



## 2017-2018 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 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* (available at <http://cph.osu.edu/students/graduate/handbooks>) that includes information about PhD requirements, and with the *Graduate School Handbook* (available at <http://www.gradsch.ohio-state.edu/>).

### PROGRAM OF STUDY

The total number of credits 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 credits of appropriate master's level course work can be counted toward the PhD. Additional requirements for courses and distribution of credits 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 Core Courses:

PUBHTLH 6010+ Essentials of Public Health	3 credits
PUBHBIO 6211 Design and Analysis of Studies in the Health Sciences II	credits count in Research Methods
PUBHEPI 7410 Epidemiology II	credits count in Research Methods
*Not required for students with a CEPH accredited MPH	

##### Required Specialization Courses:

PUBHEPI 6411^	Biological Basis of Public Health	3 credits
PUBHEPI 7410	Epidemiology II & Lab	4 credits
PUBHEPI 7430	Epidemiology III	4 credits
PUBHEPI 8430	Epidemiology IV	4 credits
PUBHEPI 8899.03	Introductory Doctoral Seminar	2 credits (2 semesters)
PUBHEPI 8899.01	Doctoral Seminar: Research Methods	2 credits (2 semesters)
PUBHEPI 8899.02	Doctoral Seminar: Teaching Methods	2 credits (1 semester)
PUBHHBP 8899.02	Grant Writing Seminar	2 credits (2 semesters)

<sup>^</sup>Required for students who do not have an MD, DVM, or equivalent clinical degree

##### Suggested Electives: (Choose courses to bring the total credits for the major field to 30 credits)

PUBHEPI 5411 Outbreak Investigations	3 credits	*PUBHEPI 6439 Genetic Epidemiology	3 credits
PUBHEPI 5412 Infectious Diseases in the Developing World	3 credits	PUBHEPI 6440 Reproductive and Perinatal Epidemiology	3 credits
PUBHEPI 5438 Cardiovascular Disease Epidemiology	3 credits	*PUBHEPI 6441 Women's Health Issues	3 credits
*PUBHEPI 6415 Nutrition in Public Health	3 credits	PUBHEPI 7411 Environmental Epidemiology	3 credits
PUBHEPI 6432 Injury Epidemiology	2 credits	*PUBHEPI 7413 Molecular Epidemiology of Cancer	3 credits

*PUBHEPI 6433 Psychiatric Epidemiology	2 credits	*PUBHEPI 8411 Epidemiology of Obesity	3 credits
*PUBHEPI 6434 Tuberculosis: a Public Health Issue	2 credits	PUBHEPI 8413 Molecular Epidemiology of Infectious Disease	3 credits
*PUBHEPI 6435 Chronic Disease Epidemiology	3 credits	VETPREV 7221 Epidemiology of Zoonotic Disease	3 credits
PUBHEPI 6436 Infectious Disease Epidemiology	3 credits	VETPREV 8782 Veterinary Clinical Epidemiology	3 credits
PUBHEPI 6437 Cancer Epidemiology	3 credits		

\*Not offered 2017/2018

### Research Methods (30 credits)

#### Required Courses:

PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3 credits
PUBHBIO 7220	Applied Logistic Regression	3 credits
*PUBHBIO 7230	Applied Longitudinal Data Analysis	3 credits
PUBHBIO 7235	Applied Survival Analysis	3 credits
PUBHEPI 6431	Design & Implementation of Health Surveys	3 credits
PUBHEPI 7431	Epidemiological Methods	3 credits
STAT 6450	Applied Regression Analysis	4 credits

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

Other courses as appropriate and approved with advisor

PUBHBIO 7215	Design and Analysis of Clinical Trials	2 credits
PUBHBIO 7240	Applied Statistical Analysis with Missing Data	3 credits
PUBHBIO 7225	Survey Sampling Methods	3 credits
PUBHBIO 7255**	Introduction to Causal Inference in Health Science Research	
PUBHEPI 5420	Infectious Disease Modeling in Humans and Animals	3 credits
*PUBHEPI 5421	Mathematics of Infectious Disease Dynamics	3 credits
PUBHEPI 7412	Principals & Procedures for Human Clinical Trials	3 credits
*PUBHEPI 8412	Design and Analysis of Group-Randomized Trials	3 credits
SOCIOL 8651	Hierarchical Linear Models	3 credits
SOCIOL 8607	Causal Modeling	3 credits

\*Not offered 2017/2018

\*\*Students are strongly recommended to take PUBHBIO 7255

### Minor Cognate Field (15 credits)

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

### Dissertation (15 credits)

PUBHLTH 8998/8999 Pre-Candidacy and Post-Candidacy Dissertation Credits	15 credits
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Note that a maximum of 20 credits 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.

#### Office of Academic Programs and Student Services (OAPSS)

OAPSS staff are available to provide assistance with College, Graduate School and University policies and procedures. To make an appointment with a staff member in OAPSS calling (614) 292-8350/100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu