

Antalya Bilim University
Department of Economics
ECON 1410: Econometrics Applications
Spring 2024-2025

Class Time: Thursdays 09:00-12:00 – B1/67

You can contact me via e-mail

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(A2-42)

This course builds on third-year econometrics courses and focusses on how to do econometric analysis using R, a free and very powerful statistical computing software. It starts with the linear regression models and then covers common nonlinear models of microeconomic methods, such as logit, probit, and tobit, as well as regression models for count data. It then deals with censored data, corner solution outcomes, and sample selection. The course has a practical flavour. The emphasis is not on proofs but on intuition and on applications.

Note: Please bear in mind that this syllabus may be subject to change.

Textbooks:

C. Colonescu (2016). Principles of Econometrics with R. Can be downloaded from <https://bookdown.org/ccolonescu/RPoE4/>.

Heiss, Florian (2016) Using R for Introductory Econometrics.

Learning Outcomes

The aim of this course is to provide students with hands-on experience in applying contemporary econometric methods. After completing this course, you will be able to:

- develop an understanding of how one chooses an econometric model to analyse the data at hand;
- use the chosen model to analyse the data using statistical software;
- interpret the results obtained:

- able to critically assess empirical work produced and published by researchers.

Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. Although plagiarism is well established in Turkish educational system, you will be punished heavily if you are caught do it.

Assessment Criteria:

- 1) **Midterm Exam:** 40%
- 2) **Final Exam:** 60%

Course Schedule

WEEK 1 Introduction to R

WEEK 2 Using Factor Variables

WEEK 3 Random Regressors

WEEK 4 Simultaneous Equations Models

WEEKS 5-7 Pooling Cross Sections across Time

WEEK 8 Midterm Exam

WEEKS 9-14 Panel Data Models

WEEK 15 Review