# Tel Aviv University - The Eitan Berglas School of Economics

### Spring semester, 2017

# Macroeconomic Theory B (1011.4108)

**Lectures**: Ofer Setty, <u>ofer.setty@gmail.com</u>, office hour: Tuesday, 10:30-11:30 AM, or by appointment.

**Recitations**: Alon Rabinowicz, <u>alon.rabinowicz@gmail.com</u>, office hour: by appointment.

#### **Course description**

We will discuss major issues in the macroeconomics, the models that allow to analyze them, and methods to solve these models. Most of the discussion will be based on solving dynamic problems. A typical discussion will include: presentation of the problem, the model used to solve it, the solution method and the implications of the results.

#### Textbook:

*Recursive Macroeconomic Theory*,  $3^{nd}$  edition, 2012, by Lars Ljungqvist and Thomas Sargent (LS3). Since most of the copies in the library are of the  $2^{nd}$  edition (2004) references below will be given to the  $2^{nd}$  edition as well.

#### **Requirements:**

The course grade will be based on the exam (75%), exercises (10%) and computational work (15%).

- **Exercises**: There will be about 10 exercises. Submission of exercises is mandatory. Each exercise will be checked and returned. The exercises will be discussed in the recitations.
- **Computational work:** The computational work will be discussed in class. It can be done in pairs.

#### Website:

#### http://www.tau.ac.il/~ofers/teaching.html

### Topics:

The course topics can be broadly divided into four categories. References are given to the second and third editions of the text book, LS2 and LS3 respectively and to the initials of the writers of papers that are listed below.

- 1. Foundations (LS2.3, LS3.3)
  - a. Dynamic optimization
  - Technical concepts
  - Dynamic optimization with finite horizon
  - Dynamic optimization with infinite horizon
  - Solution methods
- 2. Macro labor models
  - a. The basic sequential search model: McCall (LS2.6, LS3.6, M)
  - b. A model of career choice (LS2.6, LS3.6, N)
  - c. A lake model (LS2.6, LS3.6, BD)
  - d. Lucas Prescott Islands model (LS2.26, LS3.28, LP2)
  - e. Search and matching (LS2.26, LS3.28, P, H, S)
- 3. Heterogeneity in macro models
  - a. Complete markets (LS2.8, LS3.8, Arrow)
  - b. Self-insurance (LS2.16, LS3.17)
  - c. Incomplete markets models (LS2.17, LS3.18, Aiyagari, HSV)
  - d. Life cycle economies (STY)
  - e. Aggregate risk (LS2.17, LS3.18, KS)
- 4. Other topics depending on time remaining
  - a. Asset pricing (LS2.13, LS3.13, MP)
  - b. Ramsey taxation (LS2.15, LS3.16, C, MWY)
  - c. Industry equilibrium (LS2.26.6, LS3.28.8, HR)
  - d. Foundations of labor supply (LS3.29)
  - e. Optimal UI (SW, HN, FH, LS2.21, LS3.22)

Papers (additional papers may be assigned during the semester)"

- 1. Aiyagari, S. Rao. 1994. "Uninsured Idiosyncratic Risk and Aggregate Saving." Quarterly Journal of Economics, Vol. 109(3), pp. 659–684. (Aiyagari)
- 2. Arrow, Kenneth J. 1964. "The Role of Securities in the Optimal Allocation of Risk-Bearing." Review of Economic Studies, Vol. 31, pp. 91–96. (Arrow)
- 3. Blanchard, Olivier Jean and Peter Diamond (1992) "The Flow Approach to the Labor Market", American Economic Review, 82:2, 354-59. (BD)
- 4. Chamley, Christophe. 1986. "Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives." Econometrica, Vol. 54(3), pp. 607–622. (C)
- 5. Fredriksson, P., Holmlund, B., 2001. Optimal Unemployment Insurance in Search Equilibrium. Journal of Labor Economics 19(2), 370–99. (FH)
- 6. Heathcote, J., Storesletten, K., Violante, G.L., 2009. Quantitative Macroeconomics with Heterogeneous Households. Annual Review of Economics 1, 319–354. (HSV)
- 7. Hopenhayn, Hugo A., and Juan Pablo Nicolini. 1997. "Optimal Unemployment Insurance." Journal of Political Economy, Vol. 105(2), pp. 412–438. (HN)
- Hopenhayn, Hugo, and Richard Rogerson. 1993. "Job Turnover and Policy Evaluation: A General Equilibrium Analysis." Journal of Political Economy, Vol. 101, pp. 915–938. (HR)
- 9. Hosios, Arthur (1989) "On the Efficiency of Matching and Related Models of Search and Unemployment," Review of Economic Studies, 57:2, 279-98. (H)
- 10. Krusell, Per, and Anthony Smith. 1998. "Income and Wealth Heterogeneity in the Macroeconomy." Journal of Political Economy, Vol. 106(5), pp. 867–896. (KS)
- 11. Lucas, Robert E., Jr., and Edward C. Prescott. 1974. "Equilibrium Search and Unemployment." Journal of Economic Theory, Vol. 7(2), pp. 188–209. (LP2)
- 12. Mankiw, N.G., Weinzierl, M., Yagan, D., 2009. Optimal Taxation in Theory and Practice. Journal of Economic Perspectives 23, 147–74. (MWY)
- 13. McCall, John J. 1970. "Economics of Information and Job Search." Quarterly Journal of Economics, Vol. 84(1), pp. 113–126. (M)
- 14. Mehra R. and E. Prescott, (1985) "The equity premium puzzle," Journal of Monetary Economics, 15. (MP)
- 15. Neal, Derek. 1999. "The Complexity of Job Mobility among Young Men." Journal of Labor Economics, Vol. 17(2), pp. 237–261. (N)
- 16. Krueger, Dirk, Kurt Mitman and Fabrizio Perri. Forthcoming. "Macroeconomics and Heterogeneity, Including Inequality," in preparation for the Handbook of Macroeconomics, Vol 2.
- 17. Pissarides, Christopher (2000): Equilibrium Unemployment Theory, MIT Press, chapter 1. (P)
- Shavell, Steven, and Laurence Weiss. 1979. "The Optimal Payment of Unemployment Insurance Benefits Over Time." Journal of Political Economy, Vol. 87, pp. 1347–1362. (SW)
- 19. Shimer, R., 2005. The Cyclical Behavior of Equilibrium Unemployment and Vacancies. American Economic Review 95, 25–49. (S)
- Storesletten, Kjetil, Chris Telmer, and Amir Yaron. 2004. "Consumption and risk sharing over the life cycle," Journal of Monetary Economics, April 2004, Vol. 51, pp. 609-633. (STY)