



## COURSE (MODULE) DESCRIPTION

Course title	Code
Applied Macroeconomics	

Staff	Department
<b>Coordinator:</b> Dr Eglė Jakučionytė <b>Other(s):</b> Dr Mariarosaria Comunale, Dr Patrick Grüning, Dr Marius Jurgilas, Dr Milda Norkutė	Faculty of Economics and Business Administration

Study cycle	Course type
First (Bachelor's)	Compulsory

Form of implementation	Period of implementation	Language of instruction
Face-to-face	Semester 5	English

Requirements for student	
<b>Prerequisites:</b> Mathematical Methods, Statistical Theory, Econometric Theory and Practice, Economic Principles II, Economic Theory II	<b>Additional requirements (if any):</b>

Number of ECTS credits	Student's workload	Contact hours	Individual work
5	130	34	94

### Purpose of the course and competences developed

This course aims to present and analyze contemporary problems and policy issues in the macro economy. It will build on the foundations laid in the first year's principles course and it will also develop more fully the theoretical and analytical approaches presented in the second year's economic theory course.

This course provides (i) an introduction to some econometric methods which are broadly used in empirical macroeconomics, especially forecasting, (ii) an introduction to macroeconomic models and related concepts that are relevant for analyzing macroeconomic policies.

Learning outcomes	Teaching methods	Assessment methods
1.1. Have acquired knowledge in macroeconometric analysis and is able to apply the methods discussed in classes to treat macroeconomic data.	Lectures, tutorials with empirical content through illustrations in EViews and R (or STATA)	Written exam (50%) Five assignments (50%)
1.2; 2.2 Undertake applied research to produce macroeconomic forecasting.	Lectures, tutorials, group and individual work on macroeconomic topic.	
3.2; 4.2 Use and interpret mathematical models describing macroeconomic relations and present them in class.	Tutorials and assignments.	
2.1; 3.1 Critically evaluate macroeconomic policy, appreciate importance and limitations of macroeconomic theory to inform policy choices.	Lectures, tutorials, discussions.	
<b>Course themes</b>	<b>Contact / Individual work: time and assignments</b>	

	Lectures	Tutorials	Seminars	Practical classes	Laboratory work	Practice	Contact hours	Individual work	Assignments due date
Introduction to macroeconomic forecasting. Macroeconomic variables and their importance in decision making. Backcasting, nowcasting, forecasting. Forecasting at short through long horizons. Point, interval and density forecasts <i>(by Dr Milda Norkutė)</i>	2						2	4	Main readings: D Ch. 3
Selecting forecasting models. Evaluating and comparing forecast accuracy. Using forecasting methods to forecast the real GDP, interest rate, inflation, unemployment rate and other macroeconomic variables <i>(by Dr Milda Norkutė)</i>	4						4	16	Main readings: D Ch. 9-12 Assignment 1
Real business cycle (RBC) models <i>(by Dr Patrick Grüning)</i>	3						3	8	Main readings: Romer Ch. 5 CS Ch. 8, 16 SW Ch. 14-16
Fiscal policy and fiscal multipliers <i>(by Dr Patrick Grüning)</i>	3						3	8	Main readings: Romer Ch. 12 Romer and Romer (2010) Sheremirov and Spirovska (2015) Assignment 2
Optimal monetary policy, the dynamic inconsistency of low-inflation monetary policy, empirical applications <i>(by Dr Marius Jurgilas)</i>	6						6	14	Main readings: Romer Ch. 11 and specified research articles  Assignment 3
Basic mechanism of financial crises, the role of housing <i>(by Dr Eglė Jakučionytė)</i>	6						4	12	Main readings: CS Ch. 3 and 6,  Mian and Sufi (2009), Adelino, M., Schaar, A., & Severino, F. (2016)
Overview of macroprudential policies, case studies and impact evaluation <i>(by Dr Eglė Jakučionytė)</i>	4	2					8	18	Reading specified research articles  Assignment 4

The trilemma and Optimum Currency Areas. The Economic and monetary union and convergence. Policy coordination (by Dr Mariarosaria Comunale)	6						6	14	Main readings: BW (Ch. 13,15 and 16) & DeG (Ch. 1-5)  Assignment 5
<b>Total</b>	<b>34</b>	<b>2</b>					<b>36</b>	<b>94</b>	

Assessment strategy	Share in %	Time of assessment	Assessment criteria
Written exam (180 minutes)	50	<b>End of spring semester</b>	The final exam will consist of both longer open questions in which students have to show their analytical capabilities and of shorter questions simply testing students' knowledge. The final exam will test the material from the whole course.
Five assignments (one per lecturer)	50	<b>Throughout the semester</b>	Students will receive five homework assignments asking them analytical questions about the material covered in class and questions asking them to connect the studied material to the real world.

Author	Published in	Title	Issue No. or Volume	Publishing house or Internet site
<b>Required reading</b>				
Slides as well as online resources will be made available to all students.				
Romer, D.	2012	Advanced Macroeconomics	Fourth Edition	McGraw-Hill
Carlin, W. and D. Soskice (Referred to as CS)	2014	Macroeconomics: Imperfections, Institutions, Instability and the Financial System	First Edition	Oxford University Press
Stock, J. H. and M. W. Watson (Referred to as SW)	2014	Introduction to Econometrics	Third Edition	Pearson Education
Baldwin, R. and C. Wyplosz (BW)	2019	The Economics of European Integration	Sixth Edition	McGraw-Hill
Diebold, F. X. (Referred to as D)	2007	Elements of Forecasting	Fourth Edition	Thomson South-Western
Hanson, S. G., Kashyap, A. K., and Stein, J. C.	2011	A macroprudential approach to financial regulation	Journal of Economic Perspectives, 25(1), 3-28	
Mian A, Sufi A.	2009	The consequences of mortgage credit expansion: evidence from the US mortgage default crisis	Quarterly Journal of Economics, 124(4):1449-96	
Adelino, M., Schoar, A., & Severino, F.	2016	Loan originations and defaults in the mortgage crisis: The role of the middle class	Review of Financial Studies, 29(7), 1635-1670	
Romer, C. D.; Romer, D. H.	2010	The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks	NBER Working Paper 13264	

Sheremirov, V.; Spirovska, S.	2015	Output Response to Government Spending: Evidence from New International Military Spending Data	Fed Boston Working Paper No. 15-9	
<b>Supplementary reading</b>				
De Grauwe, P. (Referred to as DeG)	2020	Economics of Monetary Union	Thirteenth Edition	Oxford University Press