AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Econometrics I								
Course Code	ECON301		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	5	Workload	122 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The purpose of Econometrics I is to introduce undergraduate students to the fundamental principles and techniques of econometric analysis. This course aims to provide a solid foundation in the basic concepts of econometrics, including the nature of econometric data, the importance of economic models, and the role of statistical inference in economics. It also aims to equip students with the skills to formulate and estimate simple econometric models, particularly focusing on the classical linear regression model and its assumptions.								
Course Content	This course will give students a strong basic understanding of econometric principles and techniques and prepare them for more advanced topics in Econometrics II. Some key topics to be covered include ordinary least squares (OLS) estimation, hypothesis testing, and the interpretation of regression coefficients.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study, Problem Solving								
Name of Lecturer(s)	Prof. Osman PEKER								

Prerequisites & Co-requisities	
Equivalent Course	MLY206

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Tarı, R., Koç, S. ve Abasız, T. (2019). Ekonometri. Umuttepe Yayınları.
2	Gujarati, D. N. ve Porter, D. C. (2020). Temel Ekonometri. Literatür Yayınevi.

Week	**Weekly Detailed Course Contents & Teaching Methods**	
1	Theoretical	Introduction to Econometrics
2	Theoretical	Types of Data: Cross-Section, Time Series, and Panel Data
3	Theoretical	Econometric Modelling: Model Specification
4	Theoretical	Functional Forms of Regression Analysis
5	Theoretical	Simple Regression Analysis
6	Theoretical	Multiple Regression Analysis
7	Theoretical	The Significance of the Stochastic Disturbance Term
8	Theoretical	Estimating Model with OLS
9	Theoretical	Interpreting Regression Coefficients
10	Theoretical	Properties of OLS Estimator: Gauss-Markov Theorem
11	Theoretical	A Measure of “Goodness of Fit”: The Coefficient of Determination
12	Theoretical	Hypothesis Testing: The t-Test Approach
13	Theoretical	Hypothesis Testing: The F-Test Approach
14	Theoretical	Using Dummy Variables in Regressions

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	20	1	21
Final Examination	1	30	1	31
			Total Workload (Hours)	122
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Students understand the basic principles of econometrics and its role in empirical economic research.
2	Students differentiate between types of economic data.
3	Students estimate simple and multiple linear regression models using OLS.
4	Students understand and apply hypothesis testing within the context of regression analysis.
5	Students clearly interpret regression outputs, including coefficients, R-squared, and test statistics.

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	4	4	4
P2	3	3	3	3	3
P3	3	3	3	3	3
P4	2	2	2	2	2
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	3	4	4	4	4
P8	3	3	3	3	4
P9	2	2	2	2	2
P10	2	2	2	2	2
P11	4	4	4	4	4
P12	3	3	3	3	3