**Economics 817** **Winter 2004**
**Advanced Macroeconomic Theory II** **Hiroyuki Kasahara**

# Course Outline and Readings

*Required Readings

1. Dynamic Programming. (6 Weeks)
    - Mathematical Preliminaries: Stokey and Lucas (1989, Ch.3)*, Ljungqvist and Sargent (2000, Ch.20), Sundaram (1996, Ch.9, 10, 12, Appendix C)
    - Dynamic Programming under Certainty: Stokey and Lucas (1989, Ch.4.1-4.2, Ch.5.1)* and Ljungqvist and Sargent (2000, Ch.2)
    - Markov Process: Stokey and Lucas (1989, Ch.8.1, Ch.11.1)* and Ljungqvist and Sargent (2000, Ch.1)
    - Stochastic Dynamic Programming: Stokey and Lucas (1989, Ch.9.1-9.2, Ch.10.1)*
    - Numerical Dynamic Programming: Ljungqvist and Sargent (2000, Ch.3)*, Judd (1998, Ch.12)*, Rust (1996)
2. Incomplete Insurance and Heterogenous Agents (2 Weeks)
    - A Savings Problem: Ljungqvist and Sargent (2000, Ch. 14)*, Hugget (1993)*, Aiyagari (1994)*,
    - Heterogenious Agents: Krusell and Smith (1998), Rios-Rull (1995, 1999)
3. Search and Matching (4 Weeks)
    - Matching Model of Unemployment with Nash Barganing: Ljungqvist and Sargent (2000, Ch.19)*, Mortensen and Pissarides (1994)*, Acemoglu (2001), Pissarides (2000)
    - Wage Posting: Moen (1997)*, Acemoglu and Shimer (2000)
4. Investment (3 Weeks)
    - Principle of Maximum (Hamiltonian): Dixit (1990) and Kamien and Schwartz (1991)
    - The Q-theory: Romer (1996, Ch.8)*, Hayashi (1982)
    - Non-Convex Cost: Cabarello (1999)*, Cabarello and Engel (1999), Cooper and Haltiwanger (2001)*.

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