UNTHSC School of Public Health
MPH – Biostatistics & Data Science Concentration

The **Master of Public Health** (MPH) program with a concentration in **Biostatistics & Data Science** (48 credit hours) is designed to train students in data management, statistical data analysis, interpretation of findings, and communication of analytical results using computing technology. The concentration focuses on practical applications of biostatistics in public health, biomedical, pharmaceutical, and clinical research settings. In addition to rigorous training in statistical reasoning and techniques, students will acquire essential skills to become an effective member of a project team, including, but not limited to, communicating statistical information to educated lay (non-statistics) audiences, project management, negotiation skills, and collaborating with various professions in public health and other health sciences. There are excellent career opportunities for students wishing to pursue positions in local, state, and federal health agencies, health and medical centers, health care and clinical research institutions, the pharmaceutical industry, and consulting. Applicants wishing to enter this program should have a strong quantitative background and previous course work in college algebra and calculus.

Students in the MPH Biostatistics & Data Science concentration are admitted once a year as a cohort. Full-time attendance is required and students are expected to graduate in five consecutive semesters. Students follow a weekly calendar of curricular and co-curricular activities that occupies 8-hour blocks of time, Monday through Friday.

MPH –Biostatistics & Data Science Curriculum (cohort program completed in 5 consecutive semesters)

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
EPID 5300: Principles of Epidemiology	3	9
EPID 5313: Introduction to Data Management and Statistical Computing	3	12
Spring Semester		
BIOS 5310: Intermediate Biostatistics	3	15
BIOS 5320: Biostatistical Research and Consulting	3	18
EPID 5310: Intermediate Epidemiology	3	21
HMAP 5300: Introduction to Health Management and Policy	3	24
Summer Semester		
EOHS 5300: Environmental Determinants of Health (online)	3	27
PHED 5297: MPH Practice Experience	1	28
Fall Semester		
BIOS 5316: Categorical Data Analysis	3	31
EPID 5314: Applied Data Analysis in Epidemiology	3	34
BIOS 5322: Statistical Computing and Visualization	3	37
PHED 5297: MPH Practice Experience	1	38
PHED 5000: CPH Comprehensive Examination (exam on MPH core)	0	38
Spring Semester		
BIOS 6322: Longitudinal Data Analysis	3	41
BIOS 5318: Data Mining and Machine Learning	3	44
Elective – SPH course, requires advisor approval	3	47
PHED 5297: MPH Practice Experience	1	48

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