

The aim of this 30-hours lecture is to present modern macroeconomic methods and models used both by researchers and analysts to understand and predict macroeconomic phenomena. Upon completion students will be able to use acquired tools to explain and interpret the workings of the macroeconomy at an advanced level. The course is composed of two parts. The first part is devoted to the microfoundations of modern macroeconomic models. The second part covers core growth facts and theories. The third part is devoted to analyzing and modeling business cycles phenomena.

Part I: Microfoundations

1. Introduction to modern macroeconomics [**GLS**: 2–3]
2. Consumption [**GLS**: 9–10; **R**: 8]
3. Investment [**GLS**: 12; **R**: 9]

Part II: Economic growth

1. Growth facts. Solow-Swan model [**GLS**: 4–7; **R**: 1]
2. Ramsey-Cass-Koopmans model [**AH**: 1.3; **R**: 2A; **K**: 3]
3. Overlapping Generations model [**GLS**: 8; **R**: 2B; **K**: 8]
4. Endogenous growth models [**AH**: 3–5]

Part III: Business cycles

1. Business cycle facts. Real Business Cycles model [**R**: 5; **C**: 2; **GLS**: 17–19]
2. Models of unemployment [**R**: 10]
3. Incomplete markets models. Inequality [**K**: 10]
4. New Keynesian model [**C**: 3; **R**: 7; **GLS**: 23–26]
5. Monetary policy design [**R**: 11; **GLS**: 27–28]
6. Financial frictions. Great Recession [**GLS**: 35–36]

Required information is covered by the lecture slides and notes.

Supplementary readings come from various textbooks:

[**AH**] P. Aghion and P. Howitt (2009) *The Economics of Growth*. MIT Press.

[**C**] C. Costa Junior (2016) *Understanding DSGE models*. Vernon Press.

[**GLS**] J. Garín, R. Lester and E. Sims (2018) *Intermediate Macroeconomics*.

[**K**] D. Krueger (2012) *Macroeconomic Theory*.

[**R**] D. Romer (2012) *Advanced Macroeconomics*. McGraw-Hill/Irwin, 4th Edition.

Evaluation is based on the final exam (70%), as well as homework assignments (30%). The points from the exam and homework add up to the final grade. To pass the course, a minimum of 50% of points has to be obtained.