Visiting Professor Program
Academic year 2020/2021

DEPARTMENT OF MANAGEMENT

TEACHING COMMITMENT: 35 hours

COURSE TITLE

Quantitative Methods for Decision Making - Module Data Analysis

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Statistics

LANGUAGE USED TO TEACH

English

The Degree Course is entirely taught in 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.

**TUTORSHIP ACTIVITIES (IF APPLICABLE)**

TA classes will be provided.

**LAB ACTIVITIES (IF APPLICABLE)**

Lab activities using Stata.

**OTHER ACTIVITIES (IF APPLICABLE)**

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**VISITING PROFESSOR PROFILE DESCRIPTION**

Excellent teaching and publication record in English.

Excellent written and oral English communication skills, including cross-cultural communication.

Evidence of high-quality teaching outcomes in the subject/field of the course.

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**CONTACT PERSON AT THE DEPARTMENT**

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