



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

|  |   |  |                      |  |   |                                 |   |            |   |
|--|---|--|----------------------|--|---|---------------------------------|---|------------|---|
| Course Title                                     |   | Econometry I   |                      |  |   |                                 |   |            |   |
| Course Code                                      |   | ECO305   |                      | Course Level   |   | First Cycle (Bachelor's Degree) |   |            |   |
| ECTS Credit                                      | 6 | Workload   | 150 ( <i>Hours</i> ) | Theory   | 3 | Practice                        | 0 | Laboratory | 0 |
| Objectives of the Course                         |   | This course is intended to be an introduction to specification, estimation, prediction, and evaluation of econometric models with important skills for an intellectual training. The aim of the lecture is to provide students with the opportunity to be aware of the empirical approach to economics, have an experience in the analysis and use of empirical data in economics and understand the nature of uncertainty and methods of dealing with it. |                      |  |   |                                 |   |            |   |
| Course Content                                   |   | Regression Analysis, Two-Variable Regression Analysis, Two-Variable Regression: Estimation, Two-Variable Regression: Interval Estimation and Hypothesis Testing, Multiple Regression: Estimation, Lab Session and problem solving.   |                      |  |   |                                 |   |            |   |
| Work Placement                                   |   | N/A  |                      |  |   |                                 |   |            |   |
| Planned Learning Activities and Teaching Methods |   |  |                      | Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving |   |                                 |   |            |   |
| Name of Lecturer(s)                              |   | Lec. Zümre ÖZDEMİR GÜLER   |                      |  |   |                                 |   |            |   |

### Prerequisites & Co-requisites

|                |    |
|----------------|----|
| ECTS Requisite | 70 |
|----------------|----|

### Assessment Methods and Criteria

| Method              | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1        | 40             |
| Final Examination   | 1        | 70             |

### Recommended or Required Reading

|   |   |
|---|---|
| 1 | Ramu RAMANATHAN, Introductory Econometrics with Applications, 2001.   |
| 2 | Damodar N. GUJARATI, Temel Ekonometri, Çev. Ümit Şenesen, Gülay Günlük Şenesen, Literatür Yayıncılık, İstanbul, 2009. |

| Week | Weekly Detailed Course Contents |   |
|------|---------------------------------|---|
| 1    | Theoretical                     | Regression Analysis   |
| 2    | Theoretical                     | Two-Variable Regression Analysis                                    |
| 3    | Theoretical                     | Two-Variable Regression: Estimation                                 |
| 4    | Theoretical                     | Two-Variable Regression: Interval Estimation and Hypothesis Testing |
| 5    | Theoretical                     | Multiple Regression: Estimation                                     |
| 6    | Theoretical                     | Problem Solving   |
| 7    | Theoretical                     | Functional forms in Econometrics                                    |
| 8    | Intermediate Exam               | Midterm Examination   |
| 9    | Theoretical                     | Multicollinearity   |
| 10   | Theoretical                     | Heteroscedasticity  |
| 11   | Theoretical                     | Autocorrelation   |
| 12   | Theoretical                     | Autocorrelation   |
| 13   | Theoretical                     | Lab Session and problem solving                                     |
| 14   | Theoretical                     | Lab Session and problem solving                                     |
| 15   | Theoretical                     | General Assessment  |
| 16   | Final Exam                      | Final Examination   |
| 17   | Final Exam                      | Final Examination   |

### Workload Calculation

| Activity         | Quantity | Preparation | Duration | Total Workload |
|------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14       | 0           | 3        | 42             |
| Individual Work  | 14       | 0           | 4        | 56             |



|                                       |   |    |   |     |
|---------------------------------------|---|----|---|-----|
| Midterm Examination                   | 1 | 20 | 1 | 21  |
| Final Examination                     | 1 | 30 | 1 | 31  |
| Total Workload (Hours)                |   |    |   | 150 |
| [Total Workload (Hours) / 25*] = ECTS |   |    |   | 6   |

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

|   |  |
|---|--|
| 1 | Is familiar with the basics of statistics and econometrics   |
| 2 | Is able to build an econometric model for a problem and choose an appropriate econometric method to estimate the model . |
| 3 | Is able to do estimation and hypothesis testing of the econometric model using statistical software.                     |
| 4 | Is able to interpret results.  |
| 5 | To be able to distinguish between time and section data  |

### Programme Outcomes (Economics)

|    |   |
|----|---|
| 1  | It defines and evaluates the basic economic concepts, theories, and methods.  |
| 2  | It offers a basic level of policy proposals towards current economic problems.  |
| 3  | It analyzes in the context of economic and social events in a historical perspective.   |
| 4  | It explains the role of economic actors (such as government, company, or household) in the economy.   |
| 5  | It follows national and international economic indicators and developments and it uses economic knowledge and methods in different areas.   |
| 6  | It provides methods, tools and techniques necessary for the modelling and analysis of economic data and evaluates outcomes accordingly.   |
| 7  | It defines economic systems, decision-making, policies and problems and it provides feedback about them.  |
| 8  | It benefits from other disciplines that contribute to economic basis and holds a basic knowledge of these disciplines.  |
| 9  | It explains and comments on economic growth, development and productivity problems on basic grounds.  |
| 10 | It provides sufficient know-how in sub-branches such as public economics, industry, agriculture, environment and natural resources, labor, knowledge and ownership of the economy, international finance, money, in political economy and econometrics. |
| 11 | It defines and evaluates the concept of business on basic grounds.  |
| 12 | It provides a sufficient level of legal know-how that may be demanded from high skill labor in both public and private sectors.   |
| 13 | It defines the role of innovation, creativity and technology in the dynamic global economy.   |
| 14 | It shows skills that will be useful for future employment opportunities and the working environment.  |
| 15 | It considers science as a rational individual with professional and ethical responsibility.   |

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

|     | L1 | L2 | L3 | L4 |
|-----|----|----|----|----|
| P1  | 4  | 4  | 4  | 4  |
| P5  | 4  | 4  | 4  | 4  |
| P6  | 5  | 5  | 5  | 5  |
| P7  | 4  | 4  | 4  | 4  |
| P10 | 4  | 3  | 4  | 3  |

