



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Economia e Finanza dei Mercati Globali

2122-2-F1601M063

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#### Learning objectives

Enable students to understand fundamental issues on growth and business cycle theory, through the study of macroeconomic models useful also for analysing financial variables and the structure of financial markets.

#### Contents

The first component of the course deals with the main issues about economic growth, analysing in particular the determinants of per capita income growth long-run growth and the differences in terms of income levels among different countries. Topics include the role of technical change, savings rate, population growth. (Solow model and Ramsey-Cass-Koopmans model)

The second component presents real business cycle models, where technology shocks drive economic fluctuations, in the absence of markets imperfections. The empirical evidence will follow the theoretical discussion. (Real Business Cycle model)

The third component incorporates nominal rigidities (wage and price stickiness) into RBC models, the so-called New Neoclassical synthesis (New-Keynesian model). Other frictions will be also considered (Christiano, Eichenbaum and Evans model).

The fourth component extends the models to account for financial variables and frictions (financial accelerator model).

Students will learn the basic tools for model simulation, using Dynare.

#### Detailed program

- Introduction to monetary policy
- Stylized facts on growth
- Solow model and empirical evidence
- Ramsey-Cass\_Koopmans model
- Introduction to business cycle
- Real Business Cycle model
- New Keynesian model
- Models with real and nominal rigidities (Christiano Eichenbaum e Evans)
- New Keynesian models applications
- Financial frictions
- Simulation with Dynare

## Prerequisites

Standard under graduate courses in math, statistics, micro- and macro-economics.

## Teaching methods

- Classroom lectures
- Tutorials on PC
- Research study written in collaboration with other students under the supervision of a tutor

## Assessment methods

- Written exam (3 questions)
- Assignment on DYNARE (in groups)
- Research report (in groups, optional presentation)

Students are supposed to gather in groups of 3-4 people to carry out the following assignments:

1. Do a simulation exercise on PC, using MATLAB e DYNARE (1 credit).
2. Write a report, analysing a particular topic of interest relative to the course or the case of a country of particular interest (2 credits).

## Textbooks and Reading Materials

- D. Romer, Advanced Macroeconomics, McGraw-Hill
- J. Galí, Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications, Princeton University Press

- Papers on scientific journals

## **Semester**

Second semester.

## **Teaching language**

Italian. Course material in English.

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