Theme: This course will cover solution methods for nonlinear models and solution methods for a class of heterogeneous agent models. We will also cover a variety of topics in macroeconomics.

Course Requirements: complete homework assignments, make class presentations, and write an overview paper on a topic of interest to you. You will make 2 presentations of about 15 minutes on a paper of interest. We will then have a class discussion about the paper. The overview paper provides a summary of what has been done on a specific topic, and lists what has not been done, and closes with your ideas of how you can contribute to the literature on this topics.

Homework: Complete assigned computational homework. You must include the computer code that you used and document key lines of code. I encourage you to work with another person. Each group can turn in one homework. Your homework will be posted to the website by Friday, May 8, and will be due on May 29.

Paper: Summarize 3 papers in an area of macroeconomics that is of interest to you. It cannot be a repeat of what you have done for another class. (1) Describe the goal of the papers, how the papers analyze the question posed, and summarize the main findings. (2) Describe what in your opinion that the literature in this area has established, and what remains open questions. (3) Describe your idea(s) on how you can contribute to this literature. Be as detailed as you can. This can range from some broad ideas, to a very specific idea that would include a model economy and some data. The more detailed that you are, the more feedback I can offer. This paper will be due no later than July 1.

In-Class Presentations: Pick a paper and present the main idea, summarize the analytical framework and data, and summarize the main findings in a 20 minute presentation. The slides should be easily understandable and do a good job in teaching us what the paper is about and the contribution to the literature. It
should be clear that you put time and energy into making the presentation. We will have these presentations on the last 5 class meetings. **We will begin the presentations on May 18.**

**Useful Primary Data Sources for your Research**


Federal Reserve’s Flow of Funds Accounts of the United States (FOF). ([www.federalreserve.gov/releases/z1/current/data.htm](http://www.federalreserve.gov/releases/z1/current/data.htm))

Bureau of Labor Statistics (BLS), Current population Survey (CPS) at the Minnesota Population Center (home of IPUMS). ([www.ipums.org](http://www.ipums.org))


Bureau of the Census, [www.census.gov](http://www.census.gov)


Wharton Research Data Services (WRDS) for financial data. ([wrds.wharton.upenn.edu](http://wrds.wharton.upenn.edu))


Secondary Sources

FRED – http://research.stlouisfed.org/fred2/

NBER database – http://www.nber.org/data/

Research Questions

Why have the U.S. Economy and European economies been depressed for several years?

- Why is hours worked/employment depressed?
- Why is productivity depressed?

What accounts for the change in labor’ share of income?

Why aren’t businesses investing? Why are they holding so much cash?

Why has the business start-up rate fallen so much?

Why has economic mobility fallen?

Why has geographic mobility fallen?

What factors are creating inequality?

What accounts for cyclical productivity?
What accounts for cyclical changes in the labor wedge?

How are changes in financial regulation impacting what banks do?

Solving Nonlinear Models


Lorenzoni and Marcet “Parameterized Expectations Approach: Some Practical Issues”.


Topics in Labor Markets


Davis and Von Wachter, “Recessions and the Cost of Job Loss”, 2011, Brookings Papers on Economics Activity

Topics in Depressions


Kehoe and Prescott “Great Depressions of the 20th Century”. See also the website https://www.greatdepressionsbook.com/ for all of the data used in the book.

Business Cycles and Models of Productivity Shocks


Atalay, “How Important are Sectoral Shocks?”, 2014.


Topics in Heterogeneity, Insurance, Labor Supply and Consumption

Huggett, Ventura, Yaron, “Sources of Lifetime Inequality”


Guevenen, Karahan, Ozkan, Song “What Do Data on Millions of U.S. Workers Reveal About Life-Cycle Earnings Risk?”


**Inequality**


http://www.econ.umn.edu/~vr0j/papers/QR5_revised_final_vic.pdf

Quadrini and Rios-Rull, “Inequality in Macroeconomics”

Climate Change and Macroeconomics

Krusell and Hassler, "Economics and Climate Change: Integrated Assessment in a Multi-Region World",

Krusell and Smith, "Macroeconomics and Global Climate Change: Transition for a Many-Region Economy",

Krusell, Hassler, and Conny, "Energy-Saving Technical Change".  

Krusell, Golosov, Hassler, and Tsyvinski "Optimal Taxes on Fossil Fuel in General Equilibrium"