AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Applied Econometrics								
Course Code	ECON426		Couse Level		First Cycle (Bachelor's Degree)				
ECTS Credit	5	Workload	126 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	This course aims to bridge the gap between theoretical econometrics and practical implementation, equipping students with the skills necessary to analyze economic data, test hypotheses, and inform decision-making processes. Through a combination of hands-on exercises and empirical projects, students will learn to apply econometric methods to a variety of economic issues, interpret the results critically, and communicate their findings effectively. Besides, this course strives to prepare students for advanced study and careers in economics, where data-driven decision-making is essential.								
Course Content	This course is designed to provide students with practical skills and knowledge to apply econometric methods to real-world economic data and problems. The focus will be on understanding and implementing econometric techniques to analyze economic relationships, test hypotheses, and make informed decisions based on empirical evidence. Key topics to be covered include: ordinary least squares (OLS) estimation, computation of fundamental econometric statistics, and conducting hypothesis tests.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Assignment	1	10
Quiz	1	10
Practice Examination	1	20
Final Examination	1	60

Recommended or Required Reading	
1	Gujarati, D. (2016). Örneklerle Ekonometri. Seçkin Yayıncılık
2	Gamgam, H. ve Altunkaynak, B. (2021). Regresyon Analizi: Lojistik Regresyon-Eğri Uydurma-Tahmin. Seçkin Yayıncılık.

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Basic Econometrics and Types of Economic Data: Cross-Section, Time Series, and Panel Data
2	Theoretical	Simple Linear Regression Analysis: Ordinary Least Squares
3	Theoretical	Simple Linear Regression Analysis with Matrix Algebra
4	Theoretical	Introduction to Eviews and Stata
5	Theoretical	Simple Linear Regression Analysis with Matrix Algebra in Excel, Eviews and Stata
6	Theoretical	Simple Linear Regression Analysis with Matrix Algebra in Excel, Eviews, and Stata
7	Theoretical	Error Term and Coefficient of Determination
8	Theoretical	Error Term and Coefficient of Determination in Excel, Eviews, and Stata
9	Theoretical	Variance and Standard Errors of Estimated Coefficients in Excel, Eviews, and Stata
10	Theoretical	Hypothesis Testing
11	Theoretical	Multiple Regression Analysis in Eviews and Stata
12	Theoretical	Multiple Regression Analysis in Eviews and Stata
13	Theoretical	Dummy Variables
14	Theoretical	Application of Diagnostic Tests with Eviews and Stata

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	3	98
Assignment	1	4	1	5
Practice Examination	1	8	1	9
Quiz	1	4	1	5

Final Examination	1	8	1	9
			Total Workload (Hours)	126
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Students will be able to use econometric software (e.g., STATA and Eviews) and Excel to analyze real-world economic data and conduct empirical research.
2	Students will effectively interpret econometric results and communicate their findings in a clear and concise manner, both in written and oral formats.
3	Students will design and execute an independent econometric research project, demonstrating their ability to apply econometric methods to analyze economic issues.
4	Students will be able to estimate simple and multiple regressions, interpret the results, and understand the underlying assumptions.
5	Students will be able to conduct hypothesis tests to make statistical inferences about economic relationships.

Programme Outcomes *(Economics)*	
1	Understands the fundamental concepts and theories of economics and analyzes economic events within microeconomic and macroeconomic frameworks.
2	Comprehends the historical development of economic theories and applies them to current economic issues.
3	Follows, analyzes, and evaluates international, national, regional and sectoral economic developments within the scope of economic policies.
4	Understands the connections between economics and related disciplines such as law, business, accounting, finance, and sociology for economic analysis.
5	Designs economic research, collects data using qualitative and quantitative methods, conducts analysis, and interprets results.
6	Tests economic theories using econometric methods and derives scientific and policy recommendations.
7	Uses basic computer programs and statistical software to process, visualize, and interpret economic data.
8	Communicates economic concepts and research findings clearly and effectively, both in writing and verbally, to experts and the general public.
9	Has basic level proficiency in English as a foreign language to follow developments in the field .
10	Works independently, takes initiative, and assumes responsibility in team settings.
11	Adopts a lifelong learning approach and continuously develops critical, analytical, and innovative thinking skills.
12	Conducts economic analyses on sustainable development, income equality, and social welfare while adhering to ethical values and demonstrating social responsibility.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	4	4	5	5	5
P2	3	3	4	4	4
P3	3	3	4	3	3
P4	3	3	3	3	3
P5	4	4	5	4	4
P6	5	5	5	5	5
P7	5	5	5	5	4
P8	3	5	4	4	4
P9	2	2	2	2	2
P10	4	5	5	4	4
P11	4	5	5	5	5
P12	4	5	5	5	5