

SYLLABUS

Readings:

The reference books for this course are

L. Ljungqvist and T. J. Sargent, *Recursive Macroeconomic Theory*. Third edition. The MIT Press, 2012.

N. L. Stokey and R. E. Lucas with E. C. Prescott, *Recursive Methods in Economic Dynamics*. Harvard University Press, 1989.

Both are important references and are probably worth buying now for future use. Do not worry if they seem very difficult to you at this stage. Copies of some of the other readings will be available on the course web site: <http://www.econ.umn.edu/~tkehoe/classes/8105-23.html>.

Office Hours:

Wednesdays, 9:00–10:00 am on Zoom. You will receive a link to a sign-up spreadsheet via Google Sheets. Some weeks, office hours will be on a different day than Wednesday. Check on the sign-up spreadsheet. If you need to meet at some other time, please do not call me at home; send me an e-mail message at tkehoe@umn.edu.

Assignments:

There will be five problem sets, a midterm, and a final. In addition to analytical work, some problem sets will require you to write a computer program in Matlab, Fortran, C++, Gauss, Julia, Python, or some such language. All assignments must be completed in order to receive a final grade for the course.

Teaching Assistant:

The teaching assistant is Matteo Chequer. His e-mail address is chequ001@umn.edu, his phone number is 612-282-7499, and his office is Herbert Hanson Hall 3-155. Matteo has tentatively scheduled his office hours for Wednesday afternoons 2:00–4:00 pm.

Grading:

Each problem set mark will be counted once and the final will be counted twice. The lowest of these marks will be dropped and the remaining marks averaged. Notice that this means that, if the lowest mark is that of the final, its weight will be halved, but it will not be completely dropped. The midterm will be counted only if doing so improves the overall grade.

Late Policy:

Any late assignment will be penalized 10 (out of 100) points for each class period it is late, up to a maximum of 40 points.

Cooperation on Assignments:

Students are permitted (and encouraged) to discuss the answers to problem sets together. Copying from another student's answers is not allowed.

List of Topics:

1. Introduction to Dynamic General Equilibrium

T. J. Kehoe, "Intertemporal General Equilibrium Models," in F. H. Hahn, editor, *The Economics of Missing Markets, Information, and Games*. Claredon Press, 1989, 363–393.

Stokey-Lucas-Prescott, Chapters 2, 3, 4.

2. Overlapping Generations Economies

P. A. Diamond, "National Debt in a Neo-Classical Growth Model," *American Economic Review*, 55 (1965), 1126–1150.

T. J. Kehoe, "Intertemporal General Equilibrium Models," in F. H. Hahn, editor, *The Economics of Missing Markets, Information, and Games*. Claredon Press, 1989, 363–393.

T. J. Kehoe and D. K. Levine, "Comparative Statics and Perfect Foresight in Infinite Horizon Economies," *Econometrica*, 53 (1985), 433–453.

T. J. Kehoe and D. K. Levine, "The Economics of Indeterminacy in Overlapping Generations Models," *Journal of Public Economics*, 42 (1990), 219–243.

D. Gale, "Pure Exchange Equilibrium of Dynamic Economic Models," *Journal of Economic Theory*, 6 (1973), 12–36.

G. D. Hansen, "The Cyclical and Secular Behaviour of the Labour Input: Comparing Efficiency Units and Hours Worked," *Journal of Applied Econometrics*, 8 (1993), 71–80.

Ljungqvist-Sargent, Chapter 9.

P. A. Samuelson, "An Exact Consumption Loan Model of Interest, With or Without the Social Contrivance of Money," *Journal of Political Economy*, 66 (1958), 467–482.

Stokey-Lucas-Prescott, Chapter 17.

N. Wallace, "The Overlapping Generations Model of Fiat Money," in J. H. Kareken and N. Wallace, editors, *Models of Monetary Economies*, Federal Reserve Bank of Minneapolis, 1980.

3. The Neoclassical Growth Model

N. Kaldor, "Capital Accumulation and Economic Growth," in F. A. Lutz and D. C. Hague, editors, *The Theory of Capital*, St. Martin's Press, 1961, 177–222.

T. J. Kehoe, “Calibrating the Growth Model.”

T. J. Kehoe and Kim J. Ruhl, “Why Have Economic Reforms in Mexico Not Generated Growth?” *Journal of Economic Literature*, 48 (2010), 1005–1027.

R. E. Lucas, “On the Mechanics of Economic Development,” *Journal of Monetary Economics*, 22 (1988), 3–42.

R. M. Solow, *Growth Theory: An Exposition*. Oxford: Clarendon Press, 1970.

4. Dynamic Programming

Ljungqvist-Sargent, Chapters 1, 3, 4.

Stokey, Lucas, Prescott, Chapters 5, 6, 8, 9.

5. Search, Matching, and Unemployment

Ljungqvist-Sargent, Chapter 6.

Stokey-Lucas-Prescott, Chapter 10.

D. T. Mortensen and C. A. Pissarides “Job Creation and Job Destruction in the Theory of Unemployment,” *Review of Economic Studies*, 61 (1994), 397–415.

6. Crises and Great Depressions

R. Bergoeing, P. J. Kehoe, T. J. Kehoe, and R. Soto, “A Decade Lost and Found: Mexico and Chile in the 1980s,” in T. J. Kehoe and E. C. Prescott, editors, *Great Depressions of the Twentieth Century*, Federal Reserve Bank of Minneapolis, 2007, 217–256.

H. L. Cole and L. E. Ohanian, “A Second Look at the Great Depression in the United States From A Neoclassical Perspective,” in T. J. Kehoe and E. C. Prescott, editors, *Great Depressions of the Twentieth Century*, Federal Reserve Bank of Minneapolis, 2007, 21–58.

J. C. Conesa, T. J. Kehoe, and K. J. Ruhl, “Modeling Great Depressions: The Depression in Finland in the 1990s,” in T. J. Kehoe and E. C. Prescott, editors, *Great Depressions of the Twentieth Century*. Federal Reserve Bank of Minneapolis, 2007, 427–475.

T. J. Kehoe and E. C. Prescott, “Great Depressions of the Twentieth Century,” in T. J. Kehoe and E. C. Prescott, editors, *Great Depressions of the Twentieth Century*, Federal Reserve Bank of Minneapolis, 2007, 1–20.

T. J. Kehoe and K. J. Ruhl, “Sudden Stops, Sectoral Reallocations, and the Real Exchange Rate,” *Journal of Development Economics*, 89 (2009), 235–249.

T. J. Kehoe, K. J. Ruhl, and Joseph B. Steinberg, “Global Imbalances and Structural Change in the United States,” *Journal of Political Economy*, 126 (2018), 761–796.

Please note: We will cover topics 1-4 for sure. We will not have time to do both topic 5 and topic 6, but I hope to have time to do one of these topics.