BIOSTATISTICS PROGRAM COMPETENCIES

MPH COMPETENCIES

MPH-BST 1: Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question

MPH-BST 2: Understand issues of data collection, analysis and study management

MPH-BST 3: Effectively communicate research results orally and in writing across the spectrum of scientific venues

MPH-BST 4: Critically evaluate published research

MPH-BST 5: Utilize common computer programs to aid in analysis, description, and presentation of statistical data and results

MPH-BST 6: Understand the courses and means of control of infectious and chronic diseases

MPH-BST 7: Gain experience in public health service and research

MS COMPETENCIES

MS-BST 1: Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question

MS-BST 2: Understand issues of data collection, analysis and study management

MS-BST 3: Propose and complete research project appropriate for addressing a specific research question in statistics or in an applied field

MS-BST 4: Effectively communicate research results orally and in writing across the spectrum of scientific venues

MS-BST 5: Critically evaluate published research
MSPH COMPETENCIES

MSPH-BST 1: Design, conduct, and evaluate research studies

MSPH-BST 2: Understand issues of data collection, analysis and study management

MSPH-BST 3: Demonstrate an understanding of the ethics of scientific research

MSPH-BST 4: Formulate a proposal for a research study, present it, and revise it appropriately for implementation

MSPH-BST 5: Effectively communicate research results orally and in writing across the spectrum of scientific venues

MSPH-BST 6: Critically evaluate published research

MSPH-BST 7: Demonstrate application of biostatistics in an area of specialization.

PHD COMPETENCIES

PHD-BST 1: Explain the theoretical justifications for statistical methodologies.

PHD-BST 2: Apply statistical techniques with rigorous evaluation of any required distributional assumptions.

PHD-BST 3: Design scientific investigations with collaborators.

PHD-BST 4: Critically evaluate the statistical literature relevant to a specific statistical method or design.

PHD-BST 5: Write publishable articles that advance public health and/or statistical theory/methodology.