STAT6347 - Applied Time Series Analysis

STAT 6347 Applied Time Series Analysis (3 semester credit hours) Introduction to time series data; autocorrelation function; stationarity; classical decomposition of a time series; linear processes; forecasting stationary time series; basic time series models such as autoregressive models, moving average models, ARMA models, ARIMA models and seasonal ARIMA models; model fitting; model checking; model-based forecasting; regression with ARMA errors; spectral analysis; multivariate time series; and implementation of statistical methods using a statistical software package. Prerequisite: STAT 6337 or equivalent. (3-0) T