DOCTOR OF PHILOSOPHY
EPIDEMIOLOGY AND BIOSTATISTICS

| BIOSTATISTICS

54 CREDIT HOURS

TO APPLY:

- Completed SOPHAS application
- Master's degree in biostatistics or statistics with a minimum GPA of 3.0, in a relevant subject area including the completion of Calculus I, Calculus II, probability theory and statistical inference, or equivalent courses with a grade of B or higher.
- Curriculum Vitae/Resume
- Statement of Purpose (750-1000 words)
- Three (3) letters of recommendation
- Credentials evaluation for foreign transcripts
- Language proficiency test if language of instruction was not English

THE UNIVERSITY OF
MEMPHIS®
School of Public Health

PhD in Biostatistics

ABOUT THE PROGRAM

The PhD in Epidemiology and Biostatistics with concentration in Biostatistics program provides advanced training in multivariate analysis, categorical data modeling, and machine learning techniques to study complex health challenges. Graduates will apply novel approaches and scientific methods to address the genetic and epigenetic mechanisms of cancer and allergic diseases, Bayesian methods, genomics, metabolomics and bioinformatics.

IS THIS DEGREE FOR YOU?

- Graduate students with a strong background in mathematics, statistics, public health, or related fields
- Those who seek advanced training in statistical methodologies for health research and prepare them for careers in academia, research and policy development

ENHANCE YOUR EXPERIENCE AND SKILLS

Students can enhance their skills through graduate certificates in one of the following areas, or create their own plan in consultation with an academic advisor:

- Health Analytics
- Population Health Informatics
- Health Systems Leadership
- Population Health

WHERE ARE OUR GRADUATES

Graduates of the program pursue careers in academia, research, clinical settings and consulting.

CURRICULUM

CORE COURSES - 12 CREDIT HOURS
PUBH 8152 | Biostatistical Methods II
PUBH 8172 | Epidemiology in Public Health II
PUBH 8310 | Mixed Model Regression Analysis
PUBH 8311 | Applied Categorical Data Analysis

BIOSTATISTICS CORE COURSES - 12 CREDIT HOURS
MATH 7643 | LEAST SQUARE AND REGRESSION ANALYSIS*
MATH 7654 | INFERENCE THEORY*
PUBH 8455 | CLINICAL TRIALS II*
PUBH 8460 | ADVANCED SURVIVAL ANALYSIS*

DOCTORAL SEMINAR CORE - 6 CREDIT HOURS
PUBH 8901 | Doctoral Professional Development Seminar
PUBH 8720 | Grant Writing in Health Sciences

ELECTIVE COURSES - 12 CREDIT HOURS
In consultation with faculty and/or academic advisors

DISSERTATION - 12 CREDIT HOURS
PUBH 9000 | Dissertation

COMPREHENSIVE EXAM
PhD candidates are required to pass a comprehensive exam covering Core and Biostatistics Core courses.

* Prerequisites

WHAT YOU WILL LEARN

Students learn to analyze large, complex datasets, applying advanced statistical and machine learning techniques and gain hands-on experience in programming tools to uncover patterns and insights that inform public health strategies.

CONNECT WITH OUR TEAM

Meredith Ray, PhD
Associate Professor and Program Coordinator
901.678.5390 | maray@memphis.edu

Briana McNeil, MBA, M.Ed.
Recruitment & Admissions Coordinator
901.678.3740
sphadmissions@memphis.edu

Shirl Sharpe, MS
Academic Services Coordinator II
901.678.1710
SPHadvising@memphis.edu

How to Apply