

Advanced Macroeconomics (Spring, 2015)

Instructor: Ryoji Ohdoi (Department of Social Engineering)

Office Hour: W9-636, Wed. 10:45-12:15, or by appointment.

E-mail: ohdoi[at]soc.titech.ac.jp

Topics covered in the course:

1. An introduction to infinite-horizon dynamic optimizations (4 lectures)
2. The Ramsey-Cass-Koopmans model and its applications (3 lectures)
3. Endogenous growth models (2 lectures)
4. Models of preference reversals (1-2 lectures)
5. Some macroeconomic applications of stochastic dynamic programming (3 lectures)

(*) The above list is the tentative plan of the course, thereby it is subject to change.

(*) Owing to a time constraint such that we have only 15 weeks, an overlapping generations model, a new Keynesian DSGE model, or a heterogenous-agent model will not be covered.

Grading policy: The final grade is based on homework assignments (30%), midterm- (30% scheduled on Jun. 3) and final examinations (40%; scheduled on Jul. 29, or Aug. 5, still to be determined).

References: There is no designated textbook. Handouts or slides used for each class will be available on the corresponding page of Tokyo Tech OCW by the day before the class. The books listed below are main references of this course, which I will refer to in the teaching materials.

- [1] Acemoglu, D. (2009) *Introduction to Modern Economic Growth*, Princeton University Press.
- [2] Adda, J. and R. Cooper (2003) *Dynamic Economics*, Cambridge, MIT Press.
- [3] Barro, R. J. and X. Sala-i-Martin (2004) *Economic Growth*, Second Edition, Cambridge, MIT Press.
- [4] Blanchard, O. and S. Fischer (1989) *Lectures on Macroeconomics*, Cambridge, MIT Press.

- [5] Ljungqvist, L. and T. J. Sargent (2012) *Recursive Macroeconomic Theory*, Third Edition, Cambridge, MIT Press.
- [6] Mas-Colell, A., M. D. Whinston and J. R. Green (1995) *Microeconomic Theory*, Oxford University Press.
- [7] Stokey, N. L., R. E. Lucas Jr., with E. Prescott (1989) *Recursive Methods in Economic Dynamics*, Harvard University Press.
- [8] Sundaram, R. K., (1996) *A First Course in Optimization Theory*, Cambridge University Press.