



**Institute of Economics**  
**Department of Economic Theory**

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Syllabus for the Master's course

## **Advanced Macroeconomics 1**

Winter semester 2025/26

- **Summary:**

The course studies macroeconomic models at an advanced level using state-of the art dynamic general equilibrium theory. The main focus is on monetary models of the business cycle and the role of fiscal and monetary policy in this framework. Specifically, we will study how monetary policy interacts with fiscal policy and how they jointly determine equilibrium prices and allocations in real and financial markets. We will also explore the tools available to monetary policy to control inflation and the role of fiscal policy and its potential to stimulate the economy. Finally, we will study the existence and form of optimal monetary and fiscal policy aiming to maximize consumer welfare under alternative informational and political constraints.

The course employs the two major workhorses of modern macroeconomics in this field: First, the New Classical framework which abstracts from market frictions assuming price-taking behavior of all market participants combined with price flexibility on all markets. Second, the New Keynesian models which incorporate various frictions such as monopolistic competition and/or staggered price adjustments. In recent years, the New Keynesian approach has become the dominant framework used at central banks to guide monetary policy.

- **Credit points:** 6 ECTS

- **Target audience:**

Students enrolled in the M.Sc. programs Economics and VWL.

- **Teaching format:**

- All classes take place in-person requiring your presence in Freiburg.
- Course participants are expected to attend all scheduled classes without exception.
- Regular attendance is also key to be successful in the final exam.

- **Examination:**

- Two-hour (90 minutes) written final exam at the end of the semester.
- A retake will be offered at the end of the following semester.

- Contents (tentative):
  1. The Basic New Classical Model
  2. Monetary Dynamics and Fiscal-Monetary Interaction
  3. Expansionary Fiscal Policy
  4. The Stochastic New Classical Model
  5. The Basic New Keynesian Model
  6. Fiscal and Monetary Policy in the New Keynesian Model\*

\* = 'time permitting'

- Course literature:
  - COCHRANE, J. H. (2023): *The Fiscal Theory of the Price Level*. Princeton University Press, MA.
  - GALI, J. (2008): *Monetary Policy, Inflation, and the Business Cycle*. Princeton University Press, Princeton a.o.
  - LJUNGQVIST, L. & T. SARGENT (2012): *Recursive Macroeconomic Theory, Third Edition*. MIT Press, Cambridge, Massachusetts.
  - MIAO, J. (2014): *Economic Dynamics in Discrete Time*. MIT Press, Cambridge, Massachusetts.

Additional references will be given in class.

- Prerequisites:

Course participants are expected to have a sound understanding of intermediate macroeconomics and microeconomics paired with a solid background in basic mathematics (linear algebra, calculus, constrained optimization, etc.) and statistics (probability theory, random variables, etc.). Since the course will have a strongly quantitative focus, we expect a genuine interest in economic theory and mathematical model building.

- Course meeting times:
  - One-and a half lecture classes ( $3 \times 45$  min.) per week
  - Lecture classes take place on Thursdays, 4-7 pm in lecture hall HS 1199 (KG I)
  - The first lecture takes place on *Thursday, October 16, 2025 at 4:15 pm*
  - Lecture classes are complemented by tutorial classes:
    - *regular tutorial classes* discussing course material relevant for the exam
    - *supplementary tutorials* discussing additional material not relevant for the exam.
  - We will alternate between regular and supplementary tutorials every week.
  - Tutorial classes take place on Fridays, 12-2 pm in lecture hall HS 1199 (KG I)
  - The first tutorial takes place on *Friday, October 31, 2025 at 12:15 pm*.
- Course material:
  - The entire course material (slides, problem sets, etc.) will be provided electronically on the ILIAS platform ([ilias.uni-freiburg.de](https://ilias.uni-freiburg.de)).
  - The name of the course is *Advanced Macroeconomics 1 - WS 25/26*
  - Students can directly sign up for the course and no password is required.
  - The course material will be released gradually every week prior to the lecture classes.
  - Participants enrolled in the course will be notified about all updates.
  - The same procedure applies for the tutorial classes.