

# Syllabus

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## 1 Course Information

### Term

4th Quarter 2016. Wednesdays and Fridays (8:50–10:20).

### Instructor

Associate Professor Kenji Sato, Graduate School of Economics.

Office: 208 Dainikenkyushitsu (Faculty Offices).<sup>1</sup>

Email: mail@kenjisato.jp

### Office Hours

Tuesdays (13:20–14:50) and Wednesdays (10:40–12:10) or upon request, at the instructor's office.

### Textbook

David Romer, *Advanced Macroeconomics*, 4th edition. McGraw-Hill. 2012.

The course will cover Chapters 1 and 2, and either 3 or 5 of the textbook. I recommend Charles Jones and Dietrich Vollrath, *Introduction to Economic Growth*, 3rd edition (2013, Norton) as a companion. Other related materials will be announced in class.

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<sup>1</sup>Building 28 on the map: [http://www.kobe-u.ac.jp/en/campuslife/campus\\_guide/campus/rokkodai1.html](http://www.kobe-u.ac.jp/en/campuslife/campus_guide/campus/rokkodai1.html)

## Schedule

	Topic	Textbook Sections Covered	
1	Dec. 7	Introduction to economic growth	Preface and 1.1
2	Dec. 9	Solow model	1.2–1.7
3	Dec. 14	Solow model	1.2–1.7
4	Dec. 16	Solow model and environment	1.8
5	Dec. 21	Ramsey model	2.1–2.7
6	Dec. 27	Ramsey model	2.1–2.7
7	Jan. 6	Ramsey model	2.1–2.7
8	Jan. 11	Discrete-time Solow model	
9	Jan. 13	Discrete-time Ramsey model	
10	Jan. 18	Diamond OLG model	2.8–2.12
11	Jan. 20	Diamond OLG model	2.8–2.12
12	Jan. 25	Model of knowledge accumulation	3.1–3.5
13	Jan. 27	Model of knowledge accumulation	3.1–3.5
14	Feb. 1	Model of knowledge accumulation	3.1–3.5
–	Feb. 3	No class.	
15.	Feb. 8	Final exam	

## Grading

Grading will be based on the results of homework assignments given several times, a mid-term (take-home) exam and a final, which will be an **open-book** exam.

	Weight	
Attendance	P/F	fail if number of absences > 3
Homework	20%	assigned up to 4 times
Take-home exam	30%	Dec. 27 – Jan. 11
Final exam (open-book)	50%	Feb. 8

## Course Websites

The main website is <http://en.kenjisato.jp/teaching/ma/2016/> . You can find some of the course materials and their updates there. Programmable notebooks with example codes will be provided in the form of Jupyter notebooks at

<https://github.com/kenjisato/macroeconomics>  
as supplementary materials. Click “launch binder” button and play with the codes.

## 2 Course objectives

This is an introduction to advanced-level study on macroeconomics. It is aimed at first-year graduate students (especially, of GMAP) and advanced undergraduate students (especially, of the IFEEK program). The course will introduce the standard machinery of modern macroeconomic analysis and apply it to the study of economic growth. Students should be able to achieve the following course objectives:

- Become familiar with the standard framework for macroeconomic analysis,
- Understand the behaviors of important macroeconomic variables, and
- Analyze the impact of changes in major economic variables on output, wages, investment etc.

An important goal of any course work in graduate study is to acquire knowledge and skills to read and understand research papers, which is a prerequisite for writing your own thesis. Since modern economics uses a lot of mathematics and authors usually omit any routine technical manipulations (because they assume that every reader knows them), you as a reader should learn a lot of things to fully appreciate contents of research papers. After taking this course seriously, you will be able to read such papers yourself.

In macroeconomics, the current trend of research methods emphasizes the importance of simulation and/or empirical tests. As you study macroeconomic theory, you are advised to learn how to perform a simulation and do an empirical exercise; the latter is in the scope of econometrics. This course will guide you through the process of writing simulation codes for some toy examples. Any serious work is just some effort away.