

## ECON 714: Macroeconomic Theory II (Updated 2/27/09)

**Professor:** Noah Williams

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Office hours: 2:30-3:30 Tuesday, or by appointment.

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**Course Schedule:**

Lectures: Section 1 – Monday and Wednesday from 9:30-10:45, 6240 Social Sciences

Section 2 – Monday and Wednesday from 11:00-12:15, 6101 Social Sciences

All course documents and communication will also be on the class web page:

<http://www.ssc.wisc.edu/~nwilliam/Econ714>

Requirements for this portion of the class include attendance at the lectures, four problem sets (32% of grade), and a final (68% of grade). No late homework will be accepted. The final examination will take place in class on **March 11**.

**Discussion Schedule:**

12:05 PM Fridays, 6113 Social Sciences

1:20 PM Fridays, 6117 Social Sciences

2:25 PM Fridays, 4322 Social Sciences

**Schedule and Reading List**

There are no required textbooks for the course, but we'll use some of the following books:

Ljungqvist, Lars and Thomas J. Sargent. (2004) *Recursive Macroeconomic Theory*. MIT Press, Cambridge. 2<sup>nd</sup> Edition. (LS)

Stokey, Nancy L. and Robert E. Lucas, Jr. with Edward C. Prescott (1989) *Recursive Methods in Economic Dynamics*. Harvard University Press, Cambridge. (SLP)

Walsh, Carl E. (2003) *Monetary Theory and Policy*. MIT Press, Cambridge. 2<sup>nd</sup> Edition.

In addition, many of the journal articles cited below can be found on-line through various sources such as ScienceDirect and JSTOR.

## Schedule

This is subject to change. Check the class web page for updates.

1/21	Discrete time dynamic optimization and consumption-savings problems
1/26	Dynamic programming
1/28	Discrete time dynamic stochastic optimization
2/2	Implications for consumption dynamics
2/4	General equilibrium under uncertainty and infinite horizon models
2/9	Competitive equilibria in endowment economies and asset pricing
2/11	Neoclassical growth model
2/16	Dynamics of optimal trajectories and applications
2/18	Fiscal policy in the growth model: Ricardian equivalence and effects of G
2/23	Fiscal policy in the growth model: Optimal taxation
2/25	Stochastic growth model
3/2	Stochastic growth model and business cycles
3/4	Monetary models: currency in the utility function and cash in advance
3/9	Monetary models: search
3/11	<b>FINAL EXAM</b>

**Reading List.** More crucial readings are marked with a \*.

### **Dynamic programming and the savings problem.**

\*SLP, Chapter 4.

LS, Chapters 3-4.

### **Stochastic dynamic programming and the savings problem.**

\*SLP, Chapter 9.

\*LS, Chapter 16.

Schechtman, J. and V. L. S. Escudero (1977) "Some Results on 'An Income Fluctuation Problem,'" *Journal of Economic Theory*, 16: 151-166.

Chamberlain, Gary and Charles A. Wilson (2000) "Optimal Intertemporal Consumption under Uncertainty," *Review of Economic Dynamics*, 3: 365-395.

### **Infinite horizon models:**

\*LS, Chapter 8.

### **Endowment economies and asset pricing:**

\*LS, Chapter 13.

\*Cochrane, John H. (2001) *Asset Pricing*, Ch. 1, 2.

\*Lucas, Robert E., Jr. (1978) "Asset Prices in an Exchange Economy," *Econometrica*, 46: 1426-1445.

Mehra, Rajnish and Edward C. Prescott (1985) "The Equity Premium: A Puzzle," *Journal of Monetary Economics*, 15: 145-162.

### **Neoclassical growth model:**

\*Obstfeld and Rogoff (1996) *Foundations of International Economics*, Ch. 7.1

\*LS, Chapter 11.1-11.4, 11.9. 14.1-14.3, 14.5.

\*SLP, Chapter 2, 5.1. 6.1.

Cass, David (1965) "Optimum Growth in an Aggregative Model of Capital Accumulation," *Review of Economic Studies*, 32: 233-240.

### **Fiscal policy in the growth model:**

\*LS, Chapter 10, 15.1-15.7.

\*Chari and Kehoe (1999), "Optimal Fiscal and Monetary Policy," Ch. 26 of *Handbook of Macroeconomics* (J. Taylor and M. Woodford, eds.), especially Sec. 2.1-2.3

Lucas, Robert E., Jr. and Nancy L. Stokey (1983), "Optimal Fiscal and Monetary policy in an Economy without Capital," *Journal of Monetary Economics*, 12:55-93.

### **Stochastic growth and business cycles:**

\*Obstfeld and Rogoff, (1996) *Foundations of International Economics*, Ch. 7.4.

\*King and Rebelo (1999) "Resuscitating Real Business Cycles", Ch. 14 of *Handbook of Macroeconomics* (J. Taylor and M. Woodford, eds.), especially Sec. 3 and Appendix A.

\*LS, Ch. 12.

Brock, William A. and Leonard J. Mirman (1972) "Optimal Economic Growth and Uncertainty: The Discounted Case," *Journal of Economic Theory*, 4: 479-513.

Kydland, Finn and Edward C. Prescott (1982) "Time to Build and Aggregate Fluctuations," *Econometrica*, 50: 1345-1370.

### **Exogenous incomplete markets models**

\*LS, Chapter 17.

\*Ayagari, Rao (1994) “Uninsured Idiosyncratic Risk and Aggregate Saving,” *Quarterly Journal of Economics*, 109: 659-84.

Krusell, Per and Anthony A. Smith (1998) “Income and Wealth Heterogeneity in the Macroeconomy,” *Journal of Political Economy*, 106: 867-896.

### **Limited commitment and private information models**

\*LS, Chapters 19-20

\*Kehoe, Timothy J. and David K. Levine (2001) “Liquidity Constrained Markets versus Debt Constrained Markets,” *Econometrica*, 69: 575-598.

Alvarez, Fernando and Urban Jermann (2000) “Efficiency, Equilibrium, and Asset Pricing with the Risk of Default,” *Econometrica*, 68: 775-798.

\*Thomas, J. and T. Worrall (1990) “Income Fluctuations and Asymmetric Information: An Example of a Repeated Principal-Agent Problem,” *Journal of Economic Theory*, 51: 367-390.

Atkeson, Andrew and Robert E. Lucas (1992) “On Efficient Distribution with Private Information,” *Review of Economic Studies*, 59: 427-453.

### **Monetary models**

Currency in the utility function:

\*Walsh, Chapter 2

Shopping time and cash-in-advance models:

\*Walsh, Chapter 3,

LS, Chapter 24

Search models:

\*Walsh, Chapter 3.4.2

\*LS, Chapter 26.8

\*Wright, R. (2007) “Search-and-Matching Models of Monetary Exchange,” *The New Palgrave*, forthcoming.