## FINANCIAL ECONOMICS

Spring 2025
Master in Economics
Washington University in St. Louis

Instructor Julian Kozlowski

Office Seigle 315E

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Time Mondays 4:00-6:50 pm

Venue Siegle 204

Office Hours After class

Teaching Assistant Marcos Correa Maldonado

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Course description: This course provides an introduction to financial economics. We start with the basic macro-finance frameworks and follow up with special topics such as bank runs, financial crisis, and liquidity.

Materials: A textbook reference is Recursive Macroeconomic Theory by Ljungqvist and Sargent (chapter numbers refer to the 4th edition). We will also use additional papers or lecture notes for the second part of the course. Course announcements will be posted on Canvas. All course materials will be posted on Canvas. Additional reading materials (aside from the textbook) are listed below and are accessible at the library.

**Grading:** The course evaluation has four components:

- 1. 10% of the grade consist on class participation. Hence, attendance and participation is encouraged. Attending a class without participating won't give full credit.
- 2. 30% of the grade consist on the problem sets.
- 3. 60% of the grade consist of the first and second mid-term exams (30% each one).

If you miss a mid-term exam you cannot retake it, and you do need to provide an approved excuse. In this case your mid-term exam grades will be based on your other mid-term grade. If you miss both mid-terms you get 0 points for the midterms portion.

**Problem sets:** The problem sets are designed to help you prepare for the mid-term exams. You will complete these assignments in groups. During the first week of class, we will form the groups that you will work with throughout the course. Each group can have up to three students.

## Schedule:

- January 13. Introduction to Macro-Finance. Macro-Finance trends, the global financial crisis, and the COVID crisis.
  - References: Farhi and Gourio (2018); Ebsim, Faria-e Castro, and Kozlowski (2022).
  - Problem set #1 (Macro-Finance data).
- January 27. Competitive equilibrium.
  - References: LS Ch. 7.
  - Problem set #2 (competitive equilibrium).
- February 3. Complete Markets.
  - References: LS Ch. 8.
  - Problem set #3 (complete markets).
- February 10. Incomplete Markets.
  - References: LS Ch. 18.
  - Problem set #4 (incomplete markets).
- **February 17.** Asset pricing.
  - References: LS Ch 13, 14.
- February 24. Asset pricing and mid-term review.
  - References: LS Ch 13, 14.
  - Problem set #5 (asset pricing).
- March 3. First mid-term exam.
- March 10: No classes, spring break.
- March 17. Mid-term overview and Compustat.
  - Overview of mid-term exam solution.
  - Practice class: An introduction to Compustat (by Marcos)
  - Problem set #6 (Compustat).
- March 24. CAPM.
- March 31. Bank runs and credit market frictions.
  - Diamond and Dybvig (1983), Kurlat's notes.
  - Modigliani-Miller
  - Costly state verification, Townsend (1979)

- Supply of liquidity, Holmström and Tirole (1998)
- Problem set #7 (credit market frictions).
- References: Townsend (1979); Holmström and Tirole (1998) and Kurlat's notes.
- April 7. Information in Macroeconomics and Finance.
  - The market for lemons, Akerlof (1970)
  - Bayesian updating
  - Learning from prices, Grossman and Stiglitz (1980)
  - Problem set #8 (information in macroeconomics and finance).
  - References: Veldkamp (2011); Baley and Veldkamp (2025) and Kurlat's notes.
- April 14. Search in financial markets, and liquidity in macroeconomics and finance. Midterm review.
  - References: Duffie, Gârleanu, and Pedersen (2005); Kozlowski (2021); Ebsim, Faria-e Castro, and Kozlowski (2022); Caramp, Kozlowski, and Teeple (2022).
- April 21. Second mid-term exam.

## References

- Akerlof, G. A. (1970, 08). The Market for "Lemons": Quality Uncertainty and the Market Mechanism\*. The Quarterly Journal of Economics 84(3), 488–500.
- Baley, I. and L. L. Veldkamp (2025). The Data Economy: Tools and Applications. Princeton University Press.
- Caramp, N., J. Kozlowski, and K. Teeple (2022). Liquidity and investment in general equilibrium. Technical report, working paper FRB of St. Louis.
- Diamond, D. W. and P. H. Dybvig (1983). Bank runs, deposit insurance, and liquidity. *Journal of political economy* 91(3), 401–419.
- Duffie, D., N. Gârleanu, and L. H. Pedersen (2005). Over-the-counter markets. *Econometrica* 73(6), 1815–1847.
- Ebsim, M., M. Faria-e Castro, and J. Kozlowski (2022). Credit and liquidity policies during large crises. Technical report, working paper FRB of St. Louis.
- Farhi, E. and F. Gourio (2018). Accounting for macro-finance trends: Market power, intangibles, and risk premia. *Brookings Papers on Economic Activity*, 147–223.
- Grossman, S. J. and J. E. Stiglitz (1980). On the impossibility of informationally efficient markets. The American Economic Review 70(3), 393–408.
- Holmström, B. and J. Tirole (1998). Private and public supply of liquidity. *Journal of political Economy* 106(1), 1–40.
- Kozlowski, J. (2021). Long-term finance and investment with frictional asset markets. *American Economic Journal: Macroeconomics* 13(4), 411–448.
- Ljungqvist, L. and T. J. Sargent (2018). Recursive macroeconomic theory. MIT press.
- Townsend, R. M. (1979). Optimal contracts and competitive markets with costly state verification. Journal of Economic theory 21(2), 265–293.
- Veldkamp, L. L. (2011). Information choice in macroeconomics and finance. Princeton University Press.