

Bemidji State University

STAT 3610: Time Series Analysis

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Linear time models, seasonal models, stationary models, moving average, autoregressive and ARIMA models, model identification, confidence intervals and testing, forecasting and error analysis.

Prerequisites: (MATH 2472 and STAT 2610) or STAT 3631. (Might not be offered every year.)

B. COURSE EFFECTIVE DATES: 06/02/2008 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Graphical displays
2. Numerical descriptions
3. Transformations
4. General forecasting techniques
5. Regression analysis and forecasting
6. Confidence intervals and testing
7. Error analysis

D. LEARNING OUTCOMES (General)

1. Recognize time series data from other types of data and categorize it as stationary or non-stationary
2. Determine fitting difference, first order, and second order models to time series data and using these models to make predictions
3. Use a statistical software package to model time series data and make predictions
4. Apply linear regression techniques to time series analyses

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted