ECON 712: Macroeconomic Theory

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Course Schedule:
Lectures: Monday and Wednesday from 1:00-2:15, Social Science 6104
All course materials will be on the class web page: http://www.ssc.wisc.edu/~nwilliam/Econ712
Requirements for this portion of the class include attendance at the lectures, four problem sets (20% of grade), two midterms (20% each) and a final (40%). No late homework will be accepted. The midterms will be in class on October 1 and November 19, and the final will be in class on December 10.

Schedule of topics:
1. The role of expectations
2. Search models of unemployment
3. Search equilibrium
4. Consumption-savings problem under certainty
5. Deterministic dynamic programming
6. Consumption-savings problem under uncertainty
7. The neoclassical growth model (Prof. Fukushima)
8. Continuous time optimization and applications
9. Stochastic dynamic programming
10. Recursive competitive equilibrium
11. Asset pricing
12. The real business cycle model
13. Incomplete markets
14. Continuous time stochastic processes and optimization
15. Monetary models: currency in the utility function and cash-in-advance
16. Monetary models: search
17. The New Keynesian model

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

Subject to change, check the class web page for updates. More crucial readings are marked *. Most of the journal articles can be found on-line through various sources.

The role of expectations:


Unemployment search models:
*LS, Chapter 6


Consumption-savings problems:
*LS, Chapter 16


Dynamic programming and the savings problem.
*SLP, Chapter 4.
LS, Chapters 3-4.

Continuous time optimization and applications


Stochastic dynamic programming and the savings problem.
*SLP, Chapter 9.
*LS, Chapter 16.


**Endowment economies and asset pricing:**
*LS, Chapters 8, 13.


**Neoclassical growth model:**

*SLP, Chapter 2, 5.1. 6.1.


**The real business cycle model:**

*LS, Ch. 12.


**Incomplete markets models**
*LS, Chapter 17.


Continuous time stochastic processes and stochastic control


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

The New Keynesian model
*Walsh, Chapter 5.4, 11

Woodford, *Interest and Prices*, Chapter 3.1-3.2, 4.1