



## ECON 506 – Econometrics

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Office Hours: TBA

Course Assistants: Özge Kaptan

Lectures: Monday: 13.40-16.30 FASS 1089

### Disclaimer

We may have to revise the course plan according to the reassessment to be made country-wide, regarding higher education, at the beginning of April. The content to be delivered is as stated below but the method of course delivery, the number and dates of exams, and some other details are subject to change.

### Course Overview

The aim of this course is to develop familiarity with a wide range of statistical and econometric techniques that have proved to be useful in applied contexts. Theoretical results will be developed as necessary and in order to allow students to apply general principles to their own research problems. Primary emphasis, however, is placed upon applicability, on the ability to understand the techniques in use in the literature, and on acquiring acquaintance with econometric computing.

### Textbook

The course will not follow a specific text book. The lectures notes are the primary material students will be responsible from. However, there are a number of alternative textbooks if you

would like to obtain one for reference. *Econometric Analysis* by William H. Greene (Prentice Hall) offers a large compendium of main techniques in the field along with numerous empirical exercises. *Econometrics* by Fumio Hayashi (Princeton University Press) is another textbook directed at Ph.D. students in Economics.

### Requirements and Grading

Regular class attendance is required.

There will one final exam. In addition, there will a number of problem sets to deepen your understanding of the material. Some of the assignments will require you to work with actual data. In order to do this you need to get accustomed to using the Stata statistical software. Assignments will count for 50%, and final exams will count 50%.

### Mode of teaching and exams

The lectures will be synchronous taught in class physically and will also be available via zoom. However, there will be no video recordings and uploading of video recordings to SuCourse. All exams will be physical, on campus.

If you have to attend any of the course components online: you must attend the synchronous Zoom lectures, recitations, etc. with your SU email account.

<https://sabanciuniv.zoom.us/j/2725299734>

### Course Outline - subject to revision

Topic 1: Classical Regression Model and Ordinary Least Squares Estimation (Greene, Ch. 2, 3, 4, 5; Hayashi, Ch. 1, 2;)

Topic 2: Generalized Method of Moments (Greene 18; Hayashi, Ch. 3, 4)

Topic 3: Maximum Likelihood Estimation (Greene, Ch. 17; Hayashi, Ch. 7)

Topic 4: Qualitative Response and Limited Dependent Variable Models (Greene, Ch. 21, 22; Hayashi, Ch. 8)