

DATA SCIENCES AND OPERATIONS

FALL 2023

DSO 560 — *Text Analytics and Natural Language Programming*

Section(s) – 16284D

Professor

Lorena Martin

Email

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When

Mondays 11:00 AM - 12:20 PM

Office

BRI 400c

Units

1.5



WHY TAKE THIS COURSE?

This course will provide students with a thorough introduction and overview of the core concepts and tools needed to acquire, analyze, visualize, and perform natural language processing (NLP) on text data.

COURSE OBJECTIVES

- Describe how NLP is used to solve business problems
- Write functional code
- Extract themes from documents using several different approaches
- Extract insights from NLP output

KEY CONCEPTS

- Python Proficiency
- Sentiment Analysis
- Pre-process and feature selection with text
- Develop word embeddings
- Bridge the gap between management and business analytics

COURSE DESCRIPTION

Develop the technical skills for natural language processing and text analysis. Within the industry there is often a divide between the teams generating the insights and those who are making the final management decisions. This course serves to help students bridge the gap between management and business analytics each week contains self-contained business use case modules that will introduce students to the full insight pipeline- from data text mining, data preprocessing, machine learning modelling, visualization, product/marketing strategy, and storytelling.