

DATA SCIENCES AND OPERATIONS

Spring 2023

DSO 510 Business Analytics

Section 16304D

No prerequisites

Professor

Richard W. Selby

Email

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When

Tuesday 6:30pm-9:30pm

Office

BRI 401

Units

3.0



WHO SHOULD TAKE THIS COURSE?

Students who plan to have a career in management, consulting, strategy, product development, marketing, social media, or operations with an emphasis on data-driven decision making, innovation, and leadership in organizations

COURSE OBJECTIVES

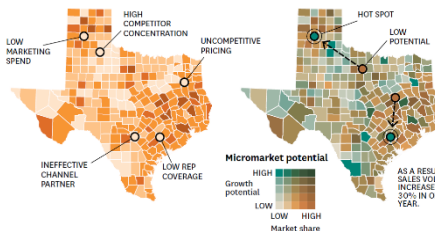
- Foundational knowledge, skills, methods, tools, and resources for business analytics
- Understanding of ideas, strategies, and approaches for how leading companies use business analytics in multiple business functional areas
- How to use market-leading analytics and statistical packages (SAS, Tableau, Python, SQL, Google, dashboards) to implement analytics
- Hands-on skills for defining, performing, and presenting business analytics for data-driven decision making, innovation, and leadership

KEY CONCEPTS

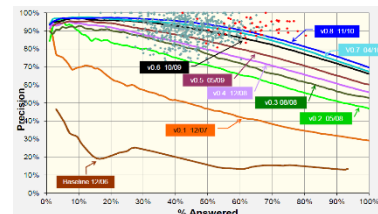
- Business analytics
- Data-driven decision making
- “Big Data” initiatives
- Strategy, data analysis, models
- Predictive modeling
- Dashboards, data visualization
- Regression, analysis of variance
- Cluster analysis, neural network models
- Statistical data analysis packages
- Hands-on skills and team projects
- Results, interpretations, actions, feedback



Business Sphere for global business analytics at Procter & Gamble



Analyzing and modeling micro-markets and predicting hot spots



Insights, actionable knowledge, and feedback in IBM Watson analytics system

COURSE DESCRIPTION

Business analytics provides benefits throughout all major functional areas of an organization. Business analytics is defined as the study, integration, and application of knowledge, skills, and methods for using data, statistical analysis, quantitative approaches, and predictive modeling to enable data-driven decision making, innovation, and leadership in organizations. Business analytics enables “Big Data” initiatives. This course teaches students how to use market-leading analytics and statistical packages (SAS, Tableau, Python, SQL, Google, dashboards, etc) including hands-on skills to implement strategies and approaches for defining, performing, and presenting business analytics. This course does not assume prior knowledge of topics for business analytics, has no prerequisites, and is open to all USC graduate students from all schools and all disciplines.