



Visiting Professor Program Academic Year 2024/2025

TEACHING COMMITMENT: 35 hours

COURSE TITLE

Data analysis

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Statistics/Econometrics

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The nature of econometrics and economic data;
The simple linear regression model;
Multiple linear regression model in vector and matrix notation;
Multiple regression analysis: estimation;
Statistical inference in the linear regression model;
Multiple regression analysis: inference;
Multiple regression analysis: further issues;
Multiple regression analysis with qualitative information: binary (or dummy) variables;
Multiple regression analysis: OLS asymptotics;
Introduction to non-standard linear regression models: Relaxing the assumptions;
Heteroskedasticity;
Further issues in using OLS with time series data;

Instrumental variables estimation and two-stage least squares.

LEARNING OBJECTIVES

The aim of the course is to increase the level of ability of students to practically utilize optimization problems (linear programming models) as a useful tool for decision making. The ability to (i) find out which organization is efficient in using its valuable resources, (ii) discriminate efficient and inefficient organizations, (iii) identify sources and amounts of inefficiency in each factor for each organization. Becoming confident with econometrics and familiar with the statistics/econometrics software package Stata.

Tutorials will be provided.

OTHER ACTIVITIES BESIDES THE COURSE

Seminars for Phd students and/or colleagues.

VISITING PROFESSOR PROFILE

Excellent teaching and publication record in English.

CONTACT REFERENT

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