Study programme(s): Applied mathematics (MB)

Level: master

Course title: Econometrics (MB-08)

Lecturer: Zorana Lužanin

Status: obligatory for MB, module Financial mathematics

ECTS: 6

Requirements: Statistics

Learning objectives

Introduction of concepts and methods of modern econometric analysis. Attention is paid to problems of formulation of regression models in terms of covering relationship of interdependence of economic phenomena and knowledge in the field of evaluation, testing and interpretation of econometric models of various types.

Learning outcomes

Functional knowledge of regression methods, conditions of applicability, and their main advantages and disadvantages. The ability to define and practical application of appropriate models for the specific type of problem.

Syllabus

Theoretical instruction

The basics of econometrics. One-dimensional regression. Multidimensional regression. Ratings and statistical significance. Omission of relevant variables. Inclusion of irrelevant variables. Heteroscedasticity. Autocorrelation.

Practical instruction

Tasks and problems are solved, practical lessons follow the teaching content i.e. theoretical instructions. Usage of statistical software.

Literature

1. G. S. Maddala, Introduction to Econometrics, 3rd edition, Wiley, 2001
2. J. Kmenta, Počela ekonometrije, drugo izdanje, MATE d.o.o., Zagreb, 1997
3. C. Dougherty, Introduction to Econometrics, Oxford University Press, 1992

Weekly teaching load				Other:
Lectures: 3	Exercises: 2	Other forms of teaching:	Student research:	

Teaching methodology

Lectures, exercises, analysis of examples with applications, writing reports and statistical analysis.

Grading (total number of points 100)

Pre-exam obligations	**points**	**Final exam**	**points**
practical problems	20	oral exam	
tests		written exam	40
colloquia	40		