ANKARA YILDIRIM BEYAZIT UNIVERSITY – DEPARTMENT OF ....
COURSE SYLLABUS

Course Code	Course Title	Course Type	ECTS Credits	Prerequisite Information	Date of Preparation
BF301	Econometrics I	Compulsory	6	Statistics 1 and 2	22.10.2025

Instructor of the Course & E-Mail Address	Erhan Çankal ecankal@aybu.edu.tr
Office Hours & Office Room	Thursday: 12:30 – 13:30
Course Content and Objectives	This course introduces the theory and applications of econometrics. Econometrics is the science of confronting economic models with data for the purposes of testing the models, predicting future events, and generating policy advice. This course provides both theoretical and practical tools for applying economic and finance theory and models to real data. This course aims to provide students with the theoretical tools and practical experience necessary to conduct applied econometric research. Throughout the course, the students will be presented with theoretical and empirical relations among economic and financial variables. Students will gain experience in processing and estimating various types of data, as well as interpreting the estimated econometric models.
Textbook(s)	- Gujarati, D. N., Basic Econometrics, McGraw-Hill, 5th Edition. - Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition - Verbeek, M., A Guide to Modern Econometrics, Wiley, 3rd Edition. The instructor will supplement the texts with readings or handouts that extend the discussion or offer an alternative view from the presentation. Generally, the course will follow the list of topics outlined in the suggested textbooks. The instructor reserves the right to modify the syllabus as circumstances necessitate, but no new policy will be enforceable until students have been notified in class.
Teaching Methods and Techniques	(The teaching methods and techniques used in the course, such as homework, class discussions, and reading materials, should be listed here.)

Course Learning Outcomes		
	1	Students who complete this course will be able to; estimate and interpret regression equations and perform significance tests
	2	build econometric models and use appropriate techniques to estimate
	3	perform diagnostic tests and estimate various models
	4	perform appropriate tests for assessing various econometric models
	5	estimate and predict economic and financial models to impose accurate economic policies

Program Outcomes Contributed by the Course	
Contribution of the Course to Field Instruction	

	1. Week	Basic Mathematical Tools, Summary of Matrix Algebra, Fundamentals of Mathematical Statistics, *Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.703-805.*
	2. Week	The Nature of Econometrics and Economic Data, *Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.1-20.*
	3. Week	Simple Regression, *Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.22-67.* *Verbeek, M., A Guide to Modern Econometrics, Wiley, 3rd Edition, p.7-21.* *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.2.*
	4. Week	Hypothesis Tests and Extensions of the Simple Regression Model, *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.6.*
	5. Week	Multiple Regression Analysis: Estimation, *Regression Analysis: Inference, Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p. 68-117.* *Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.118-167.*
Topics Covered in the Course	6. Week	Interpreting and Comparing Regression Models, *Verbeek, M., A Guide to Modern Econometrics, Wiley, 3rd Edition, p.53-83.*
	7. Week	Heteroscedasticity and Autocorrelation, *M., Introductory Econometrics, South Western, 5th Edition, p.268-302.* *Verbeek, M., A Guide to Modern Econometrics, Wiley, 3rd Edition, p.85-127.*
	8. Week	Midterm Week
	9. Week	Multiple Regression Analysis with Qualitative Information: Binary (or Dummy) Variables, *Wooldridge, J Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.227-267.* *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.9.*
	10. Week	Specification and Data Issues, *Wooldridge, J. M., Introductory Econometrics, South Western, 5th Edition, p.303-342.*
	11. Week	Multicollinearity, *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.10.*
	12. Week	Heteroskedasticity Tests, *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.11.*
	13. Week	Autocorrelation Tests, *Gujarati, D. N., Basic Econometrics, Mc Graw Hill, 5th Edition, Ch.12.*
	14. Week	Working on Empirical Projects, The class material and guidance will be provided by the instructor
	15. Week	Final Exam and Presentations

	In-Term Studies	Quantity	Percentage %
	Mid-terms	1	30 %
	Quizzes	2	20 %
Course Evaluation Criteria	Assignments		%
	Attendance		%
	Practice		%
	Project	1	10 %
	Final examination	1	40 %

	Total		100%	
Disability Policy	If you have a documented disability (e.g., visual, hearing, or physical impairment, etc.) that may influence your performance in this course, it is recommended to meet with the Engelsiz AYBU (https://aybu.edu.tr/engelsiz/content_list-327-yildirim-beyazit-universitesi-engelsiz-universite-birimi-yonergesi.html) to arrange for reasonable conditions (such as accommodation, etc.) to ensure an equitable opportunity to meet all the requirements of this course. You may also contact the local authority of the Faculty of Humanities and Social Sciences. You should communicate your needs to the course instructor as soon as possible to ensure that any course needs concerning exams, lecture materials, etc. are met.			