

School of Public Health-Epidemiology MS

Competencies

Upon satisfactory completion of the MS curriculum with a concentration in Epidemiology, graduates will be able to demonstrate the following competencies.

- Describe the nature of disease distributions in populations and the factors that influence these distributions
- Explain and discuss the strengths and weaknesses of the key study designs used in epidemiological research, i.e., cross-sectional, ecological, case-control, cohort, and experimental (field trials) designs, and the analytic approaches and techniques applicable to each design
- Analyze and address a given epidemiologic question, select the most appropriate study design and develop a detailed study proposal
- Utilize biostatistical concepts and methods appropriate to epidemiological research
- Prepare, manage, and analyze epidemiologic data sets using appropriate computer hardware and software packages and applications
- Critically evaluate the research questions, methods, analyses, and findings of epidemiological research reports and presentations