

## IWH-DPE/CGDE First-Year Course

# Macroeconomics

**Work load:** 150 hours / 6 ECTS

**Lecture:** Bi-weekly, 14 x 90 minutes / in person at IWH

**Begin:** 22.04.2022

**Time:** Fridays 10:30–12:00 and 13:00–14:30

### Schedule

**Professor Dr Lars Börner**

22.04.22; 10:30-12:00 / 13:00-14:30

06.05.22; 10:30-12:00

**Professor Dr Thomas Steger**

06.05.22; 13:00-14:30

20.05.22 and 03.06.22; 10:30-12:00 / 13:00-14:30

**Professor Dr Oliver Holtemöller**

10.06.22; 10:30-12:00 / 13:00-14:30

**Professor Dr Roland Winkler**

01.07.22 and 15.07.22; 10:30-12:00 / 13:00-14:30

### Contents

#### I. Technology, Institutions and Growth

Professor Dr Lars Börner, Martin Luther University Halle-Wittenberg

1. Long Run Growth: Technology and Human Capital
2. Long Run Growth: Institutions
3. State Formation and Policy: Welfare State, Fiscal and Monetary Policy

#### II. Quantitative Growth Modeling

Professor Dr Thomas Steger, Leipzig University

1. Methods: Dynamic Optimization & Numerical Solution
2. Workhorse Models: Ramsey & OLG
3. Human Capital & Economic Growth
4. Endogenous Technological Change
5. Stochastic Growth & Climate Change

#### III. Dynamic Stochastic General Equilibrium Models of Fluctuations

Professor Dr Oliver Holtemöller, IWH and Martin Luther University Halle-Wittenberg

1. Model and Data Preparation
2. Environmental DSGE Models

## IV. Monetary and Fiscal Policy

Professor Dr Roland Winkler, Friedrich Schiller University Jena

1. The Baseline New Keynesian Model
2. Monetary and Fiscal Policy in the Baseline NK Model
3. Empirical Evidence: The Effects of Government Spending
4. Macroeconomic Stabilization Policies in Models with Heterogeneity

## Registration

Please register for the course **until March 31, 2022** by sending an e-mail to [cgde@iwh-halle.de](mailto:cgde@iwh-halle.de).

The course is designed for at most 25 participants.

## Exam

6 of 7 Problem Sets (at least one from every block indicated by Roman numbers) have to be successfully passed to complete the course.

## Main Literature

Literature marked with an asterisk has to be studied beforehand.

### I.1 Long Run Growth: Technology and Human Capital

(\*) Goldin, Claudia. Human Capital. In: Claude Diebolt and Michael Hauptert, Handbook of Cliometrics. Berlin: Springer Verlag 2016, 55-86.

(\*) Mokyr, Joel. Long-term Economic growth and the History of Technology. Handbook of Economic Growth, Volume 1, Part B, 2005, 1113-1180.

### I.2 Long Run Growth: Institutions

(tba)

### I.3 State Formation and Policy: Welfare State, Fiscal and Monetary Policy

(\*) Dincecco, Mark and Gabriel Katz. State Capacity and Long-Run Economic Performance: The Economic Journal. Vol. 126 (Feb.), pp. 189-218.

(\*) Johnson, Noel D. and Mark Koyama. States and Economic Growth: capacity and constraints. Explorations in Economic History. 2017, Vol. 64, pp. 1-20.

(\*) Przeworski, Adam, and Fernando Limongi. Political Regimes and Economic Growth. Journal of Economic Perspective. 1993. Vol. 7 (3), pp. 51-69.

### II.1 Methods: Dynamic Optimization & Numerical Solution

(\*) Acemoglu, D. (2009): Introduction to Modern Economic Growth, Princeton University Press, Chapters 6-7.

See also the Relaxation website: <https://sites.google.com/view/relaxmacro>

### II.2 Workhorse Models: Ramsey & OLG

(\*) Acemoglu, D. (2009): Introduction to Modern Economic Growth, Princeton University Press, Chapters 8-9.

### II.3 Human Capital & Economic Growth

(\*) Acemoglu, D. (2009): Introduction to Modern Economic Growth, Princeton University Press, Chapter 10.

### II.4 Endogenous Technological Change

(\*) Acemoglu, D. (2009): Introduction to Modern Economic Growth, Princeton University Press, Chapters 12-13.

## II.5 Stochastic Growth & Climate Change

(\*) Acemoglu, D. (2009): Introduction to Modern Economic Growth, Princeton University Press, Chapters 16-17.

Hassler, J., P. Krusell, and A. Smith. 2016. "Environmental Macroeconomics." In Handbook of Macroeconomics, edited by J. B. Taylor and H. Uhlig, 2. Elsevier Science.

Further information on Part II: [sites.google.com/view/thomassteger/teaching/amacrocgde](https://sites.google.com/view/thomassteger/teaching/amacrocgde)

### III.1 Model and Data Preparation

(\*) Alogoskoufis, G. (2019): Dynamic Macroeconomics, MIT Press, Chapter 12.

DeJong and Dave (2007): Structural Macroeconometrics, 2. ed., Princeton University Press, Chapters 1-4, 6.

King, R.G.; Plosser, C.I.; Rebelo, S. (1988): Production, growth and business cycles, Journal of Monetary Economics 21, 195-232

### III.2 Environmental DSGE Models

Hassler, J.; Krusell, P. (2018): Environmental macroeconomics: The case of climate change, Handbook of Environmental Economics 4, 333-394

Heutel, G. (2012): How should environmental policy respond to business cycles? Optimal policy under persistent productivity shocks, Review of Economic Dynamics 15(2), 244-264

Nordhaus, W. (2013): The climate casino: risk uncertainty, and economics for a warming world, Yale University Press

## IV. Monetary and Fiscal Policy

(\*) Gali, J. (2015): Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications. Second Edition. Princeton University Press. Chapters 1-5.

Ramey, V.A. (2019): Ten Years After the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research? Journal of Economic Perspectives 33 (2), 89–114.

(\*) Woodford, M. (2011): Simple Analytics of the Government Expenditure Multiplier. American Economic Journal: Macroeconomics 3(1), 1-35.

(\*) Bilbiie, F. O. (2020): The New Keynesian Cross. Journal of Monetary Economics 114, 90-108.

Bilbiie, F. O. (2008): Limited Asset Market Participation, Monetary Policy and (Inverted) Aggregate Demand Logic. Journal of Economic Theory 140, 162-196.