

UNTHSC College of Public Health

MPH – Biostatistics & Data Science Concentration

The **Master of Public Health** program with a concentration in **Biostatistics & Data Science** is designed to train students in data management, statistical data analysis, interpretation of findings, and communication of analytical results. The concentration focuses on practical applications of statistics in public health, biomedical, pharmaceutical, and clinical research settings. In addition to comprehensive training in statistical reasoning and data visualization techniques, students will also be introduced to public health theory and epidemiological study design, as well as acquire essential skills to become an effective member of a project team and communicate statistical information to the public. There are many excellent career opportunities for students within the field of Biostatistics and Data Science, such as: positions in local, state, and federal health agencies, health care and clinical research institutions, consulting firms, pharmaceutical companies, biotechnology and other industry settings.

Students in the Biostatistics & Data Science concentration are admitted once a year as a cohort and are expected to complete 48 hours of coursework and graduate in five consecutive semesters. Students attend lectures and co-curricular activities in-person within a 9-hour block of time (9AM-6PM) Monday through Friday.

Please Note: Applicants wishing to enter this program should have a quantitative background and previous coursework in college algebra, calculus, and basic statistics.

Biostatistics & Data Science Courses	Credit Hours	Total Hours
Fall Semester		
BACH 5300: Theoretical Foundations of Individual and Community Health	3	3
BIOS 5300: Principles of Biostatistics	3	6
BIOS 5322: Statistical Computing and Visualization	3	9
EPID 5300: Principles of Epidemiology	3	12
Spring Semester		
BIOS 5310: Intermediate Biostatistics	3	15
EOHS 5300: Environmental Determinants of Health	3	18
EPID 5310: Intermediate Epidemiology	3	21
HMAP 5300: Introduction to Health Management and Policy	3	24
Summer Semester		
Elective – CPH course, requires advisor approval (online)	3	27
PHED 5100: Scope of Work	1	28
Fall Semester		
BIOS 5316: Categorical Data Analysis	3	31
BIOS 5320: Biostatistical Research and Consulting	3	34
EPID 5313: Introduction to Data Management and Statistical Computing	3	37
PHED 5101: Capstone and ILE Experience	1	38
PHED 5000: CPH Comprehensive Examination	0	38
Spring Semester		
BIOS 5318: Data Mining and Machine Learning	3	41
BIOS 6322: Longitudinal Data Analysis	3	44
EPID 5314: Applied Data Analysis in Epidemiology	3	47
PHED 5102: Final Applied Practice Experience	1	48

If you have any questions about the MPH Biostatistics coursework, please contact the **Office of Student and Academic Services** at either 817-735-0489 or cph@unthsc.edu.