THE OHIO STATE UNIVERSITY
COLLEGE OF PUBLIC HEALTH

2023-2024 Curriculum Guide for Master of Science degree program
with a specialization in EPIDEMIOLOGY

The Master of Science (MS) degree is intended for students whose interests in epidemiology are academically oriented rather than directed toward professional practice. MS graduates will have the knowledge and skills to participate in basic and applied research and will have the foundation to enter into a research-oriented career. The MS degree is also a natural entry point for students who are qualified to pursue a PhD degree which requires broader scope and depth of content via additional didactic courses and more intensive research emphasis. To reflect this research and academic orientation, the MS degree requires preparation and defense of a hypothesis-based thesis. The MS degree typically can be completed within two years.

Students admitted to the MS degree program are assigned a faculty advisor who will provide guidance throughout the program. This document serves as a resource to be used by the student and the advisor in planning a program with a specialization in Epidemiology (EPI), but is not inclusive of all important degree, college, and university requirements. This is not considered an on-line degree program; however, students will enroll in a combination of courses designed for on-campus in-person delivery (IP), distance learning (DL), or hybrid (HY). All students are expected to be familiar with the College of Public Health (CPH) *Graduate Student Handbook* http://cph.osu.edu/students/graduate/handbooks , the *Graduate School Handbook* https://gradsch.osu.edu/handbook, and the CPH competencies: https://go.osu.edu/cphcompetencies.

PROGRAM OF STUDY

The MS Public Health – Epidemiology specialization curriculum consists of a minimum of 46 credit hours.

Required Foundation Courses (9 credit hours)

PUBHLTH 6010	Essentials of Public Health	3 credit hrs
PUBHBIO 6210	Applied Biostatistics I	3 credit hrs
PUBHEPI 6410	Principles of Epidemiology	3 credit hrs

Required Courses in the Specialization (31-32 credit hours)

PUBHBIO 6211	Applied Biostatistics II	3 credit hrs
PUBHBIO 6270	Introduction to SAS for Public Health Students	2 credit hrs
PUBHEPI 6411^	Biological Basis of Public Health	3 credit hrs
PUBHEPI 6431	Design and implementation of Health Surveys	3 credit hrs
PUBHEPI 6442	Social Epidemiology	3 credit hrs
PUBHEPI 7410**	Epidemiology II & Lab	4 credit hrs
PUBHEPI 7430**	Epidemiology III	4 credit hrs

Complete three of four methods courses:

PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3 credit hrs
‡PUBHBIO 7230	Longitudinal Data Analysis	3 credit hrs
PUBHBIO 7235	Applied Survival Analysis	3 credit hrs
STAT 6450	Applied Regression Analysis	4 credit hrs

^Required for students who do not have an MD, DVM, or equivalent clinical degree.

Electives (3-4 credit hours)

PUBHEPI 5412 Global Epidemiology of Infectious Disease	3 credit hrs	‡PUBHEPI 6440 Reproductive & Perinatal Epi	3 credit hrs
PUBHEPI 5438 Cardiovascular Disease Epidemiology	3 credit hrs	PUBHEPI 6441 Epidemiology of Women's Health	3 credit hrs
PUBHEPI 6415 Nutrition in Public Health	3 credit hrs	‡PUBHEPI 7411 Epi in Environmental Health	3 credit hrs
PUBHEPI 6432 Injury Epidemiology	2 credit hrs	PUBHHMP 7686 Qualitative Methods for Health Research	3 or 4 credit hrs
‡PUBHEPI 6436 Infectious Disease Epidemiology	3 credit hrs	VETPREV 7721 Epidemiology of Zoonotic Diseases	3 credit hrs
PUBHEPI 6437 Cancer Epidemiology	3 credit hrs	VETPREV 8782 Veterinary Clinical Epidemiology	3 credit hrs

‡*Not offered 2023-2024*

Thesis

PUBHLTH 7999   Master's Thesis Research in Public Health   3 credit hours

Sample Curriculum Plan for the Master of Science in Epidemiology

This is one option. Other options that are consistent with curriculum guide are possible. However, students who want to deviate from the proposed plan below are advised to consult their advisor to ensure the logistical feasibility of their proposed plan.

TERM	COURSE	COURSE TITLE	CREDIT HRS	TERM(S) OFFERED	DELIVERY MODE
Year 1 Autumn	PUBHEPI 6410	Principles of Epidemiology	3	AU	DL
	PUBHBIO 6210	Applied Biostatistics I	3	AU, SP	DL
	PUBHBIO 6270	Introduction to SAS for Public Health Students	2	AU	DL or IP
	PUBHEPI 6431	Design & Implementation of Health Surveys	3	AU	IP
Year 1 Spring	PUBHEPI 7410	Epidemiology II & Lab	4	SP	IP
	PUBHBIO 6211	Applied Biostatistics II	3	SP	DL or IP
	PUBHLTH 6010	Essentials of Public Health	3	SP	IP
	METHODS COURSE		3	varies	DL or IP
Year 2 Autumn	PUBHEPI 6442	Social Epidemiology	3	AU	IP
	PUBHEPI 7430	Epidemiology III	4	AU	IP
	PUBHEPI 6411	Biological Basis of Public Health	3	AU	IP
	STAT 6450 or	Applied Regression Analysis Or	4	AU	IP
	PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3	AU	IP
Year 2 Spring	ELECTIVE		3	ANY	
	PUBHLTH 7999	Master's Thesis Research in Public Health	3	ANY	
	PUBHBIO 7230 or PUBHBIO 7235	Applied Longitudinal Data Analysis or Applied Survival Analysis	3	SP	IP

**After completion of the EPI course sequence, students should be able to: Demonstrate an ability to access, manage, and analyze large public-use data sets used in epidemiology, Choose the correct analysis for data obtained from an epidemiologic investigation, Analyze and interpret data obtained from an epidemiologic investigation, Assess confounding and effect modification in data from an epidemiologic investigation, Develop visuals and communicate findings from an epidemiologic analysis to academic and non-academic audiences.

Grade Policy:

In addition to the general Graduate School requirements of a cumulative grade point average of 3.0 or higher, students must meet specific college policies regarding grades in Foundation and Specialization courses. Students should familiarize themselves with Section 11 of the College of Public Health Graduate Student Handbook.

College of Public Health - Office of Academic Programs and Student Services (OAPSS)

OAPSS staff are available to provide assistance with College, Graduate School and University policies and procedures. (614) 292-8350/100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu. Questions regarding the student's program of study should be directed to the advisor.