COURSE SYLLABUS

Course Number: STAT 4630

Course Title: Applied Time Series

Credit Hours: 3

Prerequisites: STAT 3610 or 3010. STAT 2510 with consent of instructor.

Corequisite: n/a

Course Content/Objective:

- ARIMA models: the autoregressive process, the moving average process, and the ARMA process. (3 weeks)
- Forecasting from these models: forecasting errors and confidence intervals; updating forecasts. (3 weeks)
- Model Building. (2 weeks)
- Estimation of model parameters. (2 weeks)
- Model assessment. (2 weeks)
- Applications in Econometrics. (1 week)
- Spectral theory. (2 weeks)

Possible Textbook:
Forecasting, Time Series and Regression, 4th Edition, by Bowerman, O'Connell and Koehler (2005).