

**UNIVERSITY OF TORONTO  
DEPARTMENT OF ECONOMICS**

**ECO2021H1, Fall 2020**

**Course Information**

Instructor: Ronald Wolthoff

E-mail: ronald.wolthoff@utoronto.ca

Office hours: Friday 9:10 – 10:00 (or by appointment); online synchronous via Zoom

Class: Mon 9.10 – 11.00, Wed 9.10 – 11.00; online synchronous via Zoom

TA: Frank Leenders (frank.leenders@mail.utoronto.ca)

Tutorial: Thu 16.10 – 18.00; online synchronous

**Description**

This course will cover equilibrium models of markets with frictions.

**Evaluation**

Your grade will be determined by the final exam (80%) and two homework assignments (10% each).

**Tentative Course Outline** (subject to change)

Class dates: October 28; November 2, 4, 16, 18, 23, 25, 30; December 2, 7, 9, 10.

Exam: TBA

The class will cover a selection of the following topics. Additional topics may be added if time permits.

- Background Material: Dynamic programming; Poisson processes; (continuous-time) Bellman equations; continuous-time optimization; Nash bargaining; HP filter.
- Moral Hazard in the Labor Market: Chapter 9.1-9.4 of Romer, Shapiro and Stiglitz (1984).
- Indivisible Labor: Hansen (1985), Rogerson (1988).
- Search Frictions
  - Search Models: Lucas and Prescott (1974), Pissarides (1985), Mortensen and Pissarides (1994), Chapter 1 and 2 of Pissarides (2000).
  - Efficiency: Hosios (1990), Moen (1997).
  - Business Cycles / Unemployment-Volatility Puzzle: Shimer (2005), Hagedorn and Manovskii (2008), Menzies and Shi (2011).
- Private Information in Asset Markets: Guerrieri et al. (2010), Chari et al. (2011), Guerrieri and Shimer (2012), Chang (2018)

## Notice of video recording and sharing

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor. For questions about recording and use of videos in which you appear please contact your instructor.

## References

- Chang, B. (2018). Adverse selection and liquidity distortion. *Review of Economics Studies*, 85(1):275–306.
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- Guerrieri, V., Shimer, R., and Wright, R. (2010). Adverse selection in competitive search equilibrium. *Econometrica*, 78(6):1823–1862.
- Hagedorn, M. and Manovskii, I. (2008). The cyclical behavior of equilibrium unemployment and vacancies revisited. *American Economic Review*, 98:1692–1706.
- Hansen, G. D. (1985). Indivisible labor and the business cycle. *Journal of Monetary Economics*, 16(3):309–327.
- Hosios, A. K. (1990). On the efficiency of matching and related models of search and unemployment. *Review of Economic Studies*, 57:279–298.
- Lucas, R. E. and Prescott, E. C. (1974). Equilibrium search and unemployment. *Journal of Economic Theory*, 7(2):188–209.
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- Mortensen, D. T. and Pissarides, C. A. (1994). Job creation and job destruction in the theory of unemployment. *Review of Economic Studies*, 61:397–415.
- Pissarides, C. A. (1985). Short-run equilibrium dynamics of unemployment, vacancies and real wages. *American Economic Review*, 75:676–690.
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- Shimer, R. (2005). The cyclical behavior of equilibrium unemployment and vacancies. *American Economic Review*, 95(1):25–49.