

ECON 8331 — ECONOMETRICS II

Material covered:

For the first midterm, I expect you to know

- Maximum Likelihood
- Information matrix and estimation of the variance of the parameters.
- You should be able to find the score, Hessian, ML-estimator, etc. for any (simple) model but in particular, well known ones such as
 - Normal with regressors
 - Normal autoregressive
 - Normal moving average
 - Exponential
 - Bernoulli
 - Logit and Probit Models (univariate in detail, multivariate less detailed).
 - The Poisson Model. Likelihood (details, such as finding the mean and variance for midterm II).
- The Newton Algorithm. (Theory or practical examples.)
- Panel data. Fixed effects and Frisch-Waugh. Bias in short panels in the absence of strict exogeneity.
- Selectivity. (I won't ask for derivations, we will leave that for midterm II).
- Programs: Be able to understand Gauss programs similar to those I have shown you in class.