# Monetary economics and asset pricing

## Prof. Domenico Delli Gatti; Prof. Maurizio Motolese

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The main purpose of this course is to equip the students with analytical frameworks for understanding the fundamental features of

1. the *monetary policy transmission mechanism* in settings characterized by nominal rigidities, asymmetric information, uncertainty and liquidity shocks;
2. portfolio choice and asset pricing on financial markets and their role for macroeconomic fluctuations.

After completion of the course the student will be able to

* describe and solve advanced macroeconomic models used to evaluate the effects of monetary policy and the inner working and macroeconomic effects of financial markets;
* apply the acquired knowledge (i.e., use the solution procedures developed in class) for addressing additional issues, with particular reference to the causes and consequences of financial instability;
* develop an autonomous assessment of models and issues based on the conceptual tools discussed in class;
* expose and communicate opinions in a rigorous way using the conceptual/lexical toolkit used during the course;
* learn new frameworks and conceptual tools in the area of macro-finance.

***COURSE CONTENT***

Module I: *Prof. Domenico Delli Gatti*

1. The main channels of transmission of monetary policy: an overview.
2. Ex post asymmetric information, monitoring costs and the external finance premium: Bernanke-Gertler.
3. The credit view: the lending channel and the balance sheet channel.
4. Asset prices and borrowing constraints: Kiyotaki-Moore.
5. Optimal monetary policy in the New Keynesian Dynamic Stochastic General Equilibrium Model.
6. Bank runs and financial contagion.

Module II: *Prof. Maurizio Motolese*

1. The consumption-based asset pricing model: an overview.
2. General equilibrium Rational Expectations asset pricing models: some financial markets puzzles.
3. Beyond Rational Expectations: solutions to the puzzles?
4. Macro consequences of asset markets volatility.
5. Volatility and uncertainty shocks.
6. The term structure of interest rates: the yield curve and GDP growth.
7. Monetary policy and asset price volatility.

***READING LIST***

Module I

C.E. Walsh, *Monetary Theory and Policy,* MIT Press, Cambridge, Massachusetts, 2010, 3rd edition.

Module II

J.H. Cochrane, *Asset Pricing,* (revised edition). Princeton University Press, Princeton, NJ and Oxford, UK, 2005.

For each module, additional scientific papers and lecture notes will be distributed to supplement the reading list above.

***TEACHING METHOD***

The teaching is organized in lectures and possibly seminars on selected topics.

***ASSESSMENT METHOD AND CRITERIA***

All exams are written. Limited to the two exam sittings immediately following the end of the fall quarter, the structure of the exam and its evaluation will be different between attending and non-attending students:

*For attending students*:

* Per each module students will be given 2 homework sets (take-home).
* At the end of module I, all attending students who have done and handed in the take-homes can take a midterm written test.
* At the end of module II, all attending students who have passed the midterm and have done and handed in the take-homes of the second module can complete the exam by taking a second written test in any of the two exam sittings immediately following the end of the fall quarter.
* The take-homes will be graded; the average grade of the take-homes contributes to 10% of the final grade in the midterm and the second written test. The final grade of the course is then given by the arithmetic average of the grades obtained in the midterm test and the second test.

*For non-attending students*:

The exam will be administered at one time for both modules during the exam session dates assigned to this course. The final grade of the exam is given by the arithmetic average of the grades obtained in the two essay questions of the final exam.

***NOTES AND PREREQUISITES***

Additional information and further details will be given in class and posted on the instructors' web-pages and/or on Blackboard.

The course builds on the first year courses in Microeconomics and Macroeconomics.

*Office hours*

Domenico Delli Gatti: Wednesdays from 16.30 to 18.30 in Via Necchi, 5 room 303.

Maurizio Motolese: Thursdays from 16.00 to 18.00 in Via Necchi, 5 room 105.