

Course Overview

Course Description

This course extends linear “OLS” regression by introducing the concept of Generalized Linear Model “GLM” regression. The course reviews traditional linear regression as a special case of GLM's, and then continues with logistic regression, poisson regression, and survival analysis. The course is heavily weighted towards practical application with large data sets containing missing values and outliers. It addresses issues of data preparation, model development, model validation, and model deployment.

In addition, you will be introduced to the Python statistical programming language, its use in data management and statistical modeling.



Course Goals

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

- Demonstrate a practical understanding of the primary theoretical concepts behind generalized linear models.
- Analyze and select appropriate types and combinations of models given particular business situations.
- Develop modeling techniques to address different types of data.
- Use statistical analysis software to build and deploy specific models based on real-world business problems.