MACROECONOMIC THEORY ECON 8105

SYLLABUS

Readings:

The reference books for this course are

L. Ljungqvist and T. J. Sargent, *Recursive Macroeconomic Theory*. Second edition. The MIT Press, 2004.

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. I will also be discussing material from

T. J. Kehoe and E. C. Prescott, editors, *Great Depressions of the Twentieth Century*, Federal Reserve Bank of Minneapolis, 2007.

Copies of some of the other readings will be available on the course web site: http://www.econ.umn.edu/~tkehoe/classes/8105-12.html.

Office Hours:

Tuesday, 9:00 am - 10:30 am at 4-175 Herbert M. Hanson Jr. Hall, 612-625-1589. There is a sign-up sheet outside my door. 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 four or 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, 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 Zhifeng Cai, 3-131 Herbert M. Hanson Jr. Hall, 612-625-7369, caixx162@umn.edu. His office hours are on Friday, 9:00 am – 11:00 am. His web site is http://zhifengcai.weebly.com/.

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.

CLA Guidelines for Defining Scholastic Dishonesty:

The University Student Conduct Code defines scholastic dishonesty as follows:

Scholastic Dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.

Scholastic dishonesty includes, but is not limited to, the description above. It could also be said that scholastic dishonesty is any act that violates the rights of another student with respect to academic work or that involves misrepresentation of a student's own work. Also included would be cheating on assignments or examinations, inventing or falsifying research or other findings with the intent to deceive, submitting the same or substantially similar papers (or creative work) for more than one course without consent of all instructors concerned, depriving another of necessary course materials, and sabotaging another's work. (*CLA Classroom, Grading & Examination Procedures*, http://advisingtools.class.umn.edu/cgep/studentconduct.html.)

Penalties for scholastic dishonesty of any kind will entail an "F" for the particular assignment/exam or the course.

List of Topics:

1. Introduction to Dynamic General Equilibrium

T. J. Kehoe, "Intertemporal General Equilibrium Models," in F. 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. 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. Business Cycles

T. F. Cooley and E. C. Prescott, "Economic Growth and Business Cycles," in T. F. Cooley, editor, *Frontiers of Business Cycle Research*, Princeton University Press, 1995, 1–38.

R. J. Hodrick and E. C. Prescott, "Postwar U.S. Business Cycles: An Empirical Investigation," *Journal of Money, Credit, and Banking*, 29 (1997), 1–16

F. E. Kydland and E. C. Prescott, "Time to Build and Aggregate Fluctuations," *Econometrica*, 50 (1982), 1345–1370.

7. 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, "A Sudden Stop to the Savings Glut and its Impact on the U.S. Economy," Federal Reserve Bank of Minneapolis.

Please note: We will cover topics 1-5 for sure. We will not have time to do all of topics 6 and 7. I hope to cover at least one of these two topics.