

## PANEL DATA ECONOMETRICS

1	Course Title:	PANEL DATA ECONOMETRICS
2	Course Code:	EKO6111
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Mehmet Çınar
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	mcinar@uludag.edu.tr Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi Görükle Kampüsü 16059 Nilüfer / Bursa
17	Website:	
18	Objective of the Course:	Explaining basic subjects and current developments in panel data analysis and applying panel data analysis methods
19	Contribution of the Course to Professional Development:	To be able to study in applied area using these techniques with economic series.
20	Learning Outcomes:	
	1	Formulate static and dynamic econometric models for panel data on the basis of economic theories.
	2	Recognise why panel data is a richer data source than pure cross-section data, pure time-series data and repeated cross sections.
	3	Estimate parameters in panel data models by using suitable software.
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21	Course Content:	
	<b>Course Content:</b>	
Week	Theoretical	Practice
1	Panel data, basic concepts	
2	Linear panel data models	

<b>3</b>	Classical Model Pooled Least Squares Method	
<b>4</b>	Fixed Effects Model	
<b>5</b>	Least Squares Method with Fixed Effects Dummy Variables	
<b>6</b>	Fixed Effects Within-Group Estimation Method	
<b>7</b>	Between group Estimation Method	
<b>8</b>	Applications with real ampirical data	
<b>9</b>	Random Effects Generalized Least Square Method	
<b>10</b>	Random Effects Maximum Likelihood Method	
<b>11</b>	Choices Among Predictors	
<b>12</b>	Tests of basic assumptions	
<b>13</b>	Resilient estimators in case of deviations from basic assumptions	
<b>14</b>	Applications with real ampirical data	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	0	0.00	0.00
Homeworks	0	0.00	0.00
Projects	2	20.00	40.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	80.00	80.00
Total Work Load			148.00
Total work load/ 30 hr			4.93
ECTS Credit of the Course			5.00

22	Textbooks, References and/or Other Materials:	<p>Panel Veri Ekonometrisi: Stata ve EViews Uygulamalı ÇINAR M. Ekin Basım Yayın, Bursa, 2021</p> <p>1-6 Üniteler İçin : Econometric Analysis Of Panel Data Badı Baltacı Fourth Edition</p> <p>Makaleler</p> <p>M. Hashem Pesaran, A Simple Panel Unit Root Test In The Presence Of Cross-Section Dependence Journal Of Applied Econometrics, J. Appl. Econ. 22: 265–312 (2007)</p> <p>Pesaran, M. H. (2004). General Diagnostic Tests For Cross Section Dependence In Panels. Cesifo Working Papers No.1233, 255–60.</p> <p>M Hashem Pesaran, Aman Ullah† And Takashi Yamagata A Bias-Adjusted Lm Test Of Error Cross-Section Independence Econometrics Journal (2008), Volume 11, Pp. 105–127.</p> <p>Kaddour Hadri Eiji Kurozumi A Simple Panel Stationarity Test In The Presence Of Serial Correlation And A Common Factor Economics Letters 115 (2012) 31–34</p> <p>Josep Llu’Is Carrion-I-Silvestre, Tom’As Del Barrio-Castro And Enrique L ’Opez-Bazo</p> <p>Breaking The Panels: An Application To The Gdp Per Capita Econometrics Journal (2005), Volume 8, Pp. 159–175.</p> <p>J Westerlund , Testing For Error Correction In Panel Data Oxford Bulletin Of Economics And Statistics, 69, 6 (2007)</p> <p>J Westerlund Panel Cointegration Tests Of The Fisher Effect Journal Of Applied Econometrics J. Appl. Econ. 23: 193–233 (2008)</p> <p>Joakim Westerlund David L. Edgerton A Panel Bootstrap Cointegration Test Economics Letters 97 (2007) 185–190</p> <p>Pesaran, M. H., Shin, Y. And Smith, R. J. (1999), Pooled Mean Group Estimation Of Dynamic Heterogeneous Panels, Journal Of The American Statistical Association, 94: 621–34.</p> <p>Nelson C. Mark Masao Ogaki And Donggyu Sul Dynamic Seemingly Unrelated Cointegrating Regressions Review Of Economic Studies (2005) 72, 797–820</p> <p>Nelson C. Mark And Donggyu Sul Cointegration Vector Estimation By Panel Dols And Long-Run Money Demand Oxford Bulletin Of Economics And Statistics, 65, 5 (2003)</p> <p>M. Hashem Pesaran Estimation And Inference In Large Heterogeneous Panels With A Multifactor Error Structure Econometrica, Vol. 74, No. 4 (Jul., 2006), Pp. 967-1012</p> <p>Peter Pedroni Fully Modified Ols For Heterogeneous Cointegrated Panels Nonstationary Panels, Panel Cointegration And Dynamic Panels, Volume 15, Pages 93–130.</p>
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade	0.00	
Contribution of Final Exam to Success Grade	100.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	In addition to the assigned homework, the success of the student is evaluated with the classic final exam.	
<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>	

<b>25</b>	<b>CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS</b>															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	5	4	4	3	3	4	4	4	5	5	5	0	0	0	0
ÖK2	4	4	5	5	4	4	4	4	5	4	4	4	0	0	0	0
ÖK3	4	5	4	4	5	4	4	4	5	5	3	5	0	0	0	0
<b>LO: Learning Objectives    PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>		<b>2 low</b>		<b>3 Medium</b>		<b>4 High</b>		<b>5 Very High</b>							