

## Economics 205A

### Advanced Macroeconomic Theory

**Introduction:** This first course in the year-long sequence in macroeconomic theory for PhD students concentrates on the analytical techniques and basic frameworks of contemporary macroeconomics. The course will cover the basics of productivity growth, consumption, investment and savings, fiscal policy and asset market equilibrium.

**Requirements:** The course grade will be based on a midterm examination (35%), several problem sets (15%) and a final examination (50%). The purpose of these problem sets is to help you develop analytical tools and will be written to complement the lectures and readings.

You are allowed, indeed encouraged, to discuss and work with each other on problem sets, but you must write up your own answers and not copy from one another.

The midterm exam will be held in class on Thursday, November 3, 2016. The final exam is scheduled for Tuesday, December 6, 2016 at noon.

**Office Hours:** Mondays and Wednesdays 11:00-12:00 or by appointment, in Room 401E of Engineering 2.

**Students with disabilities:** UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, we would also like us to discuss ways we can ensure your full participation in the course. We encourage all students who may benefit from learning more about DRC services to contact DRC by phone at [831-459-2089](tel:831-459-2089) or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu).

**Readings:** Much of the required reading for the course is found in

Lars Ljungqvist and Thomas Sargent, *Recursive Methods of Macroeconomics*, third edition, MIT Press, 2012.

Additional texts you will or may find useful are

Blanchard, O. and S. Fischer, *Lectures on Macroeconomics*, MIT Press, 1989

Obstfeld, M. and K. Rogoff, *International Macroeconomics*, MIT Press, 1999

Stokey, N.L. and R.E. Lucas, Jr., *Recursive Methods in Economic Dynamics*, Harvard University Press, 1989

Wickens, M., *Macroeconomic Theory*, Second Edition, Princeton University Press, 2011

The optional non-textbook readings are available online.

On the reading list below, an asterisk denotes required readings. Additional textbook readings offer alternative explanations of the same material, and the recommended articles are a small offering of references on the subjects covered.

## **Course Outline**

### **I. General equilibrium modelling and growth**

#### **1. Command economy**

\*Wickens, chapter 2

Wickens, Mathematical Appendix, sections 17.1-17.5

Barro, R.J. and X. Sala-i-Martin, *Economic Growth*, McGraw-Hill, 2003, Appendix, A3.

#### **2. Decentralized economy**

\*Wickens, chapter 4

\*Blanchard and Fischer, chapter 2, pp. 39-52.

Abel, A.B., "Asset Prices under Habit Formation and Catching up with the Joneses," *American Economic Review*, 80, 1990, pp. 38-42.

Hall, R.E., "Stochastic Implications of the Life Cycle-Permanent Income Hypothesis: Theory and Evidence," *Journal of Political Economy*, 86, 1978, pp. 971-987.

Hansen, G.D. and R. Wright, "The Labor Market in Real Business Cycle Theory," *Federal Reserve Bank of Minneapolis Quarterly Review*, 16, 1992, pp. 2-12.

### **II. Fiscal Policy in the representative agent economy**

#### **1. Government debt and taxes**

\*Wickens, sections 5.1-5.3

\*Ljungqvist and Sargent, chapter 10 and sections 11.1-11.8

Angelitos, G-M., "Fiscal Policy with Non-contingent Debt and the Optimal Maturity Structure," *Quarterly Journal of Economics*, 117, 2002, pp. 1105-31.

Barro, R.J., "On the Determination of the Public Debt," *Journal of Political Economy*, 87, 1979, pp. 940-71.

#### **2. Optimal taxation**

\*Ljungqvist and Sargent, sections 16.1-16.8

Wickens, section 5.7 (pp. 112-125)

Lucas, R. E. and N. Stokey, "Optimal Monetary and Fiscal Policy in an Economy without Capital," *Journal of Monetary Economics*, 12, 1983, pp. 55-94.

### **III. Overlapping generations**

\*Ljungqvist and Sargent, sections 9.1-9.5

Wickens, section 6.3

\*Blanchard and Fischer, sections 3.1-3.2 and section 4.1

Diamond, P., "National debt in a neoclassical growth model," *American Economic Review* 55, 1965, pp. 1126-1150.

Tirole, J., "Asset Bubbles and Overlapping Generations," *Econometrica*, 53, 1985, pp. 1499-1528.

Weil, P., "Overlapping Families of Infinitely Lived Generations," *Journal of Public Economics*, 38, 1989, pp. 401-421.

### **IV. Dynamic programming and competitive equilibrium analysis**

#### **1. Competitive equilibrium under uncertainty**

\*Ljungqvist and Sargent, sections 8.1-8.7

Lucas, R.E., "Asset Prices in an Exchange Economy," *Econometrica*, 46, 1978, pp. 1429-46.

\*Obstfeld, M. and K. Rogoff, *International Macroeconomics*, MIT Press, 1999, sections 5.2-5.3

#### **2. Dynamic programming and recursive equilibrium**

\*Ljungqvist and Sargent, chapters 3 and 4.

Ljungqvist and Sargent, sections 17.1-17.7 and 18.1-18.6 (as time permits)