COURSE DESCRIPTION:

This course is the first of a two-module, second-semester graduate-core course in Advanced Macroeconomics, covering the first 6 weeks from January 14 to February 20 plus the 2nd week of April (14 and 16), with the second module covered by Professor Paco Buera (starting the last week of February). This module is devoted to fundamental as well as contemporary issues in growth theory and income distribution. It begins by reviewing the basics, followed by several advanced topics in macro dynamics, micro structures, as well as income, wealth and firm distribution and distributive politics. The main purpose of this course is to help you strengthen essential knowledge for Ph.D. learning and get ready for exploring the frontier of macroeconomic research should you elect to do so. Course materials of each week will be ready Monday morning at: https://sites.wustl.edu/pingwang/courses/macroeconomics-ll/.

GRADING:

Your overall performance will be assessed based on (i) three homework assignments (20% each, about every two weeks) and (ii) an exam (on February 28; 40%). No reschedule of the exam or deferral of homework will be given except medical or family emergency. Your course grade will be the simple average of the grades received from the two modules.

TEXTS: (recommended but not required)


In addition, the following books may be useful at various occasions for methodologies and fundamentals (no more than one or two chapters per book though):

- Infinite-horizon continuous-time optimization: AH, BF, BS, GH
- Infinite-horizon discrete-time optimization: BF, SL
- Overlapping generations framework: AZ, GR
- Computational dynamic models: LS


(BF) Blanchard, O. and S. Fischer (1990), Lectures in Macroeconomics, MIT Press.


TIMETABLE:

1/14 Tue  Lecture A-1: Exploring the World of Growth and Development
1/16 Thu  Lecture A-2: Foundations of Dynamic Macroeconomic Analysis
1/21 Tue  Lecture A-3: Endogenous Growth Theory
1/23 Thu  Lecture A-4: Endogenous Growth Theory (HW#1 distributed)
1/28 Tue  Lecture A-4: Endogenous Growth Theory (HW#1 due by 1:15 PM)
1/30 Thu  Lecture B-1: Technology and Growth
1/31 Fri  Lecture B-1, B-2: Technology, Human Capital and Growth (Makeup Class for 2/6, Time TBD)
2/4 Tue  Lecture B-2: Human Capital and Growth (HW#2 distributed)
2/6 Thu  no class/no office hours
2/11 Tue  Lecture B-3: Fertility Choice and Growth (HW#2 due by 1:15 PM)
2/13 Thu  Lecture B-4: Money, Finance and Growth
2/18 Tue  Lecture C-1: Income and Wealth Distribution
2/20 Thu  Lecture C-1: Income and Wealth Distribution (HW#3 distributed)
2/25 Tue  Lectures by Professor Buera Start (HW#3 due by 1:15 PM)
2/28 Fri  2-Hour Exam: Coverage A-3 to C-1 (Time TBD)
4/14 Tue  Lecture C-2: Firm Distribution (HW#3 due by 1:15 PM)
4/16 Thu  Lecture C-2. C-3: Firm Distribution, Institutions and Politics

READINGS: (* Required; + Recommended)

A.  Fundamentals in Growth Theory

1.  Stylized Facts and Growth Empirics

*(AC), ch. 1.
+(BS), chs. 1, 2.
+(BC), ch. 1, “Introduction: A Quick Reference to Growth Theory,”
   *Handbook of Economic Growth*, 1, 473-552.
2. Fundamentals: Aggregate Production, Representative Agent, Welfare Theorems and Central Planner, Infinite-Horizon Optimization (Dynamic Programming and Optimal Control), Growth with Overlapping Generations, and Stochastic Growth

*(AC), chs. 5 (representative agent, welfare theorems and central planning)
*(AC), chs. 6-7 & 9 (dynamic programming, optimal control and growth with overlapping generations)
+(AC), chs. 16-17, appendix A,B (stochastic dynamic programming and stochastic growth)
(AZ), chs. 7, 13 (basic growth models in discrete time with finite or infinite lifetime)
(BS), ch. 2 (Solow-Swan-Ramsey exogenous growth models)
(DR), ch. 2 (Solow-Swan-Ramsey exogenous growth models)
(BS), secs. 4.1-4.3 (introduction to endogenous growth theory – AK model & variations)
+(SL), chs. 3-5, 9-10.


3. Basic One-Sector Models: from Constant to Variable Returns

(AC), ch. 11.
(AH), ch. 5.
(BS), ch. 4.

4. Basic Multi-Sector Models: from Balanced to Nonbalanced Growth

(AH), ch. 10.
(BS), ch. 5.
(GH), chs. 3, 4.
5. Transitional Dynamics and Local Indeterminacy


B. Sources of Economic Growth

1. Technological Changes, Adoption and Long-Run Growth

*(AC), sec. 21.4.
(AC), chs. 15, 18.
(AH), chs. 2, 3.
(GH), chs. 3, 4, 11, 12.
2. Human Capital, Learning and Long-Run Growth

*(AC), secs. 10.3 & 10.8.
3. Fertility Choice, Demographic Transition and Long-Run Growth

+(AC), sec. 21.2.


4. Money, Finance and Long-Run Growth

(AC), secs. 21.1, 21.6.


C. Contemporary Issues in Income, Wealth and Firm Distribution and Distributive Politics

1. Income and Wealth Distribution


2. Firm Distribution, Growth and Cycles, and International Trade


3. Institutions and Politics

+(AC), chs, 22, 23.

(AH), ch. 9.

(DZ), ch. 8.


