



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

Document Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>			<b>SEMESTER</b>	<b>Compilation Date</b>																																																				
Business Statistics	6120903003		T=3	P=0	ECTS=4.77	1	July 17, 2024																																																				
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>																																																					
	Anita Safitri, S.Kom, M.Kom		Renny Sari Dewi			Hujjatullah Fazlurrahman, S.E., MBA.																																																					
<b>Learning model</b>	Case Studies																																																										
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program which is charged to the course</b>																																																										
	<b>Program Objectives (PO)</b>																																																										
	<b>PO - 1</b>	Students are able to analyze using descriptive and inferential statistical methods to solve problems. C4. Students are able to analyze using descriptive and inferential statistical methods to solve problems..																																																									
	<b>PLO-PO Matrix</b>																																																										
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	<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																																																										
	<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td></td> <td style="padding: 5px;">1</td><td style="padding: 5px;">2</td><td style="padding: 5px;">3</td><td style="padding: 5px;">4</td><td style="padding: 5px;">5</td><td style="padding: 5px;">6</td><td style="padding: 5px;">7</td><td style="padding: 5px;">8</td><td style="padding: 5px;">9</td><td style="padding: 5px;">10</td><td style="padding: 5px;">11</td><td style="padding: 5px;">12</td><td style="padding: 5px;">13</td><td style="padding: 5px;">14</td><td style="padding: 5px;">15</td><td style="padding: 5px;">16</td> </tr> <tr> <td style="padding: 5px;">PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>							P.O	Week																	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	
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<b>Short Course Description</b>	This course contains basic concepts of business statistics, population & samples, probability, descriptive data presentation, inferential data analysis and hypothesis testing for business research. The learning methods that are often used are lectures and discussions, as well as CBL (case based learning).																																																										
<b>References</b>	<b>Main :</b>																																																										
	<ol style="list-style-type: none"> <li>1. Freeman, J., Anderson, D., Sweeney, D., Williams, T., &amp; Shoesmith, E. (2017). Statistics For Business and Economics. (4 ed.) Cengage .</li> <li>2. Bambang Kustianto. 2018. Statistika untuk Ekonomi dan Bisnis. Yogyakarta: Andi</li> <li>3. Suharyadi &amp; Purwanto, SK. 2016. Statistika untuk Ekonomi &amp; Keuangan Modern (Edisi 3). Jakarta: Salemba Empat.</li> <li>4. Ratih Hurriyati &amp; Muji Gunarto. 2019. Metode Statistika Bisnis. Jakarta: Refika Aditama</li> </ol>																																																										
	<b>Supporters:</b>																																																										
	<ol style="list-style-type: none"> <li>1. Ramadhayanti, A. 2019. Aplikasi SPSS untuk Penelitian dan Riset Pasar. Jakarta: PT Elex Media Komputindo.</li> </ol>																																																										
<b>Supporting lecturer</b>	Dr. Purwohandoko, M.M. Dr. Ratih Amelia, S.E., M.M. Dwi Yuli Rakhmawati, S.Si., M.Si., Ph.D. Ika Diyah Candra Arifah, S.E., M.Com. Hujjatullah Fazlurrahman, S.E., MBA. Renny Sari Dewi, S. Kom., M. Kom., MCE., MOS. Achmad Kautsar, S.E., M.M. Ahmad Kurniawan, S.M., M.B.A. Fresha Kharisma, S.E., M.SM. Muhammad Fajar Wahyudi Rahman, S.E., M.M.																																																										

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	Formulate the meaning and function of statistics	<p>1. Students are able to differentiate between scientific and non-scientific truths</p> <p>2. Students are able to understand the meaning of statistics</p> <p>3. Students are able to understand types of statistics</p> <p>4. Students are able to understand the types of data in statistics</p>	<p><b>Criteria:</b> Holistic rubric</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> theory of understanding and statistical function.</p> <p><b>References:</b> <i>Freeman, J., Anderson, D., Sweeney, D., Williams, T., &amp; Shoesmith, E. (2017). Statistics For Business and Economics. (4 ed.) Cengage.</i></p> <hr/> <p><b>Material:</b> Concept of business statistical methods</p> <p><b>Reader:</b> <i>Ratih Hurriyati &amp; Muji Gunarto. 2019. Business Statistics Methods. Jakarta: Refika Aditama</i></p>	2%
2	Analyze and present descriptive statistical data	<p>1. Students understand the meaning and function of descriptive statistics</p> <p>2. Able to analyze the frequency distribution of categorical data and quantitative data</p> <p>3. Students are able to analyze and determine the presentation of analysis results using SPSS</p>	<p><b>Criteria:</b> Criteria: Holistic rubric</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> descriptive statistical data processing.</p> <p><b>Reference:</b> <i>Anderson, Sweeney &amp; Williams. 2011. Statistics for Business and Economics (11th Ed). USA: South-Western Cengage Learning.</i></p> <hr/> <p><b>Material:</b> Descriptive Statistics</p> <p><b>Reader:</b> <i>Bambang Kustianto. 2018. Statistics for Economics and Business. Yogyakarta: Andi</i></p>	2%

3	Analyze and present descriptive statistical data	<ol style="list-style-type: none"> <li>1. Students understand the meaning and function of descriptive statistics</li> <li>2. Able to analyze the frequency distribution of categorical data and quantitative data</li> <li>3. Students are able to analyze and determine the presentation of analysis results using SPSS</li> </ol>	<p><b>Criteria:</b> Criteria: Holistic rubric</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> presents descriptive statistics</p> <p><b>References:</b> <i>Freeman, J., Anderson, D., Sweeney, D., Williams, T., &amp; Shoesmith, E. (2017). Statistics For Business and Economics. (4 ed.) Cengage.</i></p> <hr/> <p><b>Material:</b> Descriptive Statistics</p> <p><b>Reader:</b> <i>Bambang Kustianto. 2018. Statistics for Economics and Business. Yogyakarta: Andi</i></p>	2%
4	Analyze measures of data central tendency and measures of data dispersion	<ol style="list-style-type: none"> <li>1. Able to calculate and analyze mean, median, mode for group data</li> <li>2. Able to calculate and analyze: Percentiles, Deciles, Quartiles, Range, Quartile Range, Semi-quartile Range using SPSS</li> <li>3. Able to calculate and analyze: Percentiles, Deciles, Quartiles, Range, Quartile Range, Semi-quartile Range.</li> <li>4. Able to calculate and analyze mean, median, mode for group data using SPSS</li> </ol>	<p><b>Criteria:</b> Holistic Rubric</p> <p><b>Form of Assessment :</b> Practice / Performance</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> theory of data central tendency measures and data dispersion measures</p> <p><b>References:</b> <i>Anderson, Sweeney &amp; Williams. 2011. Statistics for Business and Economics (11th Ed). USA: South-Western Cengage Learning.</i></p> <hr/> <p><b>Material:</b> Central tendency and data dispersion</p> <p><b>Reader:</b> <i>Bambang Kustianto. 2018. Statistics for Economics and Business. Yogyakarta: Andi</i></p>	2%

5	Analyze measures of data central tendency and measures of data dispersion	<ol style="list-style-type: none"> <li>1. Able to calculate and analyze mean, median, mode for group data</li> <li>2. Able to calculate and analyze: Percentiles, Deciles, Quartiles, Range, Quartile Range, Semi-quartile Range</li> <li>3. Able to calculate and analyze mean, median, mode for group data using SPSS</li> <li>4. Able to calculate and analyze: Percentiles, Deciles, Quartiles, Range, Quartile Range, Semi-quartile Range using SPSS</li> </ol>	<p><b>Criteria:</b> Holistic rubric</p> <p><b>Form of Assessment :</b> Practice / Performance</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> theory of data central tendency measures and data dispersion measures</p> <p><b>References:</b> <i>Freeman, J., Anderson, D., Sweeney, D., Williams, T., &amp; Shoesmith, E. (2017). Statistics For Business and Economics. (4 ed.) Cengage.</i></p>	5%
6	Analyze probabilities	<ol style="list-style-type: none"> <li>1. Able to understand the meaning and basic concepts of probability</li> <li>2. Able to understand and differentiate the probability of a normal distribution and a discrete distribution</li> </ol>	<p><b>Criteria:</b> Holistic rubric</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> probability</p> <p><b>Bibliography:</b> <i>Murray, Spiegel R. 2004. Schaums Outlines Theory and Problems of Probability and Statistics Second Edition. Jakarta: Erlangga</i></p>	5%
7	Analyze probabilities	<ol style="list-style-type: none"> <li>1. Able to understand the meaning and basic concepts of probability</li> <li>2. Able to understand and differentiate the probability of a normal distribution and a discrete distribution</li> <li>3. Able to calculate and analyze probability using SPSS</li> </ol>	<p><b>Criteria:</b> Holistic rubric</p> <p><b>Form of Assessment :</b> Practice / Performance</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> probability techniques</p> <p><b>Reader:</b> <i>Ratih Hurriyati &amp; Muji Gunarto. 2019. Business Statistics Methods. Jakarta: Refika Aditama</i></p>	5%

8	Midterm exam	Midterm exam	<b>Criteria:</b> Midterm exam  <b>Form of Assessment :</b> Test	Midterm Exam 2 X 50	Midterm exam	<b>Material:</b> midterm exam <b>References:</b> <i>Freeman, J., Anderson, D., Sweeney, D., Williams, T., &amp; Shoesmith, E. (2017). Statistics For Business and Economics. (4 ed.) Cengage.</i>  <b>Material:</b> all material taught at meetings 1-7 <b>Reader:</b> <i>Ratih Hurriyati &amp; Muji Gunarto. 2019. Business Statistics Methods. Jakarta: Refika Aditama</i>	20%
9	Understand the meaning of statistical inference and hypothesis	1. Able to understand the meaning of inferential statistics 2. Able to understand the types of inferential statistical analysis methods 3. Able to understand the meaning of hypothesis and the types of analytical methods that can be used to test hypotheses	<b>Criteria:</b> Holistic rubric  <b>Form of Assessment :</b> Participatory Activities	Discussion and Case Study 3 X 50	Discussion and Case Study	<b>Material:</b> statistical theory of inference and hypothesis <b>References:</b> <i>Anderson, Sweeney &amp; Williams. 2011. Statistics for Business and Economics (11th Ed). USA: South-Western Cengage Learning.</i>	5%
10	Conduct hypothesis testing	1. Able to calculate and analyze using the chi-square method using SPSS 2. Able to calculate and analyze using the z test method using SPSS 3. Able to calculate and analyze using the difference test method (t-square) using SPSS 4. Able to calculate and analyze using the variance analysis method using SPSS	<b>Criteria:</b> Holistic Runbik  <b>Form of Assessment :</b> Practice / Performance	Discussion and Case Study 3 X 50		<b>Material:</b> hypothesis testing theory <b>References:</b> <i>Murray, Spiegel R. 2004. Schaums Outlines of Theory and Problems in Probability and Statistics, Second Edition. Jakarta: Erlangga</i>	5%

11	Conduct hypothesis testing	<ol style="list-style-type: none"> <li>1. Able to calculate and analyze using the chi square method using SPSS</li> <li>2. Able to calculate and analyze using the z test method using SPSS</li> <li>3. Able to calculate and analyze using the difference test method (t-square) using SPSS</li> <li>4. Able to calculate and analyze using the variance analysis method using SPSS</li> </ol>	<p><b>Criteria:</b> Holistic Rubric</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> Hypothesis testing</p> <p><b>References:</b> <i>Ratih Hurriyati &amp; Muji Gunarto. 2019. Business Statistics Methods. Jakarta: Refika Aditama</i></p>	3%
12	Conduct hypothesis testing	<ol style="list-style-type: none"> <li>1. Able to calculate and analyze using the chi square method using SPSS</li> <li>2. Able to calculate and analyze using the z test method using SPSS</li> <li>3. Able to calculate and analyze using the difference test method (t-square) using SPSS</li> <li>4. Able to calculate and analyze using the variance analysis method using SPSS</li> </ol>	<p><b>Criteria:</b> Holistic Rubric</p> <p><b>Form of Assessment :</b> Practice / Performance</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> Hypothesis testing</p> <p><b>References:</b> <i>Ratih Hurriyati &amp; Muji Gunarto. 2019. Business Statistics Methods. Jakarta: Refika Aditama</i></p>	3%
13	Conduct hypothesis testing	13.1 Able to calculate and analyze using the analysis of variance method using SPSS	<p><b>Criteria:</b> Holistic Rubric</p> <p><b>Form of Assessment :</b> Practice / Performance</p>	Discussion and Case Study 3 X 50	Discussion and Case Study	<p><b>Material:</b> hypothesis testing</p> <p><b>References:</b> <i>Murray, Spiegel R. 2004. Schaums Outlines of Theory and Problems in Probability and Statistics, Second Edition. Jakarta: Erlangga</i></p>	3%

14	Able to analyze data using regression testing	1.Able to understand and understand the meaning and function of regression testing 2.Able to calculate and analyze regression tests using SPSS	<b>Criteria:</b> Holistic rubric  <b>Form of Assessment :</b> Participatory Activities	Discussion and Case Study 3 X 50		<b>Material:</b> regression <b>Bibliography:</b> <i>Anderson, Sweeney &amp; Williams. 2011. Statistics for Business and Economics (11th Ed). USA: South-Western Cengage Learning.</i>	3%
15	Able to analyze data using Correlation Test	1.Able to understand and understand the meaning and function of correlation testing 2.Able to calculate and analyze correlation tests using SPSS	<b>Criteria:</b> Holistic Rubric  <b>Form of Assessment :</b> Practice / Performance	Discussion and Case Study 3 X 50	Discussion and Case Study	<b>Material:</b> correlation test <b>References:</b> <i>Anderson, Sweeney &amp; Williams. 2011. Statistics for Business and Economics (11th Ed). USA: South-Western Cengage Learning.</i>	5%
16	Final exams	Final exams	<b>Criteria:</b> Final Semester Evaluation / Final Semester Examination  <b>Form of Assessment :</b> Test	Final Exam Semester 2 X 50	Final exams		30%

#### Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	22%
2.	Practice / Performance	28%
3.	Test	50%
		100%

#### Notes

- 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.
- 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.
- 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.
- 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.
- Indicators for assessing** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.

