Advanced Macroeconomic Theory I

Econ. 2110
Fall 2005

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Texts

Available at Pitt Book Center:


On Reserve (in addition to the texts listed above):


Cambridge: Harvard University Press.


Textbook references in the syllabus are denoted in bold type.

Grades: Grades will be based on one midterm, homework assignments, and the final exam.
Syllabus

I. Introduction and Review of Structural-Equation Models

A. Introduction

B. Introduction to Stylized Facts
*Blanchard and Fischer* (1989), Chapter 1.

C. Review of Structural-Equation Models

D. Introduction to Production Functions

II. Nonstochastic Dynamics: Tools and Selected Examples

A. Neoclassical Growth Models

B. Background Tools: Difference Equations, Linear Systems, Linearization.
*Azariadis* (1993), Chapters 1, 2, 4, and 6.

C. Optimization and Economic Growth

D. The Maximum Principle and Dynamic Programming

E. Endogenous Growth
F. Poverty Traps

G. Introducing Market Distortions in Dynamic Programming Problems

H. Labor-Leisure Decisions in Optimal Growth Models

I. Time Inconsistency

III. Dynamic Uncertainty: Introduction with Selected Examples
A. Projection Theory
Sargent (1987a), Chapter X.

B. Difference Equations
Sargent (1987a), Chapter IX, Sections 1 - 2.

C. Stochastic Processes
Sargent (1987a), Chapter XI, Sections 1, 2, 6 (pp. 256-257), 13, 14, 15, 19, 24, 25.

D. Linear-Quadratic Dynamic Stochastic Optimization Problems: The Generic Problem and Its Solution

E. The Lucas Critique

F. Consumption and Asset Prices


G. Competitive Equilibria in Rational Expectations Problems


H. Empirical Work With Rational Expectations Models


IV. Additional Topics (Good sources of practice problems, additional background information for topics listed above, and additional topics not covered above.)

IVi. More Linear-Quadratic Dynamic Stochastic Optimization Problems

A. The Phillips Curve


B. "Optimal" (1970's) Policy and Observational Equivalence


C. Labor Demand


D. Labor Supply


E. Investment

*Sargent (1987a), Chapter XIV; Blanchard and Fischer (1989), Ch. 6; Romer (1996), Chapter 8;* Lucas, R.E., Jr. and Prescott, E. (1971) "Investment Under Uncertainty,"

F. Consumption and Asset Prices


G. Money Demand


IVii. Business Cycles and Policy Design Problems

A. Business Cycles


B. Government Debt


C. Time Inconsistency


IViii. Intertemporal Models with Money

A. Background: Overlapping Generations Models

B. OLG Models with Money


IViv. Endogenous Growth Models

A. Background: The Convergence Controversy


B. Endogenous Growth Models


IVv. More Stylized Facts in Macroeconomics

A. Background: Time Series Modelling


B. Stylized Facts