

## TEMAS AVANZADOS EN MACROECONOMÍA (2017-18)

### DATOS GENERALES

Código 41238

Créditos ECTS 5

#### Departamentos y áreas

Departamento	Área	Dpt. Resp.	Dpt. Acta
FUNDAMENTOS DEL ANALISIS ECONOMICO	FUNDAMENTOS DEL ANALISIS ECONOMICO	SÍ	SÍ

#### Estudios en que se imparte

MÁSTER UNIVERSITARIO EN ECONOMÍA CUANTITATIVA

#### Contexto de la asignatura

- CG3: Capacity to apply economic theory to represent real situations.
- CG4: Capacity for teamwork.
- CG5: Capacity for self-learning.
- CG6: Ethical commitment and social responsibility at work, respecting the environment, being aware and understanding the importance of respect for fundamental rights, equal opportunities for men and women, universal accessibility for the disabled and respect for the values of a peaceful, democratic society.
- CG7: Analyse problems using critical reasoning, without prejudice and with precision and rigor.
- CG8: Capacity for synthesis.
- CE1: Capacity to read Economic research articles in a reasoned fashion and evaluate them critically, understand their essential contributions and weaknesses.
- CE2: Capacity to understand how the technical problems faced by authors of research articles have been resolved in each case.
- CE3: Capacity to test theorems and propositions.
- CE5: Capacity to present important economic problems precisely and respond adequately to solve problems by using the techniques learnt in the different courses, using theoretical and empirical analyses or simulations if necessary.

#### OBJETIVOS DE APRENDIZAJE

The purpose of this course is to introduce the modeling of heterogeneous agents economies, to familiarize the student with some of the particular computational techniques used to solve numerically this kind of models, and to learn about research questions in macroeconomics that can be addressed within this environment.



## OBJETIVOS

### Objetivos específicos aportados por el profesorado (2017-18)

The purpose of this course is to introduce the modeling of heterogeneous agents economies, to familiarize the student with some of the particular computational techniques used to solve numerically this kind of models, and to learn about research questions in macroeconomics that can be addressed within this environment.



## CONTENIDOS

### Contenidos teóricos y prácticos (2017-18)

#### Part I: Introduction to Models with Heterogeneous Agents

- What the representative agent model cannot do.
- When heterogeneity does not matter. Gorman's aggregation result.
- Sources of heterogeneity: age (OLG), preferences (risk sharing), abilities (job market), policies (progressive marginal tax rates).

#### Part II: Heterogeneity in the Neoclassical Growth Model with Complete Markets

- The Standard Complete Markets (SCM) Model.
- Income fluctuations problem with complete markets.
- Permanent Income Hypothesis (PIH).
- Negishi's algorithm; value/policy function iterations; endogenous grid method.

#### Part III: The Neoclassical Growth Model with Incomplete Markets ("Bewley Models")

- The Standard Incomplete Markets (SIM) Model.
- Income fluctuations problem with incomplete markets.
- Stochastic earnings or wage processes.
- Stationary equilibrium in the incomplete markets models (Bewley / Aiyagari).

#### Part IV: Some Applications

- Inequality and the Life Cycle.
- Wealth distribution.
- Capital taxation and redistribution.
- The progressivity of the income tax.
- Social security reforms.

## EVALUACIÓN

### Instrumentos y criterios de Evaluación 2017-18

Course Grade: The grade is based on:

1. The class participation which may include a presentation in class of a paper that the student finds interesting (30%)
2. Homework assignments which may include a referee report on a paper picked by the student from a reading list and not covered in class (30%)
3. A brief presentation, 10-15 minutes, of an original research project. At the end of the course, students may have to handle a written research proposal (40%)

Minimum grade to pass the exam is 5 over 10.

Those students with a grade below 5 will have a second opportunity in the corresponding

exam period. The final grade in the second evaluation period is EXCLUSIVELY given by the grade obtained

in a retake exam (with theory and practice questions) about the whole content of the course.

Grades from continuous assessment, if any, will not be taken into account.

Tipo	Criterio	Descripción	Ponderación
EXAMEN FINAL	3. A brief presentation, 10-15 minutes, of an original research project. At the end of the course, students may have to handle a written research proposal (40%)	Presentation of a final research project	40
ACTIVIDADES DE EVALUACIÓN DURANTE EL SEMESTRE	<p>1. The class participation which may include a presentation in class of a paper that the student finds interesting (30%)</p> <p>2. Homework assignments which may include a referee report on a paper picked by the student from a reading list and not covered in class (30%)</p>	Class participation and problem sets	60