



**Universitas Negeri Surabaya**  
**Faculty of Economics and Business**  
**Bachelor of Economics Study Program**

Document Code

**SEMESTER LEARNING PLAN**

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Basic Econometrics	8722003062	Compulsory Study Program Subjects	T=3	P=0	ECTS=4.77	3	July 5, 2023
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Kukuh Arisetyawan, S.Pd., M.E.		Dr. Lucky Rahmawati.,S.E.,M.Si.			Dr. Tony Seno Aji, S.E., M.E.	

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	<b>PLO study program that is charged to the course</b>																				
PLO-4	Develop yourself continuously and collaborate.																				
PLO-5	Able to analyze overall economic theoretical concepts																				
PLO-8	Able to apply information technology in problem solving																				
PLO-9	Able to make decisions based on analysis of information and data in the fields of development planning, monetary economics and public economics																				
Program Objectives (PO)																					
PO - 1	Students are able to understand Econometric concepts and approaches in economic analysis																				
PO - 2	Students are able to apply Econometric Analysis Tools to discuss economic problems and phenomena																				
PO - 3	Students are able to reuse Econometric methodology in analyzing economic problems and phenomena																				
PLO-PO Matrix																					
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>P.O</th> <th>PLO-4</th> <th>PLO-5</th> <th>PLO-8</th> <th>PLO-9</th> </tr> </thead> <tbody> <tr> <td>PO-1</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>PO-2</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>PO-3</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>	P.O	PLO-4	PLO-5	PLO-8	PLO-9	PO-1	✓	✓	✓	✓	PO-2	✓	✓	✓	✓	PO-3	✓	✓	✓	✓
P.O	PLO-4	PLO-5	PLO-8	PLO-9																	
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PO-2	✓	✓	✓	✓																	
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PO Matrix at the end of each learning stage (Sub-PO)																																																																																					
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Short Course Description	This course discusses Econometric Concepts, Simple Linear Regression Analysis and Estimation Methods, Multiple Linear Regression Analysis and Estimation Methods, Types of Econometric Models, Classical Assumptions (Multicollinearity, Heteroscedasticity, Autocorrelation, Specification Error), and Special Topics (Dummy Variables). ) Model on Independent Variables and Dependent Variables).
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References	<p><b>Main :</b></p> <ol style="list-style-type: none"> <li>Gujarati, D. (2004). Basic Econometrics.</li> <li>Wooldridge, J.M. (). Introductory Econometrics.</li> <li>Wahyudi, S.T. (2016). Konsep dan Penerapan Ekonometrika menggunakan E-Views. PT. Rajawali Press: Jakarta.</li> <li>Baltagi. B.H. (2008). Econometrics. Springer.</li> </ol> <p><b>Supporters:</b></p>
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Supporting lecturer		Dr. Mohammad Wasil, S.Pd., M.E. Aprillia Nilasari, S.Pd., M.S.E. Ladi Wajuba Perdini Fisabilillah, S.Pd., M.SE. Ruth Eviana Hutabarat, S.E., M.E. Nurul Hanifa, S.E., M.Si. Wenny Restikasari, S.E., M.S.E.					
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	Understand and explain various basic concepts of Econometrics	1.Able to explain the meaning and definition of econometrics 2.Able to explain the Objectives of Econometrics 3.Able to explain Econometric Methodology	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> basic concepts of econometrics <b>Reference:</b> Gujarati, D. (2004). <i>Basic Econometrics</i> .	3%
2	Understand and calculate correlation and regression	1.Able to understand Descriptive Statistics 2.Able to understand various forms of correlation 3.Able to understand various forms of regression analysis 4.Able to Calculate Correlation 5.Able to Calculate Regression Parameters	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> correlation and regression <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.  <b>Material:</b> calculating correlation and regression <b>References:</b>	4%
3	Explain and Apply hypothesis testing	1.Able to explain the concept of hypothesis 2.Able to Formulate Hypothesis Statements 3.Able to explain the types of errors 4.Able to explain types of testing	<b>Criteria:</b> According to scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> hypothesis testing <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	4%
4	Explain and apply two-variable regression model testing	1.Able to explain various regression models 2.Able to apply a 2 variable regression model 3.Able to explain estimates using OLS 4.Able to Apply Statistical Tests	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> testing a two-variable regression model <b>References:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	3%
5	Explain and apply three-variable regression model testing	1.Able to apply a 2 variable regression model 2.Able to explain estimates using OLS 3.Able to Apply Statistical Tests	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> regression models and analyzing estimation results. <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	4%
6	Implement testing of regression models and analyze estimation results	1.Able to Apply Regression Model Testing 2.Able to Analyze Model Interpretation	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive Lectures, Discussions, Case Study 3 X 50	Interactive Lectures, Discussions, Case Study 3 x 50		4%

7	Understand and explain various concepts of classical assumptions	<ol style="list-style-type: none"> <li>1. Able to understand the concept of classical assumptions</li> <li>2. Able to explain classical assumption testing</li> </ol>	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 x 50	<b>Material:</b> classical assumption concept <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	4%
8	UTS	Can do it well and correctly	<b>Criteria:</b> According to scoring guidelines  <b>Form of Assessment :</b> Test	Written Test 3 X 50	Written test	<b>Material:</b> Material 1-7 <b>References:</b> Gujarati, D. (2004). <i>Basic Econometrics</i> .	20%
9	Understand, explain and analyze the existence of multicollinearity	<ol style="list-style-type: none"> <li>1. Able to explain the concept of multicollinearity</li> <li>2. Able to Understand the Consequences of Multicollinearity</li> <li>3. Able to Analyze Multicollinearity Detection</li> <li>4. Able to Analyze Improvements in Multicollinearity Cases</li> </ol>	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 X 50	<b>Material:</b> analysis of the existence of Autocorrelation <b>Literature:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	3%
10	Understand, explain and analyze the existence of autocorrelation	<ol style="list-style-type: none"> <li>1. Able to understand the concept of autocorrelation</li> <li>2. Able to explain the consequences of autocorrelation</li> <li>3. Able to Analyze Autocorrelation Detection</li> <li>4. Able to Analyze Improvements in Autocorrelation Cases</li> </ol>	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive lectures, discussions and case studies 3 X 50	Interactive lectures, discussions and case studies 3 X 50	<b>Material:</b> analysis of the existence of Heteroscedasticity <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	4%
11	Understand, explain and analyze the existence of Heteroscedasticity	<ol style="list-style-type: none"> <li>1. Able to understand the concept of heteroscedasticity</li> <li>2. Able to explain the consequences of heteroscedasticity</li> <li>3. Able to Analyze Heteroscedasticity Detection</li> <li>4. Able to analyze Heteroscedasticity Case Improvements</li> </ol>	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive Lectures, Discussions, Case Study 3 X 50	Interactive Lectures, Discussions, Case Study 3 X 50	<b>Material:</b> analysis of the existence of Heteroscedasticity <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	3%
12	Applying the Classical Assumption tests of Multicollinearity, Autocorrelation and Heteroscedasticity as well as analyzing and making improvements to classical assumption problems	<ol style="list-style-type: none"> <li>1. Able to Apply Multicollinearity Test</li> <li>2. Able to Apply Autocorrelation Test</li> <li>3. Able to Apply Heteroscedasticity Test</li> <li>4. Able to Analyze Interpretation of results</li> </ol>	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive Lectures, Discussions, Case Study 3 X 50	Interactive Lectures, Discussions, Case Study 3 X 50	<b>Material:</b> testing the Classical Assumptions of Multicollinearity, Autocorrelation and Heteroscedasticity as well as analyzing and making improvements to classical assumption problems. <b>Reference:</b> Wahyudi, ST (2016). <i>Concepts and Applications of Econometrics using E-Views</i> . PT. Rajawali Press: Jakarta.	4%

13	Understand, explain and carry out analysis of regression models with independent dummy variables	1. Able to Understand the Nature of Dummy Variables 2. Able to explain the independent dummy model 3. Able to analyze Model Estimates	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive Lectures, Discussions, Case Study 3 X 50	Interactive Lectures, Discussions, Case Study 3 X 50	<b>Material:</b> analysis of Regression Models with Dummy Variables in Independent <b>Library:</b> <i>Wahyudi, ST (2016). Concepts and Applications of Econometrics using E-Views. PT. Rajawali Press: Jakarta.</i>	4%
14	Understand, explain and carry out analysis of Regression Models with Dummy Variables on Dependents	1. Able to Understand, Explain and Analyze Linear Probability Models (LPM) 2. Able to understand, explain and analyze Logistic Models 3. Able to Understand, Explain and Analyze Probit Models	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Interactive Lectures, Discussions, Case Study 3 X 50	Interactive Lectures, Discussions, Case Study 3 X 50	<b>Material:</b> analysis of Regression Models with Dummy Variables on Dependents <b>References:</b> <i>Wahyudi, ST (2016). Concepts and Applications of Econometrics using E-Views. PT. Rajawali Press: Jakarta.</i>	5%
15	Apply testing to regression models with dummy variables and analyze estimation results	1. Able to Apply Independent Dummy Model 2. Able to apply the Dummy Dependent Model 3. Able to analyze Interpretation of results	<b>Criteria:</b> scoring guidelines  <b>Form of Assessment :</b> Participatory Activities	Group Discussion, Lecture, Case Study 3 X 50	Group Discussion, Lecture, Case Study 3 X 50	<b>Material:</b> regression models with dummy variables and analyzing estimation results. <b>Reference:</b> <i>Wahyudi, ST (2016). Concepts and Applications of Econometrics using E-Views. PT. Rajawali Press: Jakarta.</i>	5%
16	UAS	Can do it well and correctly	<b>Criteria:</b> According to scoring guidelines  <b>Form of Assessment :</b> Test	Written test	Written test	<b>Material:</b> Material 9-14 <b>Reference:</b> <i>Baltagi. BH (2008). Econometrics. Springer.</i>	30%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	50%
2.	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** 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.
- 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.

