



# **Advanced Macroeconomic Analysis I (AMA)**

Winter Term 2024/2025

**Prof. Lutz Weinke, Ph. D.**

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December 11th, 2024

## 1 Schedule

|                              |     |               |   |
|------------------------------|-----|---------------|---|
| Lecture and Tutorial (VL/UE) | Wed | 08:30 – 12:00 | Ostrom-Hall, DIW Berlin, Mohrenstraße 58, 10117 Berlin.<br><br><b>1st lecture on October 16th in room 3.3.002 A+B at the DIW.</b> |
|------------------------------|-----|---------------|---|

## 2 Lecturer

|                           | Office Hours (in person)  | Room | E-Mail                        |
|---------------------------|---|------|-------------------------------|
| Prof. Lutz Weinke (VL/UE) | Di 13:00 – 14:00,<br>registration at:<br>wpol@wiwi.hu-berlin.de | 331  | lutz.weinke@wiwi.hu-berlin.de |

## 3 Content and structure of the course

The objective of this course is to teach M.A. and Ph.D. students to use macroeconomic concepts and techniques for their own research.

The focus of the course lies on dynamic stochastic general equilibrium (DSGE) models used for positive and normative macroeconomic analysis. Throughout the course, special emphasis will be put on the fact that theory can be used as a lens to analyze data. To this end a number of theoretical and empirical concepts are presented: The computation of impulse response functions, structural vector autoregressions, as well as structural estimation. The course concludes with an introduction to Ramsey optimal policy.

There will be a 90-minute in-person final exam which will cover both parts of the course (i.e., Prof. Burda's part and Prof. Weinke's part) equally. On whole, this course provides 6 ECTS points.

## 4 Literature

- Debortoli and Galí (2024) [forthcoming]: "Heterogeneity and Aggregate Fluctuations: Insights from TANK models," *NBER Macroeconomics Annual*, 39.
- Galí, Jordi (2003): "New Perspectives on Monetary Policy, Inflation and the Business Cycle," *Advances in Economic Theory*, edited by: M. Dewatripont, L. Hansen, and S. Turnovsky, Vol. III, 151-197, Cambridge University Press.
- Galí, Jordi and Pau Rabanal (2004): "Technology Shocks and Aggregate Fluctuations: How Well Does the RBC Model Fit Postwar U.S. Data?," *NBER Macroeconomics Annual*, 19, 225-288.
- Galí, Jordi (2018): "The State of New Keynesian Economics: A Partial Assessment," *Journal of Economic Perspectives*, Vol. 32 (3), 87-112.
- McKay, Alisdair and Christian K. Wolf (2023): "Monetary Policy and Inequality," *Journal of Economic Perspectives*, 37(1), 121-44.

- Schmitt-Grohé, Stephanie and Martin Uribe (2010): "Evaluating the Sample Likelihood of Linearized DSGE Models without the Use of the Kalman Filter," *Economics Letters*, Vol. 109(3), 142-143.
- Schmitt-Grohé, Stephanie and Martin Uribe (2012): "An OLS Approach to Computing Ramsey Equilibria in Medium-Scale Macroeconomic Models," *Economics Letters*, Vol. 115(1), 128-129.

## 5 Additional Readings

Excellent textbook treatments of the concepts and techniques presented in this course exist.

With a focus on monetary economics:

- Galí, Jordi (2015): *Monetary Policy, Inflation and the Business Cycle*, Second Edition, Princeton University Press.

With a focus on open economy macro:

- Uribe, Martín and Stephanie Schmitt-Grohé (2017): *Open economy macroeconomics*, Princeton University Press.

## 6 Overview of the Course

|   | Date   | Topic of the Lecture  |
|---|--------|---|
| 1 | 11.12. | Elements of Equilibrium<br>Literature: Galí (2003, 2018) & Galí (2015), Ch.2  |
| 2 | 18.12. | Prices and Marginal Costs<br>Literature: Galí (2003, 2018) & Galí (2015), Ch.2  |
| 3 | 08.01. | Transmission of Economic Shocks<br>Literature: Galí (2003, 2018) & Galí (2015), Ch.3  |
| 4 | 15.01. | Dynamic Consequences of Technology Shocks and Possible Pitfalls in their Estimation I<br>Literature: Galí and Rabanal (2004)  |
| 5 | 22.01. | Dynamic Consequences of Technology Shocks and Possible Pitfalls in their Estimation II<br>Literature: Galí and Rabanal (2004) |
| 6 | 29.01. | Structural Estimation<br>Literature: Galí and Rabanal (2004) & Schmitt-Grohé and Uribe (2010)                                 |
| 7 | 05.02. | Ramsey Optimal Policy<br>Literature: Schmitt-Grohé and Uribe (2012)   |

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|---|--------|--|
| 8 | 12.02. | Heterogeneous Agents<br>Literature: Galí (2018),<br>Debortoli and Galí (2024) &<br>McKay and Wolf (2023) |
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