

Macroeconomic Analysis II

Spring 2025

Instructor: Chung-Liang Lin

Class Time: Thursday 9:10-12:00 a.m.

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Office Hours: Wednesday 2:00-4:00 p.m., by appointment, or just drop by (in the case of drop-by I may occasionally be too busy, but don't let that be a discouragement). It is essential for serious study that you ask me when the seems unclear to you.

Textbook and Readings: There is no specific textbook for this class. I've prepared a set of my notes on the class. As additional references, the following books can be helpful.

- *Advanced Macroeconomics* by David Romer covers similar topics.
- *Economic Growth* by Robert J. Barro and Xavier Sala-i-Martin covers more of the growth theory we will touch upon.
- *Foundations of International Macroeconomics* by Maurice Obstfeld and Kenneth Rogoff has great coverage of basic macro as well as the detail on international finance.
- *Understanding Consumption* by Angus Deaton covers the theory of consumption and saving.

Requirements: I will teach based on the assumption that you know the mathematical material in the first 12 chapters of Alpha Chiang's *Fundamental Methods of Mathematical Economics*. You need to be familiar with basic calculus, Lagrangians, dynamic optimization, and manipulations of integrals and summations.

Tests and Grading: The requirements for this class are homeworks and two tests:

- **Problem sets:** There will be one of these due pretty much every topic. If you wish to do well, you will do all the homework problems, probably more than once. Let's say that the homework will count for 30% of your overall grade.
- **Tests:** The midterm is **April 17st**, and the final is **June 12st**. The midterm will take place in class. The final is just after the end of the semester and will probably be about 2-3 hours. Let's call the midterm 35% and the final 35% of your grade.

Course Outline: I will making available lecture notes over the course of the semester. I hope that having these notes will allow students to spend less time writing and more time thinking and asking questions during lectures.

The course outline below lists the relevant chapters mainly from the Romer and Barro and Sala-i-Martin books and some chapters from the Obstfeld and Rogoff and Deaton books.

Chapter 1 Preliminaries

Chapter 2 Consumption and Saving

Romer, Chapter 8

Deaton, Chapter 1, 2, and 3

Chapter 3 The Solow Model

Romer, Chapter 1

Barro and Sala-i-Martin, Chapter 1

Chapter 4 Growth Models with Consumer Optimization

Romer, Chapter 2

Barro and Sala-i-Martin, Chapter 2 and 3

Chapter 5 Overlapping Generations

Romer, Chapter 2

Barro and Sala-i-Martin, Chapter 3

Chapter 6 Endogenous Growth

Romer, Chapter 3

Barro and Sala-i-Martin, Chapter 4 and 5

Chapter 7 The Open Economy and Growth

Barro and Sala-i-Martin, Chapter 3

Obstfeld and Rogoff , Chapter 2

Chapter 8 Real Business Cycles

Romer, Chapter 5

Chapter 9 Government Policy and Financing

Romer, Chapter 12