

PUHE-504: Applied Biostatistics

This course is designed to strengthen learners' understanding and demonstrate knowledge of advanced statistical tools for accessing and analyzing relevant public health and biomedical data, and to support research needs. Students will be introduced to various research design methodology and applicable analytic approaches. Students will obtain practical experience in techniques and software tools for accessing, linking and integrating large public health datasets, including environmental surveillance databases and/or electronic health records for analyses and to support research needs. The course will address such topics as Advanced Linear Regression, Logistic Regression, Database development, and management; Non-Parametric tests, Factorial Analyses, two-way ANOVA, ANCOVA, Survival(Time-to-Event) Analyses including risk assessment and multivariable techniques including Hotelling's Test and MANOVA. Data analyses applications to relevant public health data and clinical outcomes will be used for practice. Students will be able to communicate and interpret statistical results in a professional and consistent manner with expectations for members of the public health professions.

Credits: 3

Prerequisites:

PUHE 501

Program: Master Of Public Hth Program