 X 50 | | Material: Concepts of Statistics Bibliography: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i> | 5% |
| 3 | Able to operate SPSS | <ol style="list-style-type: none"> 1.Able to describe SPSS concepts. 2.Able to open and understand tools in SPSS. 3.Able to operate SPSS. 4.Able to Manage Data | Criteria: Project Results Assessment Form of Assessment : Project Results Assessment / Product Assessment | lecture and Practice 2 X 50 | | Material: SPSS Reference: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i> | 5% |
| 4 | Understand Parametric Test Procedures | <ol style="list-style-type: none"> 1.Able to describe Parametric Tests 2.Able to describe the Normality Test 3.Able to describe the Homogeneity Test 4.Able to describe Analysis of Variance (ANOVA) | Criteria: Project Results Assessment Form of Assessment : Project Results Assessment / Product Assessment | Lectures, reading literature, Practice, assignments 4 X 50 | | Material: Parametric Tests References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i> | 5% |

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|---|--|---|---|---|--|--|----|
| 5 | Understand Parametric Test Procedures | <ol style="list-style-type: none"> 1. Able to describe Parametric Tests 2. Able to describe the Normality Test 3. Able to describe the Homogeneity Test 4. Able to describe Analysis of Variance (ANOVA) | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment, Test</p> | Lectures, reading literature, Practice, assignments 4 X 50 | | <p>Material: Parametric Tests</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i></p> | 5% |
| 6 | Understanding Non Parametric Test Procedures | <ol style="list-style-type: none"> 1. Can describe Non Parametric Tests 2. Can describe the use of Non-Parametric statistical tests 3. Can describe the use of the Chi Square test 4. Can describe variance analysis 5. Can describe various types of non-parametric tests | <p>Criteria: practice</p> <p>Form of Assessment : Assessment of Project Results / Product Assessment, Practices / Performance</p> | Lectures, reading literature, assignments 4 X 50 | | <p>Material: Non-Parametric Tests</p> <p>References: 1. Nurhasanah, S. 2020. <i>Statistics Practicum 2 for Economics and Business. Jakarta: Salemba Empat</i></p> | 5% |
| 7 | Understanding Non Parametric Test Procedures | <ol style="list-style-type: none"> 1. Can describe Non Parametric Tests 2. Can describe the use of Non-Parametric statistical tests 3. Can describe the use of the Chi Square test 4. Can describe variance analysis 5. Can describe various types of non-parametric tests | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p> | Lectures, reading literature, assignments 4 X 50 | | <p>Material: Non-Parametric Tests, use of Non-Parametric statistical tests, use of the Chi Square test, analysis of variance, various types of Non-Parametric tests</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i></p> | 5% |
| 8 | UTS | test | <p>Criteria: test</p> <p>Form of Assessment : Test</p> | straight away 2 X 50 | | <p>Material: UTS</p> <p>Reference: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i></p> | 0% |

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|----|--|--|---|--|--|---|-----|
| 9 | Understanding the Proportion Test | <p>1.1. Describe the Proportion Test</p> <p>2.2. Describe Hypothesis Testing for One Population Proportion</p> <p>3.3. Describe the Hypothesis Test for Proportions in Two Populations</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p> | project/product assessment, 3 x 50 Proportion Test Practice | | <p>Material: Proportion Test, Hypothesis Testing Proportion of One Population, Hypothesis Testing Proportion of Two Populations</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 5% |
| 10 | Understanding the Proportion Test | <p>1.1. Describe the Proportion Test</p> <p>2.2. Describe Hypothesis Testing for One Population Proportion</p> <p>3.3. Describe the Hypothesis Test for Proportions in Two Populations</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p> | project/product assessment, 3 x 50 Proportion Test Practice | | <p>Material: Proportion Test, Hypothesis Testing Proportion of One Population, Hypothesis Testing Proportion of Two Populations</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 10% |
| 11 | Understanding the Proportion Test | <p>1.1. Describe the Proportion Test</p> <p>2.2. Describe Hypothesis Testing for One Population Proportion</p> <p>3.3. Describe the Hypothesis Test for Proportions in Two Populations</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p> | project/product assessment, 3 x 50 Proportion Test Practice | | <p>Material: Proportion Test, Hypothesis Testing Proportion of One Population, Hypothesis Testing Proportion of Two Populations</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 10% |
| 12 | Understanding Validity and Reliability | <p>1.1. Describe Validity</p> <p>2.2. describe Reliability</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p> | project and performance 3 x 50 | | <p>Material: Validity, Reliability</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1 . Surabaya: Unesa University Press</i></p> | 10% |

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|----|---|--|---|----------------------------------|--|---|-----|
| 13 | Analysis of correlation and linear regression | <p>1.1. Describe correlation analysis</p> <p>2.2. Describe Simple Regression Analysis</p> <p>3.3. Describe multiple regression analysis</p> <p>4.4. Describe the assumptions of regression analysis</p> <p>5.5. Describe Dummy regression analysis</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Assessment of Project Results / Product Assessment, Practices / Performance</p> | Project Based Learning 3 x 50 | | <p>Material: Correlation analysis, Simple regression analysis, Multiple regression analysis, Regression analysis assumptions, Dummy regression analysis</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 10% |
| 14 | Analysis of correlation and linear regression | <p>1.1. Describe correlation analysis</p> <p>2.2. Describe Simple Regression Analysis</p> <p>3.3. Describe multiple regression analysis</p> <p>4.4. Describe the assumptions of regression analysis</p> <p>5.5. Describe Dummy regression analysis</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Assessment of Project Results / Product Assessment, Practices / Performance</p> | Project Based Learning 3 x 50 | | <p>Material: Correlation analysis, Simple regression analysis, Multiple regression analysis, Regression analysis assumptions, Dummy regression analysis</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 10% |
| 15 | Analysis of correlation and linear regression | <p>1.1. Describe correlation analysis</p> <p>2.2. Describe Simple Regression Analysis</p> <p>3.3. Describe multiple regression analysis</p> <p>4.4. Describe the assumptions of regression analysis</p> <p>5.5. Describe Dummy regression analysis</p> | <p>Criteria: Project Results Assessment</p> <p>Form of Assessment : Assessment of Project Results / Product Assessment, Practices / Performance</p> | Project Based Learning 3 x 50 | | <p>Material: Correlation analysis, Simple regression analysis, Multiple regression analysis, Regression analysis assumptions, Dummy regression analysis</p> <p>References: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 10% |
| 16 | UAS | test | <p>Criteria: test</p> <p>Form of Assessment : Test</p> | test | | <p>Material: UAS</p> <p>Reference: Soesatyo, Y., Kurniawan, RY, & Prakoso, AF 2020. <i>Statistics 1. Surabaya: Unesa University Press</i></p> | 0% |

Evaluation Percentage Recap: Case Study

| No | Evaluation | Percentage |
|----|---|------------|
| 1. | Participatory Activities | 2.5% |
| 2. | Project Results Assessment / Product Assessment | 72.5% |
| 3. | Practice / Performance | 17.5% |
| 4. | Test | 7.5% |
| | | 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** 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.