Macroeconomics 210-A Fall 2005 Jaimovich

1 General Information

- Lectures are MW 8-9:20, room 300.
- Review section is F, 9-10:20.
- My office number is 227, Econ. Email: njaimovich@ucsd.edu.
- Class web page: http://www.econ.ucsd.edu/~njaimovi/teaching/graduate/graduatemacroI.html
- Office hours: Wed. 10:30-11:30 or by appointment
- TA: Andra Ghent. Email: aghent@ucsd.edu. Office hours: to be announced.
- The grades will be determined as follows. Problem Sets 30%, Midterm, 30%, Final 40%. There will be approximately 8 homeworks assignments. You are requested to work in teams of up to five students on these problem sets and one should be submitted per group.
- Dates for midterm and final: to be announced
- Textbook: Nancy L. Stokey and Robert E. Lucas, Jr., with Edward C. Prescott, *Recursive Methods in Economic Dynamics*, Harvard University Press.

2 Goals

Macroeconomics is about two things: (i) developing positive models that can help us understand key macroeconomic variables: employment, unemployment, interest rates, output, etc.; and (ii) using these model to make judgements about what policies the government should or not should not pursue. The purpose of this course is to study the tools needed to do research on (i) and (ii).

3 Outline

- 1. Introduction
- 2. A 2 Period Example
 - Production Economy
- 3. A Finite Horizon Maximization Problem
 - Social Planner Problem
 - Competitive Equilibrium
- 4. The Neoclassical Growth Model in Discrete Time I
 - Recursive Formulation
- 5. Theory of Dynamic Programming
 - Theory Part.
 - Matlab I: Value Function Iteration on the Computer.
- 6. The Neoclassical Growth Model in Discrete Time II
 - Decentralization and Definition of Competitive Equilibrium
 - The Basic Growth Model: Steady States
 - The Basic Growth Model: Dynamics
 - Solving Dynamic Models: Linearization Techniques
 - Matlab II: Solving the Model in the Computer
- 7. The Neoclassical Growth Model in Continuos Time
 - Hamiltonian in an IRTS example
- 8. Models with Uncertainty
 - Competitive Equilibrium Arrow Debreu Economy
 - A Short Overview of RBC Models
- 9. The Overlapping Generations Model
- 10. Optimal Policy
 - Ramsey Equilibrium
 - The Primal Approach
 - Time Inconsistency
- 11. Growth Models
 - Exogenous Growth: The Solow Growth Model and the Kaldor Facts
 - Endogenous Growth Models (AK, Jones-Manuelli, Romer)