

14E025

## Macroeconomics II

Term 2 – 6 ECTS

Elective Course

Prof. Danilo Guitoli

Prof. Davide Debortoli

### Prerequisites to Enroll

The course is focused on formal analysis of theoretical models. A good mathematical background (especially on optimization methods) is a pre-requisite, as well as some background in macro (having taken a course like Macro I or similar will be helpful).

### Overview and Objectives

The course will cover some of the most important topics in modern macroeconomic analysis, focusing on short and medium run dynamics, presenting the basic models and their empirical implications.

Part I studies the real side of the economy: intertemporal choices, consumption, general equilibrium dynamics, business cycles, heterogeneity and incomplete markets.

Part II focuses on monetary policy in closed economies, with a special emphasis on its effects on macroeconomic variables over the business cycle. We will cover the main theoretical models as well as recent developments about unconventional monetary policies and heterogeneous agents.

### Course Outline

#### PART I

##### 1. Intertemporal choices, consumption and uncertainty

Intertemporal choices. Uncertainty and optimal consumption. The permanent income hypothesis. Liquidity constraints and precautionary saving. Consumption and asset prices.

##### 2. Business cycles

Labor supply. Firms: production, labor and capital inputs. General equilibrium dynamics. Empirical evidence. Real business cycle theory. Government and the effects of fiscal policy. Heterogeneity, incomplete markets and aggregate fluctuations.

#### PART II

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### 3. Monetary policy: the basics

Nominal price and wage rigidities: empirics and policy implications. The New Keynesian framework. Monetary policy design in the baseline model.

### 4. Extensions of the Baseline Model and their Implications for Monetary Policy

The zero lower bound on the nominal interest rate. Unconventional monetary policies. Heterogeneous agent models

## Required Activities

Throughout the course, in both parts, problem sets will be assigned. Some problem sets will have to be handed in for grading; others will not be graded, but discussed as well during TA sessions. Problem sets are very important, not only those that count for the grade: they are necessary to learn the methods and the models that we study. You may work in groups, but to do well in the course and in the exam each of you must put effort in thinking about the problems and try to solve them.

## Evaluation

The course grade will be based on your performance in the final exam (80%) and the problem sets (20%).

The final exam for both Part I and Part II will take place at the end of the term. The score of the exam will be the average of the two parts.

## Competences

- Capacity of utilization of the theoretical instruments of the to analyze situations of coherent form.
- Ability to make independent judgments and defend them dialectically.
- Acquire a solid knowledge base for the study of quantitative issues.

## Learning Outcomes

- Students should get an overview of economic and financial theory.
- Students must be able to recognize theories and present arguments with precise examples.

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- Students will have the ability to understand how markets work and explain their weaknesses.

### References

The main references for the course are the following:

#### PART I

- Romer, David, Advanced Macroeconomics, 4th edition, McGraw-Hill, 2011:  
Chapter 8 (Consumption), Ch. 5 (Real Business Cycles)
- Papers will be assigned and made available during the course.

#### PART II

- Gali, Jordi, Monetary Policy, Inflation and the Business Cycle: An Introduction to the New Keynesian Framework, 2<sup>nd</sup> edition, Princeton University Press, 2015.