BIOSTATISTICS MS

The Biostatistics (BIO) master’s degree programs teach and develop statistical skills to put numbers into context as part of public health research for solving human health-related problems. With an MS or MPH in biostatistics, students will have the skills to collaborate on the design of biomedical studies, analyze data, and communicate the results for researchers. The entrance requirements are the same for both the MS and MPH programs.

MS students must complete a minimum of 33 credits. To complete program requirements, students will choose electives, in consultation with their academic advisor, which may include credits towards a minor.

YEAR ONE
FALL SEMESTER
PubH 6250 Foundations of Public Health (2 cr)
PubH 7405 Biostatistics: Regression (4 cr)
STAT 5101 Theory of Statistics I (4 cr) or
STAT 8101 Theory of Statistics I (3 cr)

SPRING SEMESTER
PubH 7406 Biostatistics: Design and ANOVA (4 cr)
STAT 5102 Theory of Statistics II (4 cr) or
STAT 8102 Theory of Statistics II (3 cr)

MAY (AFTER FINALS)
MS Written Examination

YEAR TWO
FALL SEMESTER
PubH 7450 Survival Analysis (3 cr)
Biostatistics electives

SPRING SEMESTER
PubH 7420 Clinical Trials (3 cr)
PubH 7494 Integrated Learning Experience (3 cr)
Biostatistics elective

ELECTIVES
MINIMUM 8 CREDITS

PubH 7430 Statistical Methods for Correlated Data (3 cr)
PubH 7435 Latent Variable Models (3 cr)
PubH 7440 Introduction to Bayesian Data Analysis (3 cr)
PubH 7445 Statistics in Genetics & Molecular Biology (3 cr)
PubH 7460 Advanced Statistical Computing (3 cr)
PubH 7461 Exploring & Visualizing Data in R (2 cr)
PubH 7462 Advanced Programming & Data Analysis in R (2 cr)
PubH 7465 Biostatistical Consulting (3 cr)
PubH 7470 Statistics for Translational & Clinical Research (3 cr)
PubH 7475 Statistical Learning & Data Mining (3 cr)
PubH 7485 Methods for Causal Inference (3 cr)
PubH 8422 Modern Non-parametrics (3 cr)
PubH 8472 Spatial Biostatistics (3 cr)
MATH 5615H Honors: Intro to Analysis I (4 cr)
MATH 5616H Honors: Intro to Analysis II (4 cr)
STAT 5401 Applied Multivariate Methods (3 cr)
STAT 5601 Nonparametric Methods (3 cr)
GEOG 5561 Principles of Geographic Info Science (4 cr)
GIS 5571 Introduction to Arc/Info (3 cr)