



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

Macroeconomics

PROF. GIANLUCA FEMMINIS; PROF. JAKOB GRAZZINI

Course aims and intended learning outcomes

The main purpose of this course is to analyze the fundamental features of modern macroeconomic models, chosen among the most widely used. The course also aims at showing how some fundamental analytical tools are used in modern macroeconomics. Hence, it should allow the students to understand and use currently used models, beyond the ones presented during the lectures.

At the end of the Course student should:

1. be able to understand the logical structure of macroeconomic simulations models,
2. be able to use some fundamental analytical tools to solve dynamic macroeconomic problems,
3. be able to understand (some) of the contribution published on field scientific journals,
4. be able to cope with models and approaches helpful to fully appreciate the courses in Monetary economics and in International economics, and useful for developing a dissertation in the area,
5. develop an appropriate technical language, useful to interact with experts in the field.

Course content

MODULE I: *Prof. Gianluca Femminis*

- Introductory examples of forward and backward dynamics.
- Output, stock market, long term interest rates, and the anticipatory effects of fiscal and monetary policies.
- Adjustment cost and investment dynamics.
- Log-linearization of simple Aggregate Demand/Aggregate Supply models.
- Traditional Rational Expectation models, the policy ineffectiveness debate and the Lucas' critique.
- Dynamic Rational Expectation models.
- New Keynesian Economics: monopolistic competition, "Calvo" pricing and the New Keynesian Phillips Curve.

MODULE II: *Prof. Jakob Grazzini*

- Basic Growth Theory: The Solow Growth Model.
- Growth Theory with optimizing agents: The Ramsey-Cass-Koopmans Model.
- New Growth Theory.
- Real-Business-Cycle Theory.
- Introduction to New Keynesian Economics.

Reading list

For the first module, lecture notes and lecture slides will be available on *Blackboard*.
The following textbook will be useful to cover some of the topics:

B. HEIJDR, *Foundations of Modern Macroeconomics*, Oxford University Press, 2017.

For the second module, lecture slides will be available on *Blackboard*.

References will be made to the following textbook:

D. ROMER, *Advanced Macroeconomics*, McGraw-Hill, New York, 2006, 3rd Edition.



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Teaching method

Classroom lectures.

Assessment method and criteria

Students will be evaluated on the basis on a written exam, which will deal with both theoretical questions and analytical exercises. The overall number of question is six for each exam; students will be required to answer to two questions out of the three pertaining to each of the two modules. The exam will be administered at one time for both Modules at the end of the Course

The answers to the questions aimed at testing the understanding of fundamental theoretical issues will be evaluated by looking at the extent of the candidate's knowledge, as well as at her/his ability to convey key messages in conceptually consistent ways through a clear and precise exposition. All problems will be designed in a way to effectively test the analytical and problem solving skills of the candidate.

All questions and problems will be analytically evaluated out of thirty points; the student's final grade will be determined as the average of the marks obtained in each of the questions composing the exam.

Written exams can possibly be followed by an oral examination, which has a residual value only and can imply an increase or decrease of up to a maximum of three points of the grade obtained in the written examination.

Further information will be posted on the lecturers' web pages.

Notes and prerequisites

Initial requirements: the student should have attended a course in Basic Macroeconomics during her/his B.A., and a course in Mathematics for economist, covering (linear) difference/differential equations, optimization, linear algebra and matrix manipulation.

As for the preliminary understanding of introductory macroeconomics, the list of useful textbooks includes:

- O. BLANCHARD, Macroeconomics, Prentice Hall, 2009, or
- O. BLANCHARD-D.R. JOHNSON, Macroeconomics-Global Edition, Pearson, 2013, or
- O. BLANCHARD-A. AMIGHINI-F. GIAVAZZI, Macroeconomia: una prospettiva europea, Il Mulino, 2016.

Further information can be found on Blackboard.

Students who wish to write their final essay in Macroeconomics are encouraged to meet the lecturers during their office hours.