

SYLLABUS

1. USEFUL REFERENCES

Two useful references for the course are Gelman et al. (2014), which covers applied Bayesian inference and Markov Chain Monte Carlo (MCMC) methods, and Wooldridge (2010) which covers panel data and cross section methods.

2. BAYESIAN BASICS

- Examples where Bayesian and frequentist inference are in conflict
- Muller-Norets bettable confidence intervals

3. REMARKS ON “MODERN” REGRESSION ECONOMETRICS

- Bootstrap, Bayesian bootstrap, randomization inference
- Bayesian treatment of weak instruments

4. MARKOV CHAIN MONTE CARLO METHODS

- Metropolis, Metropolis-Hastings, Gibbs. Data augmentation.

5. LOGIT, PROBIT, TOBIT

6. LINEAR MULTIVARIATE TIME SERIES MODELS

- VAR's, impulse responses, error bands for them
- Granger causal priority, posterior odds on restrictions
- Unit roots and cointegration
- Structural VAR's

7. GROUPED DATA

- Random and “fixed” effects
- Lagged endogenous variables

REFERENCES

- GELMAN, A., J. B. CARLIN, H. S. STERN, D. B. DUNSON, A. VEHTARI, AND D. B. RUBIN (2014): *Bayesian Data Analysis*, CRC Press.
- WOOLDRIDGE, J. M. (2010): *Econometric Analysis of Cross-Section and Panel Data*, MIT, second ed.