DSO 529 — *Advanced Regression Analysis*

Section - 16268

Professor
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When
Tue/Thu; 12:30 PM – 1:50 PM

Office
BRI 307 C

Units
3.0

From semiannual to monthly frequency
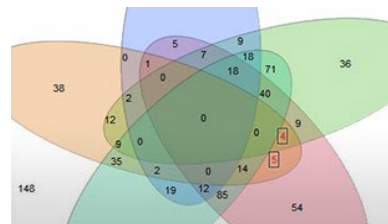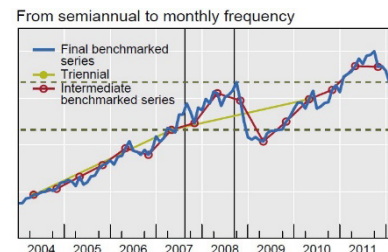
WHY SHOULD YOU TAKE THIS COURSE?

- Numerous real examples from finance, marketing, economics, accounting, politics, sports, etc., are used to illustrate applications of the material covered. Emphasis will be placed on the analysis of actual datasets.

- Knowledge of Regression Analysis is a skill in very high demand for students looking to work in either the private or public sector. This course develops those skills and opens possibilities for a business analyst/forecasting management position in business. There is a shortage of well-trained graduate business students for these types of positions.

- This course is intended for students working in the fields of Accounting, Economics, Finance, General Business, Human Resources, Marketing, Operations, etc., who want a practical introduction to Applied Statistics, Multivariate Analyses, and Econometrics.

COURSE OBJECTIVES

The course goals are for each student to understand regression methods and obtain hands-on experience using, analyzing, and developing multivariate models for business applications. This is a data analysis course that shows how to use the statistical package JMP to help solve both simple and complex real-life data problems.

KEY CONCEPTS

Regression analysis is performed in any organization working with quantifiable data.

- Marketing: using sales forecasts to for promotional budgets.
- Accounting: forecasting costs and revenues in tax planning.
- Finance: forecasting cash flows to maintain solvency.
- HR: forecasting and planning for recruitment of new employees, as well as other changes in the workforce.
- Production/Operations: forecasting raw material needs and desired inventory of finished products.

COURSE DESCRIPTION

This is a data-driven applied statistics course focusing on the analysis of data using Regression and Multivariate models. Topics include Multiple Linear Regression, Residual Analysis and Non- linear Model-building, Heteroscedasticity, Time Series Modeling, Categorical Predictors, Logistic Regression, Analysis of Variance, Clustering, and Panel Data Analysis.