ECON 8331 — ECONOMETRICS II

Material covered:

For the second midterm, I expect you to know general stuff (like ML) from the first midterm and the following:

- Selectivity ML and and Heckman correction (inverse Mill's ratio).
- Testing. Likelihood Ratio, Wald, and ML tests
- Systems of equations. SURE (including VAR), 2SLS, and (briefly) 3SLS. Make sure you can derive the results that SURE estimators are identical to equation-by-equation OLS when the regressors are identical using Kronecker products.
- Clustering of standard errors. Know the basic formula and know the broad conclusions of the papers by Moulton and Bertrand, Dufflo, and Mullainathan.
- Bootstrapping standard errors: simplest case. The parametric bootstrap.
- Weak Instruments. Know the Monte Carlo example of Nelson and Startz and the empirical issues with the Angrist-Krueger paper. Know the Stock et al. rule of thumb for first stage F-tests. Be ready to repeat the derivation on pp. 326-327 in the Davidson-MacKinnon book.
- Be able to demonstrate the issue of Local Average Treatment Effect using the simple example in my Quantitative Economics article.