



2023-2024 Curriculum Guide for PhD degree program with a specialization in EPIDEMIOLOGY

The Doctor of Philosophy (PhD) degree requires a significant program of study and research that qualifies the recipient to conduct independent high-quality research and communicate complex information in public health. In addition, the PhD graduate will contribute to the advancement of the field of knowledge. The emphasis is on mastery of the field and particularly on the acquisition of research skills as a basis for original work.

Students pursuing the PhD degree complete didactic and research courses. In addition, PhD students must successfully complete and pass a PhD Qualifying Exam, a PhD Candidacy Exam, Dissertation and Final Examination. Due to the expanded depth and scope of content and research, it typically takes a minimum of four years to complete the program requirements to earn the PhD degree. Graduates are prepared for teaching/research faculty positions in higher education and other positions in various public and private sectors.

Students admitted to the PhD 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 the program of study with a specialization in Epidemiology. 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 minimum total number of credit hours required to earn the PhD with a specialization in Epidemiology is 90. Students are expected to enter the program with a master's degree or equivalent. With approval of the student's advisor and Advisory Committee, up to 30 credit hours of appropriate master's level course work can be counted toward the PhD. Additional requirements for courses and distribution of credit hours are provided below. Students should work closely with their advisor to develop a tentative curriculum plan during the first term of their enrollment. In collaboration with their advisor, students are encouraged to form their Advisory Committee during their first year in the PhD program.

Major Field

Required Foundation Courses:

PUBHTLH 6010+ Essentials of Public Health	3 credit hours
PUBHBIO 6210+ Applied Biostatistics I	3 credit hours
PUBHBIO 6270+ Introduction to SAS for Public Health students	2 credit hours
PUBHEPI 6410+ Principles of Epidemiology	3 credit hours

**Not required for students with a CEPH-accredited master's degree*

Required Specialization Courses:

PUBHEPI 6411^	Biological Basis of Public Health	3 credit hours
PUBHEPI 6442	Social Epidemiology	3 credit hours
PUBHEPI 7410	Epidemiology II & Lab	4 credit hours
PUBHEPI 7430	Epidemiology III	4 credit hours
PUBHEPI 8430	Epidemiology IV	4 credit hours
PUBHHBP 8899.01	First Year Doctoral Seminar in HBHP	2 credit hours (2 semesters)
PUBHEPI 8899.02	Doctoral Seminar: Teaching Methods	2 credit hours (1 semester)
PUBHEPI 8899.04	Research Questions and Study Design in Epidemiology	1 credit
PUBHEPI 8899.05	Application of Advanced Methods in Epidemiology	1 credit
PUBHHBP 8899.02	Grant Writing Seminar	2 credit hours (2 semesters)

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

Suggested Electives: (Choose courses to bring the total credit hours for the major field to 30 credit hours)

PUBHEPI 5412 Global Epidemiology of Infectious Disease	3 credit hours	[‡] PUBHEPI 6440 Reproductive & Perinatal Epidemiology	3 credit hours
--	----------------	---	----------------

PUBHEPI 5438 Cardiovascular Disease Epidemiology	3 credit hours	PUBHEPI 6441 Epidemiology of Women's Health	3 credit hours
PUBHEPI 6415 Nutrition in Public Health	3 credit hours	*PUBHEPI 7411 Epidemiology in Environmental Health	3 credit hours
PUBHEPI 6432 Injury Epidemiology	2 credit hours	PUBHHMP 7686 Qualitative Methods for Health Research	3 or 4 credit hours
*PUBHEPI 6436 Infectious Disease Epidemiology	3 credit hours	VETPREV 7721 Epidemiology of Zoonotic Diseases	3 credit hours
PUBHEPI 6437 Cancer Epidemiology	3 credit hours	VETPREV 8782 Veterinary Clinical Epidemiology	3 credit hours

Research Methods (30 credit hours)

Required Courses:

PUBHBIO 6211	Applied Biostatistics II	3 credit hours
PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3 credit hours
PUBHBIO 7230	Applied Longitudinal Data Analysis	3 credit hours
PUBHBIO 7235	Applied Survival Analysis	3 credit hours
PUBHBIO 7240	Applied Statistical Analysis with Missing Data	3 credit hours
PUBHBIO 7255	Introduction to Causal Inference in Health Sciences Research	3 credit hours
PUBHEPI 6431	Design & Implementation of Health Surveys	3 credit hours

Suggested Research Methods Electives: (Choose courses to bring the total credit hours for research methods to 30 credit hours)

Other courses as appropriate and approved with advisor approval.

ESQREM 8659	Structural Equation Modeling	3 credit hours
GEOG 5210	Fundamentals of Geographic Information Systems	3 credit hours
PSYCH 6822	Statistical Mediation, Moderation, and Conditional Process Analysis	3 credit hours
PSYCH 6863	Psychometrics	3 credit hours
PSYCH 7821	Covariance Structure Models	3 credit hours
PSYCH 7823	Analysis of Repeated Measures and Longitudinal Data	3 credit hours
PUBHBIO 7215	Design and Analysis of Clinical Trials	2 credit hours
PUBHBIO 7225	Survey Sampling Methods	3 credit hours
PUBHEHS 5345	Modeling Transmission & Control of Infectious Diseases in Humans & Animals	3 credit hours
PUBHEPI 7412	Principals & Procedures for Human Clinical Trials	3 credit hours

*Not offered 2023-2024

Minor Cognate Field (15 credit hours)

In collaboration with the advisor and Advisory Committee, students will choose courses to bring the total credit hours for the minor cognate field to 15 credit hours.

Dissertation (15 credit hours)

PUBHLTH 8998/8999	Pre-Candidacy and Post-Candidacy Dissertation	Credit hours	15 credit hours
-------------------	---	--------------	-----------------

Note that a maximum of 20 credit hours of dissertation work can be counted toward the degree.

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 grade policies. 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