

Biostatistics Concentration – Available to students who started in Fall 2018 or Earlier

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

Biostatistics Concentration-Specific Competencies

- Demonstrate proficiency in clinical trials methods
- Demonstrate proficiency in analyzing large data sets
- Demonstrate proficiency in statistical programming
- Demonstrate proficiency in advanced applications of statistical methods
- Demonstrate proficiency in a focused area of biostatistical methods

Students in the Biostatistics concentration should complete Sequence 2 in the Core Curriculum Courses:

- PHP2510 Principles of Biostatistics and Data Analysis
- PHP2511 Applied Regression Analysis

*If a student completes PHP2507/2508 before deciding on the biostatistics concentration, the student must meet with the biostatistics concentration academic advisor and the MPH Program Director to request that PHP2507/2508 meet the core requirement for biostatistics. Based on an assessment of the student's background, course performance and knowledge base, PHP2507/2508 may be able to substitute for PHP2510/2511.

Biostatistics Concentration Courses:

Complete all of the following courses:

- PHP1560/2560, Statistical Programming in R
- PHP2030, Clinical Trials Methods
- PHP2550, Practical Data Analysis

Complete one of the following courses on advanced data analysis:

- PHP2260, Applied Epidemiological Analysis Using SAS
- PHP2250, Advanced Quantitative Methods in Epidemiologic Research
- PHP2410E, Medicare: A Data Based Policy Examination
- PHP2440, Introduction to Pharmacoepidemiology
- PHP2650, Statistical Learning and Big Data

Select one of the following courses focused on advanced statistical techniques:

- PHP2515, Fundamentals of Probability and Statistical Inference
- PHP2530, Bayesian Statistical Methods
- PHP2561, Methods in Informatics and Data Science for Health
- PHP2602, Analysis of Lifetime Data
- PHP2610, Causal Inference and Missing Data
- PHP2620, Statistical Methods in Bioinformatics
- PHP2650, Statistical Learning and Big Data (if not taken to fulfill Advanced Data Analysis)

Biostatistics Concentration Advisor

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