DSO 522 – *Applied Time Series Analysis for Forecasting*

Professor
Inga Maslova
Email
imaslova@marshall.usc.edu
When
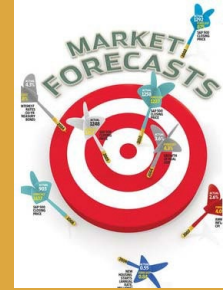*16240 – Tue/Thu: 11:00 AM – 12:20 PM*
16241 – Tue/Thu: 12:30 PM – 1:50 PM

Office	**Units**
ACC 203	*3.0*

WHY TAKE THIS COURSE?

- In business forecasting, time series models are used to analyze data that are collected over time to develop forecasting models for revenues, earnings, inventory, sales, budgets, and new product development.

- Because time series data arise in so many different business areas, forecasting methods apply to problems in finance, marketing, real estate, production, operations research, international business, and accounting.

- Knowledge of forecasting methods is among the most demanded qualifications for business people working in either private or public sector of the economy. This course provides those skills and also opens possibilities for a forecasting management position in business.

  There is a shortage of well-trained MBAs for these positions.

COURSE OBJECTIVES

Students learn simple and sophisticated methods and obtain forecasting skills and experience by completing several projects. There is a comprehensive final exam but no midterm. The course projects provide practical experience developing forecasting models for actual business operations.

The general aim is the development of sophisticated professionals, able to critically analyze business data and create business forecasting reports.

KEY CONCEPTS

- Business Forecasting
- Time Series Models
- Forecasting Methods
- Regression and Box-Jenkins

COURSE DESCRIPTION

Topics to be covered include the concept of stationarity, autoregressive and moving average models, identification and estimation of models, prediction and assessment of model forecasts, seasonal models, and intervention analysis. The course goals are for each student to understand time series methods and obtain "hands on" experience using, analyzing, and developing forecasting models for business applications.