## Advanced Macroeconomics I

Lecture: V. Hahn

Tutorials: t.b.a.

## **Objectives**

On completion of this module, students will be able to

- demonstrate an understanding of modern macroeconomics and dynamic economic analysis.
- understand techniques to solve dynamic optimization problems
- apply these methods to the study of various macroeconomic issues, such as economic growth, business cycles, monetary policy, consumption and asset prices.

## **Syllabus**

The course covers deterministic and stochastic dynamic general equilibrium modelling and their applications to macroeconomic issues. Both analytical results and numerical solution techniques (dynamic programming, log-linearisation, value-function iteration) are discussed.

- 1. Dynamic programming
- 2. The neoclassical growth model
- 3. New growth theory
- 4. Ricardian equivalence
- 5. Real business cycle theory
- 6. Dynamic models of money

## Literature

- Lecture slides (can be obtained from ilias platform)
- Adda, Cooper, "Dynamic Economies: Quantitative Methods and Applications"
- Acemoglu, "Introduction to Modern Economic Growth"
- Ljungqvist, Sargent, "Recursive Macroeconomic Theory"

- Walsh, "Monetary Theory and Policy"
- Romer, "Advanced Macroeconomics"
- $\bullet\,$  Dirk Krüger, "Macroeconomic Theory", lecture notes, available online, 2007.
- Stokey, Lucas, "Recursive Methods in Economic Dynamics"
- $\bullet\,$  additional literature mentioned on the lecture slides

The module grade will be based on the final exam and homework assignments.