UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Political Economy

2627-4-A5810202

Learning objectives

Learning objectives
Knowledge and understanding
The course aims to provide students with the fundamental conceptual and analytical tools of modern macroeconomics. By the end of the course, students are expected to know and understand the main macroeconomic phenomena — economic growth, business cycles, unemployment, inflation and financial crises — and the mechanisms through which individual decisions by households and firms translate into aggregate economic outcomes.
Particular attention is devoted to the construction of macroeconomic models based on agents' rational decisions, to the functioning of markets and the determination of equilibrium, as well as to the relationship between equilibrium and efficiency. The course also introduces the main forms of market imperfection and strategic interaction and examines their consequences for welfare and public intervention. The slides explicitly take as their starting point the coordination of individual decisions through prices and market equilibrium and use the Pareto criterion to address the issues of efficiency and public intervention.
Applying knowledge and understanding
Students will be able to use simple mathematical models to interpret the main macroeconomic phenomena, identifying the relationships among productivity, income, consumption, employment, wages, interest rates, credit, money and prices.
They will also be able to distinguish the effects of real, monetary and financial shocks, analyse the consequences of market imperfections and assess, within the models studied, the effects of different economic policy interventions.
Making judgements
The course aims to develop the ability to critically interpret observed macroeconomic phenomena and compare alternative theoretical explanations. Students will be expected to assess when market equilibrium leads to efficient allocations and when, instead, market incompleteness, market power, nominal rigidities, externalities, informational problems or strategic interactions may generate inefficiencies and create scope for public intervention.
Communication skills
Students will acquire command of the language of macroeconomics and the ability to present economic reasoning rigorously and concisely, making appropriate use of concepts, graphical representations and simple mathematical

tools.
Learning skills
The course provides the theoretical tools required to undertake more advanced macroeconomic analysis independently and to interpret data, models and debates concerning the performance of contemporary economies.

Contents

The course introduces modern macroeconomics through a micro-founded approach. After presenting the main phenomena to be explained — economic growth, business cycles and recessions — it introduces the tools of rational choice under certainty and uncertainty, competitive equilibrium, efficiency, complete and incomplete markets, and strategic interactions. The introductory structure of the slides explicitly identifies economic growth, business cycles and recessions as central phenomena, and GDP, unemployment and inflation as the main macroeconomic variables.
On this basis, the course analyses income and employment, unemployment, credit and the business cycle, money and inflation, capital accumulation and growth, financial markets and speculation, insurance and consumption, banking liquidity and financial crises.
The common thread is to trace aggregate phenomena back to agents' decisions and to the mechanisms through which those decisions are coordinated by markets or strategic interaction, assessing in each case the efficiency of equilibrium and the possible role of economic policy.

Detailed program

1. Introduction to macroeconomics
   Main macroeconomic aggregates. GDP and income. Employment and unemployment. Inflation. Economic growth, business cycles and recessions. Macroeconomics and microfoundations. Equilibrium and welfare.
2. Rational choice, markets and equilibrium
   Preferences and utility functions. Rational choice under certainty and uncertainty. Expected utility. Competitive markets. Competitive equilibrium and efficiency. Complete and incomplete markets. Pecuniary externalities. Non-cooperative games, Nash equilibrium, social dilemmas and bilateral bargaining. The introductory slides explicitly distinguish rational choice without and with uncertainty and subsequently complete markets, incomplete markets and games.
3. Income, consumption and employment
   Firms' and households' decisions. Competitive equilibrium. Productivity, wages, income, consumption and employment. Real business cycle theory. Market power, monopsony and competition among firms. Taxation and the time inconsistency of fiscal policy. In the model studied, changes in productivity may generate joint movements in income, consumption, wages and employment.
4. Wages and unemployment
   Job-search theory. Matching between firms and workers. Matching function. Surplus and bilateral bargaining. Unemployment and inefficiency. Labour-market policies. Unemployment benefits, minimum wages and competition.
5. Credit and the business cycle
   Intertemporal choices, saving, lending and the interest rate. Credit and economic activity. Real business cycles and Ricardian equivalence. Credit-market imperfections and collateral. Collateral values and the amplification of recessions. Credit-market externalities, multiple equilibria and endogenous business cycles. The slides explicitly link credit externalities to the possibility of aggregate increasing returns and multiple equilibria.
6. Money and inflation
   Money demand and supply. Monetary equilibrium. Quantity theory of money. Determination of the price level and inflation. Monetary neutrality and non-neutrality. Flexible prices and nominal rigidities. Monetary

policy, discretion, time inconsistency and monetary policy rules.

7. Capital and economic growth
   Capital, labour and production. Investment and saving decisions. Capital accumulation. Steady state and convergence. Exogenous growth. Productivity and economic development. Endogenous growth, human capital, research, the production of new ideas and technological progress. Dynamic efficiency and the role of public debt. The model links long-run productivity growth to the development of new ideas and the accumulation of human capital.
8. Finance and speculation
   Asset pricing. Equity prices and returns. Risk-free securities. The equity premium and the equity premium puzzle. Liquidity premium. Fundamental value of financial assets. Short-selling constraints and speculative bubbles. Macroeconomic effects of speculative dynamics.
9. Insurance, risk and consumption
   Choice under uncertainty. Financial and insurance markets and risk sharing. Insurance contracts and contingent claims. Complete and incomplete insurance. Efficiency and market incompleteness. Intertemporal consumption profile. Insurance-market imperfections and public intervention. With complete insurance, the model leads to consumption smoothing across states of uncertainty.
10. Liquidity, banking and financial crises
    The economic role of banking intermediaries. Public and private information. Deposits and liquidity allocation. Banking fragility and bank runs. Strategic interaction and multiple equilibria. Confidence crises. Deposit insurance and banking regulation. The model highlights the trade-off between the role of demand deposits in liquidity allocation and the fragility arising from the possibility of mass withdrawals.
    The conclusion of the course brings these modules together around three fundamental phenomena: business cycles, economic growth, and financial crises/recessions.

Prerequisites

Familiarity with the fundamental concepts of microeconomics and the basic mathematical tools used in economic analysis is required. The course nevertheless provides a preliminary introduction to rational choice, utility, market equilibrium and game theory, which are needed for the subsequent development of macroeconomic models.

Teaching methods

24 two-hour in-person lectures
Lectures are devoted to the presentation of macroeconomic phenomena, the construction and solution of theoretical models, and the discussion of their economic implications. The theoretical analysis is accompanied by the use of data, charts and empirical evidence concerning contemporary economies.

Assessment methods

The final examination consists of a written test at the end of the course, graded on a 30-point scale (from 18 to 30/30).
The examination will assess the student's ability to discuss the various topics covered during the course, with particular attention to theoretical understanding, interdisciplinary connections, and the critical evaluation of economic principles and applications.

Assessment criteria: Knowledge and understanding of the subject. Ability to connect different economic concepts

and integrate economic and policy aspects. Independent analytical and judgement skills in assessing outcomes and the effectiveness of different policies. Appropriate use of economic terminology.

Textbooks and Reading Materials

Amendola, Carbonari, Ferraris, Macroeconomia, il minimo teorico.
Egea, 2024

N.G. Mankiw, Macroeconomia, 7th edition.
Zanichelli, 2024
Also available as an e-book

Sustainable Development Goals

NO POVERTY | DECENT WORK AND ECONOMIC GROWTH | REDUCED INEQUALITIES