

CUNY School of Professional Studies

DATA XXX COURSE TITLE

CUNY SPS Master of Science in Data Science

Fall 2021

Instructor Name:

Instructor Email:

Class Meetup:

Office Hours:

Degree Program: M.S. in Data Science

Credits: 3 graduate credits

Prerequisites: None

Type of Course: Required course

Course Description

Course Learning Outcomes:

Program Learning Outcomes addressed by the course:

How is this course relevant for data analytics professionals?

Grading

Grade Distribution

Quality of Performance	Letter Grade	Range %	GPA
Excellent - work is of exceptional quality	A	93 - 100	4
Excellent	A-	90 - 92.9	3.7
Good - work is above average	B+	87 - 89.9	3.3
Satisfactory	B	83 - 86.9	3
Below Average	B-	80 - 82.9	2.7
Poor	C+	77 - 79.9	2.3
Poor	C	70 - 76.9	2
Failure	F	< 70	0

Schedule

Note: Schedule is subject to change.

Topic	Readings	Deliverables
Set up Environment	Supplementary materials on Gephi	Environment Setup
Network Analysis Overview Text Mining Overview	Natural Language Processing with Python Ch.1 2 Social Network Analysis for Startups Ch.1 Supp. materials on iGraph package	Week 2 Assignment
Network Analysis Graph Theory Definitions	Social Network Analysis for Startups Chapter 2 Supplementary material on Graph Theory	Week 3 Assignment
Network Analysis Centrality Measures	Social Network Analysis for Startups Chapter 3	Project 1
Network Analysis Clustering 1	Social Network Analysis for Startups Chapter 4	Week 5 Assignment
Network Analysis 2-mode networks	Social Network Analysis for Startups Chapters 5 and 6	Project 2
Text Mining Natural Language Processing	Natural Language Processing with Python Chapter 3 and 4	Week 7 Assignment
Text Mining: Word Association	Natural Language Processing with Python Chapters 5 and 6	Week 8 Assignment
Network Analysis:Topic Mining 1	Natural Language Processing with Python Chapters 7-8	Project 3
Network Analysis:Topic Mining 2	Natural Language Processing with Python Chapter 9	Week 10 Assignment
Network Analysis:Sentiment Analysis	Natural Language Processing with Python chapters 10 and 11	Week 11 Assignment
Text Mining: Text-Based Prediction	Natural Language Processing with Python chapter 6 Supplementary material on algorithms	Week 12 Assignment
Network Analysis and Text Mining: Longitudinal Analysis	NONE	Project 4
Network Analysis and Text Mining	NONE	Final Project Proposals Due

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