210A lays the theoretical groundwork for studying macroeconomic issues. We will begin by studying the basic growth facts and growth framework. As part of the theory, we will discuss various methods for continuous time dynamic optimization. We will then discuss discrete time models, including the basic Neoclassical model used to study business cycles and overlapping generations models.

Useful textbooks:

- David Romer, *Advanced Macroeconomics*, 3\textsuperscript{rd} edition.

Journal articles

Most of the journal articles are available on-line, from either jstor.org or other sources. Any required articles not available on-line will be made available for check-out in the graduate student lounge.

* indicates required reading.

Grades

20%: Problem Sets. You may work on these together, but must hand in your own write-up of the answers.

30%: Midterm Exam.

50%: Final Exam.
I. Introduction to Macroeconomics

A. The Big Questions

B. Brief History of Macroeconomic Thought

C. Optimal Control in Continuous Time


D. Differential Equations


II. Economic Growth

A. Growth Facts and Growth Accounting

Romer, Section 1.1

* Barro and Sala-i-Martin, “Introduction.”


Romer, Section 1.7


B. Solow-Swan Growth Model


Romer, Ch. 1.

* Barro and Sala-i-Martin, Ch. 1.
C. Ramsey Model

* Barro and Sala-i-Martin, Ch. 2

Romer, Sections 2.1-2.7.

D. Models with Endogenous Growth

* Barro and Sala-i-Martin, Chapter 4.


E. Empirical Tests


III. Discrete Time Dynamic Optimization

A. Time Series and Difference Equation Basics


Ljungqvist and Sargent, Chapter 2

B. Optimal Control and Dynamic Programming


Ljungqvist and Sargent, Chapters 3 and 4


IV. Discrete Time Neoclassical Model

A. Neoclassical Model with Endogenous Labor Supply


B. Neoclassical Model with Government Spending


V. Overlapping Generations Models

* Romer, Section 2.8-2.12

Blanchard and Fisher, Ch. 3