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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 introduces students to different types of data commonly collected in business settings. Students will also learn basic skills of managing and wrangling the business data using analytical techniques like structured query language and data visualization in R, an environment for statistical computing and visualization. Knowledge of basic statistics through linear regression is helpful, but not necessary. The course assumes students have had no previous exposure to computer programming.

COURSE OBJECTIVES:

After completing this course, students are expected to
- demonstrate basic skills of manipulating data from a variety of sources and translating raw data into a format suitable for analysis
- prove their ability of analyzing and visualizing data and integrating their analysis into beautiful reports
- demonstrate proficiency with the R language

COURSE CONTENT OUTLINE:

Unit 1: Introduction to analytics, R, and RStudio.
Unit 2: Data types in R.
Unit 3: Data cleansing and tidy data.
Unit 4: Generating reports with knitr
Unit 5: Missing values, visualization
Unit 6: Time series data.
Unit 7: Data validation
Unit 8: Mapping and spatial data.
Unit 9: Structured Query Language
Unit 10: Structured web data: json, the Twitter API.
Unit 11: Lexical analysis - regular expressions.