

M.Sc. Economics

Code:		Type:	M.Sc. 3 rd semester lecture series
--------------	--	--------------	---

Title:	Econometrics II
---------------	-----------------

Lecturer:	Robert Kunst
------------------	--------------

ECTS:	7	Contact hours (per semester):	24 á 90 min.
--------------	---	--------------------------------------	--------------

Semester:	Winter 2009/2010	Frequency of the lecture:	Twice a week
------------------	------------------	----------------------------------	--------------

Dates:	October 6 th , 2009 until January 19 th , 2010
---------------	--

Prerequisites:	Some familiarity with linear regression and statistical methods
-----------------------	---

Learning objectives (What are the intended learning outcomes? Which skills will be acquired?):

Participants will develop a thorough understanding of linear time-series analysis and its main models: univariate ARMA as well as multivariate VAR models including their error-correction variants. They will be able to apply linear time-series models to data.

Content (Which professional competence and which contents will be imparted?):

- Basic concepts of time-series analysis: stochastic processes, stationarity, autocorrelation function, spectral analysis.
- Linear univariate models: AR and MA models, ARMA models.
- Unit roots and integrated processes: order of integration, unit-root tests, persistence.
- Linear multivariate models: vector autoregressions (VAR), impulse response functions.
- Cointegration and error correction: cointegrating regression, Engle-Granger two-step method, Johansen's method.

Teaching approach (Description of the learning and teaching methods):

Lectures and projects

Workload (Definition of workload (ECTS), divided in pre-modules (e.g. pre-readings), core-modules (contact hours), post-modules (e.g. case studies)):

/

M.Sc. Economics

Language of instruction (Information on the language of teaching):

English

Obligatory literature (E.g. scripts, books, articles, cases, papers):

Set of lecture notes

Additional literature (E.g. books, articles, cases, papers):

Brockwell, P.J., and Davis, R.A.: Time series analysis, Theory and Methods. Springer, 1991.
 Johansen, S.: Likelihood-Based Inference in the Cointegrated Vector Autoregressive Model. Oxford, 1995.

Mode of examination (Mode of the examinations and tests (e.g. oral or written examination, lecture, homework, papers, class participation):

Written examinations, project papers, homework.

Grading:

The written tests and project papers carry a weight of 80% in the final grade, the homework 20%.

Special features (E.g. excursion, guest speaker):

/

Contact information:

Prof. Robert Kunst
 Institute for Advanced Studies
 Department of Economics and Finance
 Stumpergasse 56
 A-1060 Vienna
 Kunst@ihs.ac.at
 Tel: ++43 1 59991-255
 Fax: ++43 1 59991-163

Office hours:

To be announced

Course website:

<https://cecnet.tuwien.ac.at/>