Biostatistics Track for those Who Enrolled Prior to Fall 2018

The Biostatistics track seeks to enhance MPH training with courses on methods and practice of biostatistics in public health and clinical research. This track also provides an opportunity to work with biostatistics faculty in development of thesis ideas and research.

Track Specific Competencies
To equip students with the skills to help design, analyze, and interpret the results of medical and public health surveys, observational studies and clinical trials

To prepare students with the foundation of basic principles and methods of biostatistics in the context of public health, with a focus on applying biostatistical methods to public health issues.

To help students develop presentation and communication skills that are necessary to effectively collaborate with policymakers, medical and public health scientists and community organizations.

Internship
All students in the Biostatistics Track complete PHP2070, Public Health Community Service Internship. The internship includes a core curriculum as well as a field experience tailored to the student’s public health interests and future career goals.

Thesis
All students are required to complete a thesis. Students work with faculty advisors to design a thesis project appropriate to their interests and career path in biostatistical applications for public health.

Core Curriculum Courses
Students in all tracks are required to complete the MPH Core Courses, which can be found in the pdf found on this page under Core Courses: https://www.brown.edu/academics/public-health/mph/

Biostatistics Track Core Requirements
Students in the biostatistics track must complete the following sequence:
The two course sequence includes:
PHP2510 Principles of Biostatistics and Data Analysis
and
PHP2511 Applied Regression Analysis

Students who have completed PHP2507/PHP2508 who wish to enter the biostatistics track must meet with the biostatics track academic advisor and the MPH Program Director to request that these courses meet the core requirement for biostatistics and applied data analysis. Based on an assessment of the student’s background, course performance and knowledge base PHP2507/PHP2508 may be able to substitute for PHP2510 and PHP2511.

Biostatistics Track Specific Requirements
Analysis of Population Based Datasets (choose 1)
PHP2410E, Medicare: A Data Based Policy Analysis
PHP2430, Analysis of Population Based Datasets
PHP2550, Practical Data Analysis
PHP2561, Statistical Computing II
PHP2650, Statistical Learning and Big Data

Advanced Methods in Biostatistics (students must choose two)
PHP2030, Clinical Trials
PHP2223, Statistical Genetics
PHP2520, Statistical Inference I
PHP2530, Bayesian Statistical Methods
PHP2560, Introduction to Statistical Computing
PHP2580, Statistical Inference II
PHP 2550 - Practical Data Analysis (if not taken as the Dataset requirement)
PHP2561, Statistical Computing II (if not taken for Dataset requirement)
PHP2601, Generalized Linear Models
PHP2602, Analysis of Lifetime Data
PHP2603, Analysis of Longitudinal Data
PHP2604, Statistical Methods in Spatial Data
PHP2610, Causal Inference and Missing Data
PHP2620, Statistical Methods in Bioinformatics I
PHP2650, Statistical Learning and Big Data (if not taken for the Dataset Requirement)
PHP2690, Advanced Topics in Biostatistics
PHP2690A, Advanced Topics in Biostatistics

Electives
The total course requirement is 13, including both core requirements and electives. Each student works out an individualized elective plan, with the support of faculty advisors.