



**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
Advanced Econometrics	8722003063	Compulsory Study Program Subjects	T=3	P=0	ECTS=4.77	4	June 6, 2023
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Kukuh Arisetyawan, S.Pd., M.E.		Dr. Lucky Rachmawati, S.E., M.Si			Dr. Tony Seno Aji, S.E., M.E.	

Learning model	Project Based Learning																																																																		
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																																		
	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 explain more about advanced econometric models in economic analysis																																																																		
	PO - 2 Apply various econometric models to discuss economic problems and phenomena.																																																																		
	PLO-PO Matrix																																																																		
	<table border="1"> <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> </tbody> </table>	P.O	PLO-4	PLO-5	PLO-8	PLO-9	PO-1	✓	✓	✓	✓	PO-2	✓	✓	✓	✓																																																			
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PO Matrix at the end of each learning stage (Sub-PO)																																																																			
<table border="1"> <thead> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td style="text-align: center;">✓</td><td></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><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>PO-2</td> <td style="text-align: center;">✓</td><td style="text-align: center;">✓</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> </tbody> </table>	P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1						✓		✓	✓	✓	✓						PO-2	✓	✓														
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Short Course Description This course discusses analytical tools in quantitative form based on economics, mathematics and statistics. The topics discussed in this lecture focus on regression analysis which captures causality (functional) relationships. In more detail, this lecture material is a continuation of Econometrics I which includes a review of Econometrics I material, time series models including ARIMA models, bivariate and multivariate models (VAR), Error Correction Models (ECM), Vector Error Correction models. Model (VECM), followed by a model using panel data, and a probit/logit model.

References

Main :

- Gujarati, D. N., & Porter, D. C. (2009). Basic econometrics. McGraw-hill.
- Wooldridge, J.M. (). Introductory Econometrics.
- Wahyudi, S.T. (2016). Konsep dan Penerapan Ekonometrika menggunakan E-Views. PT. Rajawali Press: Jakarta
- Baltagi. B.H. (2008). Econometrics. Springer

Supporters:

Supporting lecturer Dr. Lucky Rachmawati, S.E., M.Si.
Dr. Prayudi Setiawan Prabowo, S.E., M.E.
Kukuh Arisetyawan, S.Pd., M.E.
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	Students are able to explain the basic concepts of time series	1.Understand the basic concepts of time series 2.Explaining the Stationarity Test	Criteria: According to scoring guidelines Form of Assessment : Participatory Activities	Lecture, Project Based Learning 3 X 50	Lecture, Project Based Learning	Material: time series References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	2%
2	Students are able to explain the basic concepts of time series	1.Understand the basic concepts of time series 2.Explaining the Stationarity Test	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Lecture, Project Based Learning 3 X 50	Lecture, Project Based Learning	Material: time series References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	3%
3	Students are able to understand, explain and analyze forecasting	1.Explaining Autoregressive and Moving Average (ARMA) 2.Explaining Moving Average (MA)	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Project based learning 3 X 50		Material: Autoregressive Integrated Moving Average References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
4	Students are able to understand, explain and analyze forecasting	1.Explaining Autoregressive and Moving Average (ARMA) 2.Explaining Moving Average (MA)	Criteria: According to scoring guidelines Form of Assessment : Participatory Activities	Project based learning 3 X 50		Material: Autoregressive Integrated Moving Average References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
5	Students are able to understand and analyze Vector Autoregressive and Vector Error Correction Models	1.Analyzing Vector Autoregressive Models 2.Analyzing the Vector Error Correction Model 3.	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Interactive lectures, discussions and problem based learning 3 X 50		Material: Vector Autoregressive References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
6	Students are able to understand and analyze Vector Autoregressive and Vector Error Correction Models	1.Analyzing Vector Autoregressive Models 2.Analyzing the Vector Error Correction Model 3.	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Interactive lectures, discussions and problem based learning 3 X 50		Material: Vector Autoregressive References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
7	Students are able to understand and analyze Vector Autoregressive and Vector Error Correction Models	1.Analyzing Vector Autoregressive Models 2.Analyzing the Vector Error Correction Model 3.	Criteria: According to scoring guidelines Form of Assessment : Participatory Activities, Practical Assessment	Interactive lectures, discussions and problem based learning 3 X 50		Material: Vector Autoregressive References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
8	UTS	UTS	Criteria: Can do things well and correctly Form of Assessment : Project Results Assessment / Product Assessment	UTS 3 X 50	UTS 3 X 50	Material: Material 1-7 References: 1. <i>Gujarati, D. (2004). Basic Econometrics.</i>	20%

9	Students are able to explain and apply regression with panel data	1.Students are able to describe panel data 2.Students are able to analyze using models with panel data	Criteria: According to scoring guidelines Form of Assessment : Test	Discussion and Problem based learning 3 X 50		Material: panel regression model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	2%
10	Students are able to explain and apply regression with panel data	1.Students are able to describe panel data 2.Students are able to analyze using models with panel data	Criteria: According to scoring guidelines Form of Assessment : Test	Discussion and Problem based learning 3 X 50		Material: panel regression model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	3%
11	Students are able to explain and apply the qualitative response regression model	1.Students are able to explain the qualitative response regression model 2.Students are able to apply the qualitative response regression model	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Discussion and Problem based learning 3 X 50		Material: qualitative response regression model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
12	Students are able to explain and apply the logit model	1.Students are able to explain the logit model 2.Students are able to apply the logit model	Criteria: According to scoring guidelines Form of Assessment : Participatory Activities, Practical Assessment	Discussion and Problem based learning 3 X 50		Material: Logistic model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
13	Students are able to explain and apply the probit model	1.Students are able to explain the probit model 2.Students are able to apply the probit model	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment	Discussion and Problem based learning 3 X 50		Material: Logistic model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
14	Students are able to explain and apply the Tobit model	1.Students are able to explain the Tobit model 2.Students are able to apply the Tobit model	Criteria: According to scoring guidelines Form of Assessment : Practical Assessment, Test	Discussion and Problem based learning 3 X 50	Closed quizzes test understanding of the material	Material: Tobit model References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
15	Students are able to explain and apply multinomial logit	1.Students are able to explain the multinomial logit model 2.Students are able to apply the multinomial logit model	Criteria: According to scoring guidelines Form of Assessment : Test	Discussion and Problem based learning 3 X 50	Closed quizzes test understanding of the material	Material: Multinomial logit References: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	4%
16	UAS	UAS	Criteria: Can do things well and correctly Form of Assessment : Project Results Assessment / Product Assessment	Practice Testing 3 X 50 data		Material: Overall material Reference: <i>Gujarati, DN, & Porter, DC (2009). Basic econometrics. McGraw Hill.</i>	30%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	10%

2.	Project Results Assessment / Product Assessment	50%
3.	Practical Assessment	29%
4.	Test	11%
		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.