

Epidemiology and Biostatistics

Nasar U. Ahmed, *Chair and Associate Professor*

Ahmed Albatineh, *Assistant Professor*

Erica Gollub, *Assistant Professor*

Hafiz Khan, *Associate Professor*

Theophile Niyonsenga, *Associate Professor*

Vukosava Pekovic, *Assistant Professor*

Mary Jo Trepka, *Associate Professor*

Changwon Yoo, *Assistant Professor*

Courtesy Faculty

Lora E. Fleming, *Professor*

David J. Lee, *Associate Professor*

The Department offers a Graduate Certificate in Epidemiology, a Master's degree in Public Health with specializations in Biostatistics and Epidemiology; and a Ph.D. in Public Health with a specialization in Epidemiology.

MPH in Biostatistics courses incorporate concepts such as hypothesis testing for univariate and sometimes multivariate data sets. Quantitative methods from fields such as: statistics, operations research, economics and mathematics are included in course material. The discipline is designed to interpret information and is connected to fields in medical informatics, and bioinformatics.

MPH in Epidemiology courses prepare students to investigate the distribution of diseases and health conditions in the population, disease outbreaks and the factors determining the distribution. (See also Graduate Certificate in Epidemiology).

General Core Courses: (15 credits)

PHC 6000	Introduction to Public Health Epidemiology	3
PHC 6065	Health Statistics	3
PHC 6315	Introduction to Environmental Health	3
PHC 6410	Health Behavior and Public Health	3
HSA 5125	Introduction to Health Policy and Management	3

Specialization in Epidemiology: (15 credits)

PHC 6055	Data Management and Applied Epidemiologic Analysis	3
PHC 6013	Epidemiology Methods: Observational Design	3
PHC 6064	Model for Binary Public Health Outcomes	3
PHC 6002	Infectious Disease Epidemiology	3
PHC 6934	Scientific Writing and Oral Presentations in Epidemiology and Biostatistics	3

Specialization in Biostatistics: (15 credits)

PHC 6718	Quantitative Research Analysis in Health and Urban Affairs II	3
PHC 6715	Survey Research Methods	3
PHC 6064	Model for Binary Public Health Outcomes	3
PHC 6013	Epidemiology Methods: Observational Design	3
PHC 6062	Research Synthesis and Meta Analysis in Public Health	3

Elective Courses: (9 credits)

PHC 6001	Environmental and Occupational Epidemiology	3
PHC 6003	Infectious and Chronic Disease Epidemiology	3
PHC 6004	Injury Epidemiology and Prevention	3
PHC 6009	AIDS Epidemiology and Control	3
PHC 6012	Current Research in Epidemiology	3
PHC 6014	Behavioral Epidemiology	3
PHC 6013	Epidemiology Methods: Observational Design	3
PHC 6016	Social Epidemiology, Health Promotion and Policy	3
PHC 6762	International Public Health	3
PHC 6251	Disaster and Emergency Epidemiology	3
PHC 6536	Health Demography	3
PHC 6907	Independent Study in Public Health	1-3

** or any other advisor approved elective

Capstone Courses: (6 credits)

PHC 6945	Supervised Field Experience in Public Health	6
----------	--	---

PHC 6945 is required for all MPH students, unless student has at least 3 years of practical experience working in a public health setting. The student must apply for the field experience exemption; upon approval one of the following may be selected as a capstone course:

PHC 6977	Masters Research Project in Public Health	6
	or	
PHC 6xxx	Master's Thesis	6

Doctor of Philosophy in Public Health Specialization in Epidemiology

The Doctor of Philosophy (Ph.D.) in Public Health is available with a specialization in Epidemiology. Students will be expected to demonstrate significant research capacity by completing 60 credits beyond the Master's degree and through the writing of an original dissertation.

Required Courses

The program requires a minimum of 75 credit hours beyond the baccalaureate which includes a minimum of 24 hours of dissertation credits. There are three components to the College Ph.D. curriculum. The first is a core curriculum shared across all tracks (12 credit hours). The second component is specific to the tracks (27 credit hours) and secondary field courses (12 credit hours). The third component consists of the dissertation, including 24 dissertation credit hours.

Shared Core Courses

PHC 6601	Emerging Issues in Public Health	3
PHC 6718	Quantitative Research Analysis in Health and Urban Affairs II	3
PHC 7981	Research Concepts and Proposal Development	3
PHC 7705	Methods in Evidence Based Public Health	3

Courses for Epidemiology Track (minimum 18 credits with 9 at the 7000 level) A minimum of 9 hours in Method and 18 hours in Content Courses is required.

Method Courses

PHC 6703	Epidemiology Methods: Experimental Design	3
PHC 6190	National Health Database Evaluations: Methods and Applications	3
PHC 7719	Quantitative Multivariate Analysis in Health Sciences Research	3

Content Courses

PHC 6000	Introduction to Public Health Epidemiology	3
PHC 6013	Epidemiology Methods: Observational Design	3
PHC 6020	Clinical Epidemiology	3
PHC 6700	Methods and Analysis of Epidemiologic Research	3
PHC 6715	Survey Research in Public Health	3
PHC 6536	Health Demography	3
PHC 6009	AIDS Epidemiology and Control	3
PHC 6001	Environmental and Occupational Epidemiology	3
PHC 6004	Injury Epidemiology and Prevention	3
PHC 6014	Behavioral Epidemiology	3
PHC 6016	Social Epidemiology	3
PHC 6002	Infectious Disease Epidemiology	3
PHC 6007	Cancer Epidemiology	3
PHC 6008	Cardiovascular Disease Epidemiology	3
PHC 6934	Scientific Writing and Oral Presentation in Epidemiology and Biostatistics	3
PHC 7162	Grant Writing in Public Health	3
PHC 6907	Independent Study: Public Health	3
PHC 6441	Epidemiology of Health Disparity	3
PHC 6003	Infectious and Chronic Disease	3
PHC 6012	Current Research in Epidemiology	3
PHC 6762	International Public Health	3
PHC 6251	Disaster and Emergency Epidemiology	3
PHC 6939	Special Topics in Cardiovascular Disease Epidemiology	3

Secondary Field Courses

At least 12 credit hours of approved secondary field courses. Secondary field courses selected from approved graduate school courses in consultation with academic advisor.

Dissertation Requirements

PHC 7980	Dissertation	24
----------	--------------	----

For additional and updated information about College requirements, programs, and services, please visit our website at www.cphsw.fiu.edu.

FOR A COMPLETE LISTING OF COURSE DESCRIPTIONS AND PREREQUISITES GO TO PAGES 570-581