

DATA SCIENCES AND OPERATIONS

SPRING 2023 SEMESTER

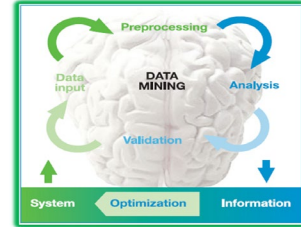
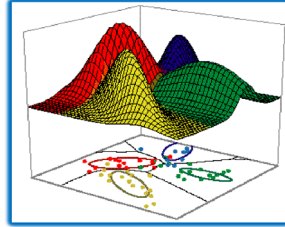
DSO 528 — *Blended Data Business*
Analytics for Efficient Decisions

Professor
 Cosimo Arnesano

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When
 Monday, 6:30 PM – 9:30 PM

Office **Units**
 TBD 3.0



WHY TAKE THIS COURSE?

Students who plan to have a career in Business Analytics and interested in knowing more about Big Data and Predictive Analytics should take this class. Students who have previous knowledge in Analytical Models do not know how to use it in Business should take this class. Managers who want to combine Analytics with Business Analysis should take this class.

COURSE OBJECTIVES

- To provide students with concepts, frameworks, analytical thinking, critical thinking and creative thinking skills for converting Company Data + Big Data into actionable form and building analytical models for monetizing data.
- To provide practical knowledge (cases), skills, methods, tools, KPIs and resources for conceiving, building and solving new paradigms in Big Data Analytics space.
- To give a Big Picture view of Big Data Analytics

KEY CONCEPTS

- Data Mining
- Business Intelligence
- Data Warehousing
- Big Data Platforms
- MAGIC framework
- JMP Software
- SAS Enterprise Miner
- Classification & Clustering & Association
- Decision Tree, Logistic Regression, KNN
- Neural Network, Naïve Bayesian
- Partitional and Hierarchical Clustering
- KPIs – Business and Statistical
- Search Engine Marketing
- Enrichment, Star Schema, Dash Boards
- Introduction to many industry tools

COURSE DESCRIPTION

The course focus is to give a Big Picture view of Business Analytics, its components, and platforms. To build sophisticated business analytical models from raw data using Desk top and Industry level tools for Classification, Clustering and Association Problems. To show how to leverage the readily available “Big Data” from third party sources for enriching and monetizing data. To develop data mining and business analysis skillset to gain inference from your analysis, from Executive, Business and Statistical point of view. To provide a systematic approach to build Analytical Models. To provide the missing link between Analytics and Business Analysis.