

GUÍA DOCENTE

1. COURSE DESCRIPTION

Degree:	Análisis Económico (English teaching)
Double Degree:	
Course:	MONETARY POLICY AND THE FINANCIAL SYSTEM (Política Monetaria y Sistema Financiero - English teaching)
Module:	5. Economic Analysis and Econometrics
Department:	Economics, Quantitative Methods and Economic History
Term:	First term
Total Credits:	6
Year:	3rd
Type of Course:	Obligatory
Course Language:	English

Teaching model:	A1	
a. General/background:		70%
b. Theory-into-practice/developmental knowledge-building		30%
c. Guided Academic Activities:		

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2. COURSE COORDINATOR

Course coordinator: Jesús Rodríguez López

2.2. Teachers	
Name:	Jesús Rodríguez López
Center:	Facultad de Ciencias Empresariales
Department:	Economía, Métodos Cuantitativos e Historia Económica
Academic Unit:	Análisis Económico
Category:	Profesor Titular de Universidad
Office:	3-4-15
E-mail:	jrodlop@upo.es
Phone:	954 349285

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3. ACADEMIC CONTEXT

3.1. Course Description and Objectives

In this course we analyze the role of financial system and the relation with inter-temporal decisions of economic agents (households and firms). Special attention is given to the role played by money and monetary institutions: money, credit and banking system, credibility and reputation of monetary authorities, such as the European Central Bank or the Bank of Spain. Other aspects targeted in this course include the following: understanding recent debt and risk premium crisis, the credit crunch and credit restrictions, financial bubbles, debt default and debt overhanging, efficient composition of asset portfolio under competitive environments, and the inter-temporal current account balance.

Students are expected to acquire basic theoretic knowledge of market function; to develop intellectual as well as practical problem-solving skills and to encourage positive attitudes, values and habits which will benefit the development of their career

3.2. Contribution to the Training Plan

Students will learn basic skills to interpret monetary and financial facts under the lens of dynamic Macroeconomics. The course will provide them with the ability to analyze monetary and financial problems as well as the surroundings within which they operate through. In particular, students will gain the knowledge to be able to analyze and respond to a diverse range of difficulties which businesses are faced with. The understanding of macroeconomic and monetary concepts is fundamental in decision making processes, the elaboration of economic policies and the application of knowledge of how modern economics works. Value judgements are prohibited.

The main objective is to offer a complete vision of the role played by money, monetary institutions and banks and financial institutions.

Students will be provided with versatile theoretic and practical knowledge which will enable them to effectively develop their career. Throughout the course, we will use several datasets: EU KLEMS, monetary statistics at Bank of Spain, International Monetary Fund Financial Statistics, etc.

3.3. Recommendations or Prerequisites

Monetary Theory is based on mathematic reasoning and the mathematical language will without doubt make the analysis more difficult. Students must therefore have adequate previous knowledge of mathematics. Specially, they must be familiar with optimization



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methods, representation of functions and graphic analysis. Importantly, before the start of the course, students are strongly encouraged to have a serious look at their notes from previous years on the following items: Mathematics, Statistics and Econometrics, Macroeconomics and Microeconomics.

It would be useful to read a general newspaper every single day or some specialized fashionable blogs, such as "Nada es Gratis".

Memorization is forbidden. Students do not have to memorize the theory and the analytic tools used for problem-solving. By contrast, students are expected to understand theoretic concepts and be able to apply them adequately in order to solve existing economic problems within a business, and interpreting economic problems.

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4. SKILLS

4.1 Degree Skills Developed during this Course

The following are skills which will be obtained through this course. Many of these are not exclusive to this subject and will also be acquired in other subjects.

Systemic:

- Competitiveness
- Self-study skills
- Creativity
- Initiative and entrepreneurship
- Motivation for quality

Personal:

- Ability to criticise and self-criticise
- Ethical commitment
- Ability to work under pressure

Instrumental:

- Ability to analyse and synthesise
- Oral and written communication in Spanish and English
- Ability to analyze and look for information from different sources
- Problem-solving skills
- Decision-making skills

4.2. Module Skills Developed during this Course

To know and be able to apply basic economic concepts.

4.3. Course-specific Skills

To know and apply basic knowledge of Monetary Economics:

- Understanding of the role of money and finances in the decision making process of households and firms.
- Understanding of the basics of expected utility theory in order to evaluate agents' behavior regarding static and dynamic dilemmas: risk aversion, insurances, assets portfolio composition, the inter-temporal substitution effect.
- Understanding of the basics of Monetary Economics: Money and inflation; The real interest rate and the life cycle wealth. Ricardian equivalence; Monetary auctions and the supply of money.
- Financial bubbles, housing price booms. Credit constraints.
- Actuarially fair insurances and credit default swaps (CDS). Complete markets.
- On the sustainability of current account deficits
- Population structure and the Social Security system as a financial problem.

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5. COURSE CONTENT (COURSE TOPICS)

1. The role of money ([Guía Edufinet](#))
 - 1.1 Wealth and Income. Assets: typology and functions.
 - 1.2 The role of financial system. **Lecture:** "El peso del sector financiero", by Pablo Ruiz Verdú, NeG 17/06/2014.
 - 1.3 The structure of the Spanish financial system.

2. Risky decisions (*Villar 1999, Chapters 11 y 12*)
 - 2.1 Monetary lotteries and risk aversion. Bernoulli utility functions.
 - 2.2 The Arrow-Pratt risk aversion coefficient. The risk premium and the certainty equivalent.
 - 2.3 Insurance contracts. Actuarially fair insurances. **Lecture:** "El futuro de los mercados de derivados CDS", by Tano Santos, NeG 05/07/2013.
 - 2.4 Understanding assets as bets. **Lectures:** "Fútbol y mercados", by Marco Celentani and J. Ignacio Conde Ruíz, NeG 20/07/2012; and "Football-lab.com: visualización de datos con pronósticos en directo de los partidos del Mundial", by Marco Celentani and J. Ignacio Conde-Ruiz, NeG 13/06/2014.
 - 2.5 Portfolio decisions I: The monetary lottery approach. Incomplete markets. **Lecture:** "Riesgo y rendimiento", by Pablo Ruíz Verdú, NeG 23/07/2014.
 - 2.6 Portfolio decisions II: The mean-variance approach. Investment funds. **Lecture:** "Escasez de Pringados", by Vicente Cuñat, NeG 14/07/2014.
 - 2.7 Portfolio decisions III: The dynamic approach. **Lecture:** "El papel de los activos seguros", by Javier Andrés, NeG 04/09/2013.
 - 2.8 The efficient market hypothesis. **Lecture:** "Cómo acertar siempre en la Bolsa", by Vicente Cuñat, NeG 25/09/2012.

3. The inter-temporal theory of credit account balance (*Williamson 2011, Chapter 8*) and ([Schmitt-Grohé y Martín Uribe, 2007, Chapter 1, 2, 5 y 9](#)).
 - 3.1 Budgets and time. The life cycle wealth and the real interest rate.
 - 3.2 Analyzing transitory and permanent changes in income. Ricardian equivalence. **Application:** US and Spanish data. The balance of payments composition. Interpreting the current account.
 - 3.3 Can a country hold a perpetual deficit in its trade balance? Can a country hold a perpetual deficit in its current account balance? **Lecture:** "La restricción exterior de la economía Española", by Javier Andrés, NeG 17/05/2013.
 - 3.4 Capital controls. transitory and permanent changes in income. Changes in the world real interest rate.
 - 3.5 The public budget in an open economy.
 - 3.6 Twin deficits: public deficits and the current account deficits.
 - 3.7 Sovereign debt crisis. Debt overhanging.

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4. Credit market imperfections (*Williamson 2011, chapter 9*)
 - 4.1 Consumption decisions when under credit market imperfections. Ricardian equivalence.
 - 4.2 Adverse selection. Assymmetric information and financial crisis.
 - 4.3 Moral hazard. limited commitment and and financial crisis.
 - 4.4 Social security. **Lecture.** “Repasando la Dinámica Reciente de la Población en España”, by J. Ignacio Conde-Ruiz el 17/07/2014.

5. Money (*Williamson 2011), chapters 11, y 16*)
 - 5.1 Several reasons justifying the use of money: The overlapping generation model.
 - 5.2 The debt equation with or without the seigniorage from money. The central bank balance sheet and the coordination of monetary and fiscal policies.
 - 5.3 Increasing the level of money supply. Money neutrality. **Lecture:** “¿Qué sabemos sobre la emisión y la inflación?”, by Juan Pablo Nicolini, *Foco Económico* 1/04/2012.
 - 5.4 Targets and tools of the monetary policy. **Application:** Money auctions at the ECB.
 - 5.5 Financial intermediation and the banking system: The Diamond-Dybvig model.

6. Money in an Open Economy (*Williamson (2011), Chapter 15; Schmitt-Grohé y Martín Uribe (2007), Chapter 10*)
 - 6.1 Nominal and real exchange rates, and the purchasing power parity condition (PPP).
 - 6.2 The quantitative theory of money under floating and fixed exchange rates.
 - 6.3 The relation between fiscal deficits and the exchange rate regime (including monetary union). **Lecture:** “Draghi: una oferta que no debemos rechazar”, by Luis Garicano in *El País*, 03/09/2014. **Lecture:** ¿Es siempre óptimo mantener la inflación estable?, by Javier Andrés en NeG, 19/06/2013.
 - 6.4 Balance of payments crises.

7. Monetary commitment and discretionality (*Williamson 2011, chapter 18*)
 - 7.1 Commitment and the time inconsistency of the optimal monetary policy.
 - 7.2 Discretionality. Central bank independence. **Lecture:** “Temiendo a la Inflación”, by Vicente Cuñat, *NeG* 3/06/2013.

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6. METHODOLOGY AND RESOURCES

The course will be structured as a combination of theoretical and problem-solving lectures. In the latter we will correct problem sets that will be made available to students sufficiently in advance of the corresponding lecture. The problem sets will give you practice working with the concepts introduced in the class and also to prepare you for the exams. Students' active involvement in solving the problem sets is strongly encouraged and will be taken into account in the final grading.

1. Data bases for (macro)-economic analysis. Series temporales: [BDSICE](#), [INE](#), [BEA](#), [EUROSTAT](#), IMF-FS, OCDE.
2. Micro data. [Encuesta Financiera de las Familias](#).
3. Programing (tentative): MATLAB-Dynare. Ejercicios de simulación de modelos monetarios y reales.
4. Topics for presentation: (1) Bets; (2) *Credit Default Swaps*; (3) efficient market hypothesis; (4) the Great moderation in the US aggregate series; (5) monetary auction; (6) decomposing the Spanish current account; (7) MATLAB without tears; (8) etc.
5. Problem sets.

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7. ASSESSMENT

Grades will be weighted in the following way:

- GT (70%): The evaluation will consist of a final exam. It will include both theoretical and practical exercises.
- PT (30%): The evaluation will consist of a number of in-class activities throughout the course. Part of this PT score will include a midterm exam (around November 15th).

The grade corresponding to the activities developed during the course (30%) will be preserved for the retake exam (June) for the students who opt to do so. The remaining (70%) will be evaluated in the final exam. Nevertheless, students can opt to make up for the percentage assigned to continuous evaluation in the final grade by an extra evaluation in the final exam. The students must notify (in written form) the teacher by June 20th. Any failure to inform the teacher in the given date can only be waived under special circumstances.



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8. BIBLIOGRAPHY

- Edufinet, [Plataforma de Educación Financiera](#).
- Schmitt-Grohé, Stephanie and Martín Uribe: [International Macroeconomics](#) (2012).
- Villar, Antonio, *Lecciones de Microeconomía*. Bosch (1999).
- Williamson, Stephen D. *Macroeconomics*. Fourth Edition. Pearson (2011)