

## Syllabus: EUI Macroeconomics II – subsection “Labor Search”, 2019

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Overview: This half-course in the macro core sequence will introduce the basic concepts of labor search. It will explain the difference between “stocks” and “flows” and the most common tools in understanding labor flows.

The first lectures

- will study the problem of an individual worker searching for a job. It will explain the relevant dynamic programming both in discrete and in continuous time.
- Subsequently we will study the flow equations when there are many workers, and describe the distribution of workers over wages.
- Finally we will study wage setting by firms, including the Diamond Paradox and wage dispersion for heterogeneous workers when search on the job is allowed.

The second set of lectures will introduce

- The Diamond-Mortensen-Pissarides Model with wage bargaining. We will carefully introduce the matching function, and derive the steady state conditions for wage formation and unemployment.
- We will briefly talk about efficiency and the “Hosios” condition. In this context we might study the related model of Competitive Search.
- We will then briefly consider the properties over the business cycle including the “Shimer Paradox”.

If there is time, the course will conclude with a brief outlook at large firms in labor markets. The syllabus is tentative and might be adapted based on the interest of the students and the skills they bring to the class. In particular the timing is not set in stone but will depend on the speed at which progress is made in class.

Reading list (will possibly be extended/alterd in the actual lecture):

Lecture 1 – 4 :

Randall Wright, lecture notes on “Job Search Theory”.

Burdett, Kenneth and Dale Mortensen, 1998, “Wage Differentials, Employer Size, and Unemployment,” *International Economic Review*, 39, issue 2, pages 257-73.

Andreas Hornstein, Per Krusell and Giovanni L. Violante (2011) “Frictional Wage Dispersion in Search Models: A Quantitative Assessment”, *American Economic Review*, Vol. 101, No. 7, pp. 2873-2898

Lecture 5 - 7:

Christopher Pissarides, *Equilibrium Unemployment Theory*, MIT Press 2000.

Julien, Benoit, Philipp Kircher, Randall Wright, and Veronica Guerrieri, "Directed Search – A Guided Tour", mimeo.

Shimer, Robert, 2005, "The Cyclical Behaviour of Equilibrium Unemployment and Vacancies", *American Economic Review*, 95 (1), 25-49.

Hagedorn, Marcus, and Iourii Manovskii. 2008. "The Cyclical Behavior of Equilibrium Unemployment and Vacancies Revisited." *American Economic Review* 98 (4):1692-1706.

Hall, Robert. 2005 "Employment Fluctuations with Equilibrium Wage Stickiness," *American Economic Review*, 95(1), pp. 50-65.

Shimer, Robert. 2004, "The Consequences of Rigid Wages in Search Models," *Journal of the European Economic Association* (Papers and Proceedings), 2: 469-479, 2004.

If time:

Kaas, Leo and Philipp Kircher. 2015. "Efficient Firm Dynamics in a Frictional Labor Market." *American Economic Review*, 105(10): 3030-60