

# Advanced Macroeconomics, Autumn 2015

## Contents

Being graduate, the course builds upon the macroeconomics courses in the bachelor program and presupposes corresponding qualifications. The course extends models from these courses in different directions and introduces new models. The emphasis is on complete dynamic models, taking forward-looking expectations, uncertainty, and market imperfections in the goods, labour and credit markets into account in a systematic way.

Fiscal and monetary policy questions are analysed in the light of these models. For example, how can "fiscal sustainability" of a given set of government spending and taxation rules be assessed? What is the role of monetary and fiscal policy in business cycle stabilization under alternative circumstances, including a liquidity trap?

Specific topics in the course:

- The continuous-time overlapping-generations model, budget policy and general equilibrium effects of public debt
- Tobin's  $q$  and firms' investment decisions
- the housing market in macroeconomics
- speculative bubbles
- macroeconomics with imperfect competition and nominal and real price rigidities
- the consumption/saving decision under uncertainty, precautionary saving
- different approaches to business cycle theory
- credit and business cycles, with an application to the Great Recession 2008

## Learning Outcome

The aim of the course is to endow the student with:

1. understanding of the basic theoretical concepts, mathematical methods and models of modern macroeconomics;
2. ability to use these tools in providing precise answers to questions related to the functioning of the economy as a whole, both in the short run and in the longer run;
3. knowledge of the major empirical regularities in the behaviour of aggregate economic variables in the short run, medium run and long run;
4. ability to evaluate the models from a theoretical as well as empirical point of view.

A perfect score of 12 at the final exam is given if the student is able to demonstrate in a clear and indisputable way to have obtained accurate and thorough competence along these lines.

Through the course students will learn the modelling tools necessary for understanding economic evolution at the aggregate level, for making macroeconomic forecasts and for policy analysis. Skills along these dimensions are essential for being qualified to work in the economic research and forecast divisions of companies, organisations and government institutions.

## Syllabus

Bernanke, B. S., and A. S. Blinder: Credit, Money, and Aggregate Demand, *American Economic Review*, vol. 78, No. 2, 1988, 435-39.

Elmendorf, D., and N. G. Mankiw: Government Debt. Chapter 25 in *Handbook of Macroeconomics*, vol. 1C, Amsterdam 1999.

Groth, C.: Lecture Notes in Macroeconomics, a text in the pipeline. Will be available at the course website.  
Mishkin, F. S.: Symposium on the Monetary Transmission Mechanism, J. of Economic Perspectives, vol. 9, no. 4, 1995, 3-10.  
Yellen, J. L.: Efficiency models of unemployment, American Economic Review, vol. 74, No. 2, 1984.  
Possibly a couple of additional articles and short notes, to be announced later.

**Language**

English

**Prerequisites**

It is a prerequisite to master macroeconomic models at a level corresponding to Romer: Advanced Macroeconomics, 2. ed., 2002 (chapters 1-2, 10-11), including knowledge of methods of intertemporal optimization (optimal control theory) and analyses of dynamic systems (difference and differential equations, phase diagrams etc.). The course is calculus intensive.

**Teaching and work forms**

Lectures with some exercises and workshop classes. Mandatory midterm paper.

**Formal requirements**

Midterm paper accepted is mandatory for access to the final exam.

**Examination**

3 hours closed book exam. Can be answered in English or in a Scandinavian language.

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