

Course Syllabus for DS745: Visualization and Unstructured Data Analysis

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

This course covers two aspects of data analytics. First it teaches techniques to generate visualizations appropriate to the audience type, task, and data. Second, it teaches methods and techniques for analyzing unstructured data, including text mining, and social network analysis.

Course Objectives

By the end of this course, you will be able to:

- Learn the principles to create effective visuals to maximize readability, comprehension, and understanding of complex datasets.
- Understand and apply principles of data visualization.
- Analyze and critique examples of good and bad visualizations (Quantitatively and qualitatively evaluate existing visualizations).
- Explain best practices that can improve the expressiveness and effectiveness of data visualizations.
- Demonstrate understanding of social network analysis.
- Demonstrate understanding of analyzing unstructured data using text mining techniques.

Course Components

Discussions: Discussions are your opportunity to contribute from and learn from your peers. We will engage in several discussions throughout the semester, as outlined in the course calendar. Note that every discussion requires two posts: one for your original

contribution to the discussion's central issues and at least two responses to your peers. The deadlines for these are staggered so everyone has a chance to post and respond. Your initial post counts as 75% of each discussion grade, while your replies count for the remaining 25%. In order to create a professional, open communication environment, you are expected to follow the online discussion guidelines.

Grading Policy

Your mastery of course content is assessed using a variety of methods:

Activity	Percentage of Grade
Discussions	55%
Projects	45%
Meet and Greet (Extra Credit)	1%
Total	100%

Final grades are assigned using the following scale:

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F At or below 59%