

# DATA SCIENCES AND OPERATIONS

SPRING 2025

## **DSO 550 – Applying Analytics to Human Capital in Business**

*Section-16248*

**Professor**

*Jeff Higgins*

**Email**

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**When**

*Wednesday 6:30 pm - 9:30 pm (1<sup>st</sup> half)*

**Office**

*TBD*

**Units**

*1.5 Units*



## WHY TAKE THIS COURSE?

Students seeking to apply analytic tools, metrics and methods to the complex world of people data to solve business problems faced by real organizations that quantify and show ROI impact.

### COURSE OBJECTIVES

- Develop/Apply problem solving skills using quantitative methods to perform root cause analysis
- Answer complex human capital business questions using data
- Understand new metrics in HR and human capital that impact and link to financial results
- Learn to transform data into intelligence for insight
- Build a data model + business case that tells a story

### KEY CONCEPTS

- Key performance metrics, forecasting, linking data to show financial impact
- People data sources, pain points and value creation
- Transforming data into business intelligence
- Interpreting analytic results, statistics vs. financial models
- Visualization, presentation + storytelling with data

## COURSE DESCRIPTION

This course provides an introduction and practical application of analytics to human capital business issues. The course features case studies and emerging practices to analyze, predict and resolve questions and challenges for organizations of all sizes today. The course will feature using simple and advanced predictive analytic methods and models, as well as basic financial modeling and costing techniques essential to quantify/capture return on investment (ROI). Students will use software tools to enable data analysis, modeling and statistical as well as financial analysis to solve workforce oriented business problems.

This practical analytic techniques and technologies in this course can be used to create a winning business case and story using data that links to business financial impact and ROI for virtually any human capital data set.