

Economics 516: Monetary Theory - Fall 2022

Prof. Claudio Paiva

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Lectures: MW 9:30 – 10:50 **Office Hours:** W 11:30 am – 12:30 pm at 216 DKH; T 5:00 pm – 6:00 pm at [REDACTED]; and by appointment

Prof. Paiva Bio : <https://ciapps.csuci.edu/FacultyBios/FacultyBiography/Details/409>

Course Description (Catalog)

Micro- and macroeconomic theories of the supply of and demand for money; money substitutes and their significance; review of current empirical research; money in closed economy, macroeconomic, and static general equilibrium models; and analysis of inflation and unemployment.

Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

Course Objectives

The purpose of this course is to introduce you to the major theoretical issues in monetary (and macro) economics that carry implications for policy decisions and policy assessment relating to interest rates, prices, output, and unemployment. Most of the course topics will be developed in the context of the historic evolution of monetary theories, most notably the debate between Classics and Keynesians (and their modern versions).

Although the course is officially about monetary *theory*, the course is part of a M.S. in Policy Economics. Therefore, this particular offering of the course will naturally reflect my previous experience at the International Monetary Fund both as a country economist who helped formulate policies and as a member of the IMF training department that designed and delivered policy courses to new IMF economists in DC and to Central Bank and government economists around the world.

Grading Procedure

The course grade will be determined by your performance on the following:

Mid-term: 35% Final Exam: 45% Problem Sets: 20% *

The final exam is comprehensive and will take place on **8:00 am - 11:00am., Monday Dec. 12**

The following materials are allowed for use during the exam: a cheap algebra calculator. There are to be no books, no papers other than the exam itself, no smart phones, no smart watches, no tablets, or any items that are capable of connecting to the internet. Students found to be using unapproved items shall be deemed in violation of the Academic Integrity policy of the University and will be subject to disciplinary action.

Optional Policy Design Project and Alternative Grading Procedure

I am willing to work with interested groups to prepare a “hands-on” macroeconomic analyses and policy recommendation report to be delivered at the end of the course (day of the final exam). The broad idea is that the group and I would jointly define a project that would be representative of tasks commonly associated with the country-desk work of an IMF economist.

If a group and I agree on a mutually interesting and feasible project for a country or group of countries, the grade procedure for students in that group would become:

Mid-term: 30% Final Exam: 40% Problem Sets: 15% * Optional (country) research project: 15%

*** Problem Sets and Group Work**

Five problem sets will be posted after each major block of course material. Answers are to be prepared and submitted in groups of three people. Working in pairs could be acceptable as well, but please check with me to ensure compatibility with the macro constraints (given the total number of registered course participants and the fact that every course participant must be part of a group).

Here it may be important to share my perspective on group work:

(1) policy making is, by nature, group work – unless you dream of becoming a country dictator, which I most certainly and for the record do not condone

(2) based on historical evidence, I am aware of the possibility that some group members may choose to “free-ride along” and let their groupmate(s) do the work or take answers I know to be available from previous semesters

- a. however, I posit that good policy design is predicated on understanding individual incentives and how to alter them to induce people to freely choose a course of action that benefits the collective
- b. hence, I will try to write exam questions that are more likely to be correctly answered by those who actively collaborate in the problem set submission (in other words: cutting corners to artificially boost PS scores is likely to yield a negative total return after exam scores are factored in)

Course Materials:

Recommended but not at all required textbooks for background reading & lecture support (see separate, detailed reading list):

- Macroeconomics, A. Abel, B. Bernanke, D. Croushore
- Monetary Economics, M. Lewis and P. Mizen
- Monetary Theory and Policy, C. Walsh
- Monetary Economics, J. Handa
 - Lecture slides, notes, media articles for discussion, practice problems and other supporting material will be posted on Canvas.
 - I strongly recommend you follow current events related to global financial markets, macro and monetary policies. Some exam and homework questions will be related to those events. Among interesting and reputable sites, I recommend <http://www.bloomberg.com> and <http://www.cnbc.com>

Communication and Other Issues.

Requests for re-graded exams must be handed in no later than one week after the exam is returned.

Please use e-mail only for short and sporadic communication. Substantive questions about the material are best answered/discussed during our live Zoom sessions.

If you would like to go further in depth regarding practical issues related to monetary and macro policies, I would be glad to discuss and share experience and material I have developed in the context of my work for the

IMF. For instance, I would be happy to discuss the IMF's assessment and recommendations for your home country as presented in recent reports available at <http://www.imf.org/en/Countries>

If you have any problems with the course, request an appointment with me as soon as possible - don't fall behind!

Course Content (see accompanying Excel file for the detailed schedule)

Part One: Introduction and Overview

1. The nature of money
 - a. Basics
 - b. A brief history of money
 - c. Money supply and monetary aggregates
 - d. Functions of money ... and how they are lost – the case of Brazil
2. Monetary economics overview as an empirical relationship between money, output, and prices
 - a. Introduction of quantity equation as a simple framework for stylized empirical measurements
 - i. Velocity originally a technical issue
 - ii. Velocity evolved to being viewed as inverse money demand
 - b. Key question: money neutrality
 - i. Long-run
 - ii. Short-run
 - c. Stylized facts and empirical correlations in the quantity theory
 - d. Quick review: how the traditional Keynesian IS-LM, AD-AS-LRAS framework deals with neutrality
 - i. Short-run AS
 - ii. Long-run AS (LRAS)
3. The evolution of monetary theory schools of thought – an overview
 - a. The classic ideas
 - b. Keynes
 - c. The New Classical
 - i. Monetarism
 - ii. The Rational Expectations revolution
 - iii. Real Business Cycle Theory
 - d. The New Keynesians
 - i. "General Disequilibrium"
 - ii. Rational expectations without market clearing
 - iii. Rationalization of sticky prices and wages

Part Two: Monetary Theory

4. The Classics
 - a. Walras, Say's law, and the determination of relative prices
 - b. The quantity theory and the determination of the price level
 - c. The Classic Dichotomy
 - d. Transmission mechanism
 - i. Direct
 - ii. Indirect - Wicksell as a precursor to interest rate targeting mon policy
 - e. Patinkin Critique and the Real-Balance Effect
5. Keynesian Inspiration

- a. Rejecting (short-run) neutrality – evidence from Great Depression.
 - b. Motives for holding money
 - c. Money demand in Keynesian synthesis: LM curve; velocity revisited
 - d. The macroeconomics of wage and price rigidities
 - e. Keynesian Business Cycle Theory
 - f. The Phillips Curve
- 6. New Classical Inspiration
 - a. Micro-foundations of demand for money: CIA and MIU to complement Solow and Ramsey models
 - i. Neutrality and super-neutrality derived
 - ii. Seigniorage and inflation tax
 - iii. Welfare costs of inflation
 - iv. Necessary conditions for neutrality and super-neutrality
 - b. Friedman, monetarism, and the quantity theory revisited
 - c. Real Business Cycle Theory
 - d. Information asymmetry, Rational expectations, and Lucas Supply Curve
 - e. Phillips Curve revisited
- 7. Dynamic Stochastic General Equilibrium Models – an introduction
- 8. Additional Implications for Monetary Policy
 - a. Time inconsistency
 - b. Rules v. discretion
 - c. Taylor rule

Part Three: Open Economy and Fiscal Considerations

- 9. IS-LM in open economy: Fixed v. Flexible ER
- 10. Monetary and Exchange Rate Arrangements
 - a. Inflation Targeting
 - b. Monetary and exchange rate-based stabilization plans
- 11. Some Unpleasant Monetarist Arithmetic
- 12. IMF Debt Sustainability Assessment Framework