2020-2021* 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](http://cph.osu.edu/students/graduate/handbooks) the Graduate School Handbook [http://www.gradsch.ohio-state.edu/](http://www.gradsch.ohio-state.edu/) and the CPH competencies [https://go.osu.edu/cphcompetencies](https://go.osu.edu/cphcompetencies).

PROGRAM OF STUDY

The minimum 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

<table>
<thead>
<tr>
<th>Required Foundation Courses:</th>
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<tbody>
<tr>
<td>PUBHTLH 6010* Essentials of Public Health</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHBIO 6210* Design and Analysis of Studies in the Health Sciences</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHBIO 6270* Introduction to SAS for Public Health students</td>
<td>2 credits</td>
</tr>
<tr>
<td>PUBHEPI 6430* Epidemiology I</td>
<td>4 credits</td>
</tr>
<tr>
<td>*Not required for students with a CEPH-accredited master’s degree</td>
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<thead>
<tr>
<th>Required Specialization Courses:</th>
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<tbody>
<tr>
<td>PUBHEPI 6411^ Biological Basis of Public Health</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 64## Social Epidemiology/Social Determinants of Health</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 7410 Epidemiology II &amp; Lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>PUBHEPI 7430 Epidemiology III</td>
<td>4 credits</td>
</tr>
<tr>
<td>PUBHEPI 8430 Epidemiology IV</td>
<td>4 credits</td>
</tr>
<tr>
<td>PUBHEPI 8899.01 Professional Skills for Public Health Doctoral Students</td>
<td>1 credit</td>
</tr>
<tr>
<td>PUBHEPI 8899.02 Doctoral Seminar: Teaching Methods</td>
<td>2 credits (1 semester)</td>
</tr>
<tr>
<td>PUBHEPI 8899.03 Epidemiology – History, Social Context, and Ethics</td>
<td>1 credit</td>
</tr>
<tr>
<td>PUBHEPI 8899.04 Research Questions and Study Design in Epidemiology</td>
<td>1 credit</td>
</tr>
<tr>
<td>PUBHEPI 8899.05 Application of Advanced Methods in Epidemiology</td>
<td>1 credit</td>
</tr>
<tr>
<td>PUBHHBP 8899.02 Grant Writing Seminar</td>
<td>2 credits (2 semesters)</td>
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|^Required for students who do not have an MD, DVM, or equivalent clinical degrees |

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

<table>
<thead>
<tr>
<th>Suggested Courses</th>
<th>Credits</th>
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<tr>
<td>PUBHEPI 5411 Outbreak Investigations</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 5412 Infectious Diseases in the Dev. World</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 6439 Genetic Epidemiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 6440 Reproductive &amp; Perinatal Epidemiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>PUBHEPI 5438</td>
<td>Cardiovascular Disease Epidemiology</td>
</tr>
<tr>
<td>PUBHEPI 6415</td>
<td>Nutrition in Public Health</td>
</tr>
<tr>
<td>PUBHEPI 6432</td>
<td>Injury Epidemiology</td>
</tr>
<tr>
<td>^PUBHEPI 6433</td>
<td>Psychiatric Epidemiology</td>
</tr>
<tr>
<td>^PUBHEPI 6434</td>
<td>Tuberculosis: A Public Health Issue</td>
</tr>
<tr>
<td>^PUBHEPI 6435</td>
<td>Chronic Disease Epidemiology</td>
</tr>
<tr>
<td>PUBHEPI 6436</td>
<td>Infectious Disease Epidemiology</td>
</tr>
<tr>
<td>PUBHEPI 6437</td>
<td>Cancer Epidemiology</td>
</tr>
<tr>
<td>HISTORY 5300</td>
<td>Contextualizing the History of HIV/AIDS in Africa</td>
</tr>
<tr>
<td>PUBHEPI 8411</td>
<td>Epidemiology of Obesity</td>
</tr>
<tr>
<td>PUBHEPI 8413</td>
<td>Molecular Epidemiology of Infectious Disease</td>
</tr>
<tr>
<td>PUBHEPI 6432</td>
<td>Mathematics of Infectious Disease Dynamics</td>
</tr>
<tr>
<td>PUBHEPI 7412</td>
<td>Principals &amp; Procedures for Human Clinical Trials</td>
</tr>
<tr>
<td>^PUBHEPI 8412</td>
<td>Design and Analysis of Group-Randomized Trials</td>
</tr>
<tr>
<td>SOCIOL 8651</td>
<td>Hierarchical Linear Models</td>
</tr>
<tr>
<td>SOCIOL 8607</td>
<td>Causal Modeling</td>
</tr>
<tr>
<td>^Not offered 2020-2021</td>
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### 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  
- PUBHBSO 7240 Applied Statistical Analysis with Missing Data 3 credits  
- PUBHBIO 7255 Introduction to Causal Inference in Health Sciences Research 3 credits  
- PUBHEPI 6431 Design & Implementation of Health Surveys 3 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 7225 Survey Sampling Methods 3 credits  
- PUBHEHS 5345 Modeling Transmission & Control of Infectious Diseases in Humans & 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 2020-2021

### 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  

*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.

### 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

*The College of Public Health is awaiting official university approval of the curriculum guide* 7.16.20