

Topics in macroeconomics 1

Course title – Intitulé du cours	Topics in macroeconomics 2
Level / Semester – Niveau /semester	L3S5 : Eco, EM, ED
Lecturer – Enseignant responsable	Philippe Alby
Lecturer	Loïc Batté
Teaching assistant – Chargé de TD	
Lecture Hours – Volume Horaire CM	30
TA Hours – Volume horaire TD	15
Language of instruction – Langue du cours	English ¹
Language for tutorials – Langue des TD et/ou TP	English ²

Teaching staff contacts – Coordonnées de l'équipe pédagogique :

Philippe Alby: Philippe.alby@tse-fr.eu

Loïc Batté: loic.batte@tse-fr.eu

Information about office hours will be provided to the students at the start of the course. All the TAs shall provide their email on their first tutorial session.

Course Objectives – Objectifs du cours :

This course is the first half of the yearlong macroeconomics course for third-year undergraduates. It is focused on the study of the economy in the very long run. Throughout the course, the economy is studied as a dynamic system. We will make explicit use of microeconomic foundations to get aggregate economic behavior, which will be determined in a general equilibrium setting.

The course starts with an introduction to growth theory: after presenting important facts, the student will be introduced to the Solow growth model. To go further and move beyond the ad-hoc behavioral assumptions behind this model, we will then study some microeconomic foundations of macroeconomics. We will focus on two intertemporal decisions: the consumption-savings tradeoff first; then investment decisions. We will then go beyond the representative household assumption and study the overlapping-generations model.

By the end of this course, the student will be able to:

- Provide a detailed account of the main forces and constraints that shape the evolution of the aggregate economy in the very long run

¹ As the lecturers are French native speaker, students should feel free to interact in French whenever English becomes a serious obstacle to comprehension, provided it does not prevent non-French speakers from following the lectures.

² None of the teaching assistants is a French native speaker, so English should remain the main language for interactions during the tutorials.

- Solve quantitative models of the aggregate economy using the tools and techniques studied in class
- Provide an economic interpretation of the mathematical results obtained once the model is solved
- Discuss the main assumptions behind the models used in modern macroeconomics

Prerequisites – Prérequis :

- Mathematics: differential calculus; real analysis; constrained optimization.
- Microeconomics: producer theory, consumer theory, general equilibrium (undergrad level); basics of welfare analysis.
- Macroeconomics: national accounts; growth theory; AS-AD model; notions of business cycle analysis and macroeconomic policy.
- English: B2 level.

Practical information about the sessions – Modalités pratiques de gestion du cours :

No remote teaching/learning unless necessary. Attending the tutorials is mandatory. The use of electronic devices with Internet connection is allowed provided they are used for class purposes (taking notes, downloading and editing the handouts...). The lecturer reserves the right to establish additional rules to foster good working conditions in class.

Grading system – Modalités d'évaluation :

To complete the class, students will have to sit for two written exams:

- A mid-term exam (1h) that accounts for 25% of the final grade.
- A final exam (1h30) that accounts for 75% of the final grade.

Bibliography/references – Bibliographie/références :

- Daron Acemoglu: "Introduction to modern economic growth"
- Philippe Aghion & Peter Howitt: "Economic Growth"
- Garin, Lester & Sims: "Intermediary Macroeconomics" (available [online for free](#)).
- Pablo Kurlat: "A Course in Modern Macroeconomics" (available [online for a small fee](#)).

Session planning – Planification des séances

- Topics in macroeconomics 1 (first semester)
 - o Chapter 1: Introduction to Growth Theory (4 weeks)
 - o Chapter 2: consumption & savings (2 weeks)
 - o Chapter 3: investment & capital accumulation (2 weeks)
 - o Chapter 4: OLG models (2 weeks)
- Topics in macroeconomics 2 (second semester)
 - o Chapter 5: Resource economics (3 weeks)
 - o Chapter 6: The economics of collapse (3 weeks)
 - o Chapter 7: Innovation and endogenous growth (4 weeks)
 - o (Chapter 8: Malthusian models, time permitting)

Remote learning – Enseignement à distance :

If necessary, remote learning solutions will be provided.