HGEN 677. STATISTICAL CONCEPTS IN GENETIC AND GENOMIC ANALYSIS.

Credits: 3

Offered by: Human Genetics (Graduate Studies)

This course is not offered this catalogue year.

Description

This course will introduce key statistical concepts that motivate and underlie the many statistical analysis methods currently used in analysis of genetic and genomic data. Emphasis will be placed on understanding how these concepts can influence study designs and analysis choices, and when substantial unanticipated biases can occur. Concepts include an understanding of variability and error, bias and its sources, independence, how distributions of variables impact analysis, outliers, covariates, missing data, the goals of data cleaning, multiple testing, and some consideration of clustering and prediction models.

- Prerequisite(s): A course introducing basic statistics or equivalent knowledge. Registration is by permission of the course coordinator.