



SGH

Year	2018/2019	
Course title	Advanced Econometrics	
Course number	315011 - 0975	7 ECTS points
Lecturer	Rubaszek Michał , PhD and team: Bech-Wysocka Katarzyna Maria, PhD	

A. Course objective

The aim of the lecture is to teach students so that they are able: 1. to use econometric modelling tools in estimating the strength and direction of economic relationships, 2. to use time-series models in analyzing the dynamic response of the economy to structural shocks, 3. to use time-series models in macroeconomic forecasting, 4. to evaluate the quality of economic forecasts, 5. to work with advanced econometric software packages (e.g. R-project), 6. to conduct an econometric research project.

B. Course syllabus

Patrz semestralny plan zajęć.

C. Educational outcome

Knowledge	By the end of the course students will have acquired the necessary skills and knowledge of the main branches of modern econometrics and econometric software packages. They should also be aware on how to conduct own econometric research project.
Skills	By the end of the course students should know how to: 1. estimate and interpret the results of an econometric model, 3. calculate and interpret impulse response function, 4. use time series models for forecasting, 5. evaluate forecast, 6. use econometric packages.
Social competencies	By the end of the course students should have improved team-working and presentation skills.

D. Semester time table

1	Least square estimation
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2	GMM/IV estimation
3	Panel data models 1
4	Panel data models 2
5	Nonparametric models
6	Application of estimation methods- empirical project
7	VAR/SVAR models
8	VAR/SVAR models
9	Sign restrictions in SVAR model
10	Bayesian VAR
11	Bayesian VAR
12	Application of VAR/BVAR methods - empirical project
13	Economic forecasting
14	Economic forecasting
15	Forecasting - empirical project

E. Basic literature

1. R.C. Hill, W.E. Griffiths, G.C. Lim, 2012. Principles of Econometrics, Wiley ; 2. W.H.Greene, 2006. Econometric Analysis, Prentice-Hall. 3. Alistair Dieppe, Romain Legrand and Björn van Roye, 2016. The BEAR toolbox, ECB WP 1934

F. Supplementary literature

1. Ca' Zorzi M., Kolasa M., Rubaszek M., 2017. Exchange rate forecasting with DSGE models, Journal of International Economics 107: 127-146

G. Author's most important publications concerning the offered course

1. Michele Ca' Zorzi, Marcin Kolasa and Michał Rubaszek, 2017. Exchange rate forecasting with DSGE models, Journal of International Economics 107: 127-146; 2. Ca'Zorzi Michele, Michał Rubaszek, 2015. Bayesian Forecasting of Real Exchange Rates with a Dornbusch Prior. Economic Modelling 46: 53-60; 3. Kolasa Marcin, Michał Rubaszek, 2015. Forecasting with DSGE models with financial frictions. International Journal of Forecasting 31: 1-19.

H. Numbers of required prerequisites

not required

I. Course size and mode

	Full-time	Saturday-Sunday	Afternoon
Total:	60	-	-
Lecture	30	-	-
Laboratorium	30	-	-

J. Final mark composition

reports	100%
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K. Foreign language requirments

English

L. Selection criteria

M. Methods applied

case studies

reporty