

## Topics in Macro 1 CM

Course title - Intitulé du cours	Topics in Macro 1CM
Level / Semester - Niveau /semestre	L3 / S1
School - Composante	Ecole d'Economie de Toulouse
Teacher - Enseignant responsable	Nicolas LEPAGE-SAUCIER
Other teacher(s) - Autre(s) enseignant(s)	Jordan LOPER
Other teacher(s) - Autre(s) enseignant(s)	Ling ZHOU
Other teacher(s) - Autre(s) enseignant(s)	Alexandre GAILLARD
Lecture Hours - Volume Horaire CM	30
TA Hours - Volume horaire TD	15
TP Hours - Volume horaire TP	
Course Language - Langue du cours	Anglais
TA and/or TP Language - Langue des TD et/ou TP	Anglais

### Teaching staff contacts - Coordonnées de l'équipe pédagogique :

Nicolas Lepage-Saucier [nicolas.lepage-saucier@](mailto:nicolas.lepage-saucier@) Office: MA202

You can talk to me after class, or by appointment. If you feel lucky, try and drop by directly at my office, I'm often there.

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### Course Objectives - Objectifs du cours :

This course is intended as an introduction to modern macroeconomics, along with its counterpart in the second semester of licence 3. As such, it focuses on presenting theoretical models of the dynamics of the economy (i.e. the evolution of macroeconomic variables through time). The course is made of two parts. In the first part of the course, we will explore which factors govern the evolution of the economy in the very long run, and consider successively the importance for sustained income growth of capital accumulation, technology, demography and natural resources. In the second part of the course, we will study the roles played by money in the economy, and some of the links that exist between the evolution of the money stock and other macroeconomic variables, such as prices. This analysis of money echoes some of the past courses of the school curriculum (especially licence 2), and will be furthered in the next semester of licence 3. This course aims at introducing students to dynamical economic models, and the related concepts of convergence, steady state and balanced growth path, among others. Accordingly, students should learn to define and characterize analytically these concepts. The ability to describe the economy using microfounded models is also an objective of this course: students should be able to identify the constraints and objectives of the agents populating the models of the economy presented in class, solve their utility-maximization problems and use these solutions to infer the behavior of the economy as a whole. A crucial skill that students should start (or continue) to acquire here is the ability to move from a formal description of the economy in terms of agents, models, and equations, to one that is focused on interpreting the results

in terms of behavior, tradeoffs, and the impact of the economic environment on agents' decisions. Additionally, one of the compulsory assignments students will have to perform will require them to deal with data.

#### **Prerequisites - Pré requis :**

Solid knowledge of micro-economic theory is required for the course. Knowledge of simple algebra and analysis (multivariate calculus, differential calculus, and a general ability to perform mathematical reasoning) is also required: the interested student will find on the course website a more detailed presentation of the mathematical prerequisites for the course.

#### **Practical information about the sessions - Modalités pratiques de gestion du cours :**

Bring phones, tablets and laptops connected to the Internet, I give online quizzes during class. You can arrive as late as you want as long as you don't disturb the class. Please ask questions. Smart questions are good. Stupid questions are even better, be sure that at least 10 classmates want to know the same thing but are too afraid to ask.

#### **Grading system - Modalités d'évaluation :**

60% TA grade, which includes a mid-term exam (40% of the final grade) and 2 written assignments (10% of the final grade each). The full rules regarding the two written assignments will be posted on the course website at the beginning of the semester. 40% final exam

#### **Bibliography/references - Bibliographie/références :**

No textbook is mandatory, but these may be useful: Robert Barro: Macroeconomics, MIT Press. Gregory Mankiw: Macroeconomics, McMillan Learning (French version also available at Editions De Boeck).

#### **Session planning - Planification des séances :**

- Part I (the dynamics of the economy in the long run): 6 weeks

Chapter 1: Introduction to growth theory (2 weeks)

Chapter 2: Demography & growth in the very long run (2 weeks)

Chapter 3: Sustainability – Growth & natural resources (2 weeks)

- Part II (topics in monetary macroeconomics): 4 weeks

Chapter 4: OLG models & the use for money (2 weeks)

Chapter 5: Hyperinflation (2 weeks)