

Guidance

IEE.B402. Advanced Macroeconomics

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The Purpose of This Course

- Macroeconomics is the study of the economy as a whole (e.g., GDP, rather than a person's income).
- This course is designed for mainly first-year graduate students as an introduction of macroeconomics at an advanced, or modern level.
- Specifically, at an advanced level, we use more sophisticated mathematical tools to consider the following macroeconomic questions:
 - Why do countries grow?
 - Why are some countries rich and others poor?
 - What are the sources of booms and recessions?
 - Why is there unemployment?

Prerequisite and Grading Policy

- Prerequisite: basically none.
- Grading policy:
 - The final grade is based on homework assignments (30%), midterm- and final examinations (30% and 40%).
 - In addition, you will try a quick “quiz” on the slides at each class.

References

- There is no designated textbook.
- Slides used for each class will be available on Tokyo Tech OCW.
- The books listed below are main references of this course:
 - Acemoglu, D. (2009) *Introduction to Modern Economic Growth*, Princeton University Press.
 - Barro, R. J. and X. Sala-i-Martin (2004) *Economic Growth*, Second Edition, Cambridge, MIT Press.
 - Gali, J. (2008) *Monetary Policy, Inflation, and the Business Cycles*, Princeton University Press.
 - Romer, D (2012) *Advanced Macroeconomics*, Fourth Edition, McGraw-Hill.

Topics covered in this course:

- 1 Brief review of Solow model (1-2 lectures, **incl. today**)
- 2 Mathematical preliminaries for advanced macroeconomics (3 lectures)
- 3 The baseline model of adv. macros (2 lectures)
(The baseline model is called the Ramsey–Cass–Koopmans model)
- 4 Economic growth theory with endogenous technological change
- 5 Real business cycle theory
- 6 Business cycles with monetary policies

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