BUA 683
Information Visualization
Graduate School of Business
Maine Business School
University of Maine
Term: TBD

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MISSION:

The mission of the Maine Business School is to advance business knowledge, connect with our local and global communities, seek adaptive approaches for business processes, and foster a sense of professionalism, teamwork, and respect for ourselves and our constituents.

COURSE DESCRIPTION:

This course presents a variety of data visualization techniques to graphically summarize business data information. Students will learn to create charts, maps, and other visualizations to create effective graphical displays of business data that tell meaningful business stories. Students will also earn to critically evaluate examples from print media and the Internet after learning the foundations of information visualization.

COURSE OBJECTIVES:

After completing this course, students are expected to
- evidence a good understanding of why visualization matters and how to truthfully represent data visually
- demonstrate skills of using visualization to support decision making and critical thinking
- evidence a good understanding of the grammar of graphics and how to select appropriate visualizations
- prove proficiency in creating static and interactive visualizations for a variety of disciplines
- demonstrate skills of building a narrative structure with visualizations combined with writing and the spoken word
- show appreciation to human perception and its impact on design

COURSE CONTENT OUTLINE:

Unit 1: Introduction to visualization and base graphics.

Unit 2: Simple statistics, tables and graphs, ggplot2 grammar

Unit 3: Perception and color, ggplot2 data

Unit 4: Graphs, ggplot2 aesthetics and geometries

Unit 5: General design for communication. Table design.

Unit 7: General and component level design.

Unit 8: Multiple measures and common errors

Unit 9: Shiny package

Unit10: Storytelling