SYLLABUS ECONOMETRICS 220E Winter 2001 Clive W.J. Granger

Textbook: James Hamilton, *Time Series Analysis*, Princeton University Press, 1993. Formal Proofs from Hamilton. I will introduce and discuss topics and interpretation.

Topic List:

- 1. General Introduction. Univariate time series models; Hamilton, Chapter 1,2,3.
- 2. Forecasting in theory and practice; Hamilton, Chapter 4.
- 3. Vector time series. VAR, impulse response; Hamilton, Chapter 10.
- 4. Unit root tests, spurious regressions; Hamilton, Chapter 15, 16, 17.
- 5. Error correction models and cointegration; Hamilton chapters 11, 19, 20.
- 6. Causality and exogeneity.
- 7. Panel data modeling.
- 8. Aggregation.

Further Topics (not all of these may be covered)

- 9. Evaluation of models.
- 10. Nonlinear models, time-varying parameter models
- 11. Models for volatility; ARCH

Lectures: 10:00 am - 11:20 am, Monday and Wednesday, Room 300

Office Hours: Monday, Wednesday - 11:30 am - 12:00 pm, Tuesday - 9:00 am - 10:00 am, Room 315 Econ Bldg.

Exams: Midterm - Monday, 12 February 2001 (Optional, 25% of grade or weight can be put on Final) Final - Open Book