Time and Location: Tuesday and Thursday, 1:00 - 2:20, 120-M

Office Hours: Tuesday and Thursday, 3:00 – 4:00, and by appointment.

Textbook:


Course Description: This is the second course in a two semester sequence. Topics covered will include state space models and the Kalman filter, models of Markov switching, state space models with Markov switching, trend/cycle decompositions, Markov Chain Monte Carlo (MCMC) methods, time series models of structural change, median-unbiased estimation, as well as other topics such as Bayesian econometrics and non Gaussian state space models, if time permits. We will also spend time covering recent and classic journal articles that both develop the theory of time series analysis and stress its application to interesting macroeconomic phenomena.

Learning Outcomes:

- Students will obtain a thorough understanding of advanced topics in the theory of time series analysis, as well as a subset of the literature on business cycle analysis.

- Students will become proficient in programming advanced time series routines in non-canned software packages such as Gauss.

- Students will be able to perform research at a level publishable in quality economic and/or statistical journals.

Software: We will be using Eviews and Gauss. Eviews is a windows based “point and click” time series program that is extremely useful, and quite easy to use. Gauss is a programming language which is slightly more difficult to use, but extremely powerful.

Grading: Your final grade will be a weighted average of the homework assignments, a midterm exam, and a final exam. Each will be worth one third of your final grade.