

DEPARTMENT OF BIostatISTICS AND Epidemiology

Mission

The mission of the Department of Biostatistics and Epidemiology is to improve the public's health by serving as a source of expertise and a focus for training in biostatistics and epidemiology, and conducting investigator-initiated research to better understand the etiology prevention and treatment of disease.

Biostatistics

- applies new or existing statistical techniques to health-related questions
- develops new statistical techniques appropriate for analysis of health-related data
- assists health researchers in:
 - making appropriate inferences from their data relative to chance
 - making valid estimates of population parameters
 - designing studies in a valid and feasible manner to maximize information obtained

Epidemiology

- studies the distribution and dynamics of disease and health in populations
- investigates causative factors and determinants of disease in populations
- advances the body of knowledge that will make it possible to control and/or prevent disease and to optimize health

The Department's programs are designed to prepare students for careers in health agencies and medical institutions; for consultation, especially in the biomedical fields; for independent biostatistical and epidemiological research; and for academic careers in schools of public health and medicine.

Research

Advance knowledge regarding the distribution, occurrence and outcome of disease in human populations by maintaining a strong interdisciplinary research program with outstanding faculty and students.

Use biostatistical and epidemiologic methods to investigate the etiology of disease in human populations and to evaluate clinical trials, health care delivery, public health prevention strategies and health promotion programs.

Maintain a robust program of collaborative biostatistical and epidemiologic research as a means of supporting and developing capacity for biomedical and public health research and for providing research opportunities for students.

Maintain a vigorous program of independent biostatistical and epidemiologic research as a means of discovery, developing new analytical methods for supporting the biomedical and public health sciences and providing research opportunities for students.

Service

Provide professional service in biostatistics and epidemiology through work with federal, tribal, state, and local health agencies and other

organizations by conducting collaborative research and offering technical assistance.

Partner with public health agencies to improve the health of populations through the training of the public health workforce.

Provide leadership in academic biostatistics and epidemiology, and in formulating local and national public health policy through service on advisory boards and review committees.

Professional Degrees Offered

- Accelerated BA Community Health/MPH Epidemiology (offered with OU Norman)
- Accelerated BS Community Health/MPH Epidemiology (offered with OU Norman)
- Master of Public Health (MPH) degree in Biostatistics
- Master of Public Health (MPH) degree in Epidemiology

Graduate Degrees Offered

- Accelerated BS Mathematics/MS Biostatistics (offered with OU Norman)
- Master of Science (MS) degree in Biostatistics
- Master of Science (MS) degree in Epidemiology
- Doctor of Philosophy (PhD) degree in Biostatistics
- Doctor of Philosophy (PhD) degree in Epidemiology

Computer Requirements for Biostatistics and Epidemiology Degrees and Courses

Students are required to have a laptop with a Windows operating system, with specifications as outlined at <https://publichealth.ouhsc.edu/Portals/1055a/Assets/Documents/Current%20Students/2022%20Computer%20Requirements.pdf?ver=2022-07-20-135711-107>.

MacOS is not compatible with SAS and other software used in the Department.