Dynamic Macroeconomic Analysis —
Máster en Economía Internacional

Marcel Jansen

Universidad Autónoma de Madrid

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Personal details

**Name:** Marcel Jansen

**Office:** X-308

**Email:** marcel.jansen@uam.es

**Web page:** www.uam.es/marcel.jansen

**Office hours:** (provisional)

Mondays 15:00 - 19:00
Course objectives

This first course in macroeconomics is intended to serve two purposes:

- A graduate-level introduction to dynamic macroeconomic analysis
- An introduction to growth theory and the determinants of the long-run performance of countries

At the end of the course the students are familiar with two of the workhorse models of modern macroeconomics — overlapping generations models (OLG) and the neo-classical growth model.
Prerequisites

The course material is self-contained, but I assume that the students

- Have completed (advanced) undergraduate courses in macroeconomics
- Are familiar with techniques for constrained optimization

Even so, the course will start with a brief review of basic macroeconomic theory. Most of you will have seen this material before.
The course material is based on:


The slides (plus additional material) are available on my personal webpage
Outline

Part 1. Introduction
Week 1. Data and Questions ........................................ AC Ch. 1
Week 2. Solow Growth Model (discrete time) .................. AC 2.1 - 2.3
Week 3. Solow Growth Model (cont. time) ..................... AC 2.4 - 2.8
Week 4. Growth Accounting ....................................... AC Ch. 3 & 4

Part 2. Microfoundations
Week 5. Consumption-savings decisions ....................... 
Week 6. Labour-leisure choice .................................. 

Neoclassical Growth
Week 7. The Canonical OLG model ......................... AC 9.1 - 9.5
Week 8. Foundations of Neoclassical Growth ............... AC Ch 5
Week 9. The Canonical Neoclassical Growth Model ........ AC Ch 8
Week 10. Neoclassical Growth Model in Cont. Time ....... AC Ch 8
Week 11. Transitional dynamics and convergence .......... AC Ch. 7 & 8

Calibration and numerical exercises
Course philosophy

The course is designed to prepare students for a job in policy institutions, but it also offers a solid basis for those who want to pursue a PhD.

- Throughout the course we will avoid unnecessary complications
- Instead, the course will include two quantitative exercises in which you will evaluate the empirical performance of the models
- The objective is to strive for a deep understanding of the material, rather than a superficial glance at many topics
Course workload

- Due to time limits, the theory classes only offer the basic results and insights.
- The students will have to complement class attendance with 4 to 5 hours of study per week.
- The additional workload includes bi-weekly assignments.
Course evaluation

The final grade is a weighted average:

- Final exam (60%)
- Mid-term exam (20%)
- Assignments and problem sets (20%)