



**THE OHIO STATE UNIVERSITY**

---

COLLEGE OF PUBLIC HEALTH

## **2013-2014 Curriculum Guides**



## Curriculum Guide for Master of Public Health degree program with a specialization in BIostatistics

Students admitted to the Master of Public Health (MPH) 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 Biostatistics. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-Biostatistics curriculum consists of a minimum of 48 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Courses required for a specialization in biostatistics (24 credits)
3. Elective courses (4 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

#### **Public Health Core Courses** (15 credits)

Every student in the MPH-Biostatistics program must take the following courses in areas of knowledge basic to public health:

##### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences 3 cr

##### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

##### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology 3 cr

##### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

##### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

#### **Required Courses in the Specialization** (18 credits)

PUBHBIO 6211 Design & Analysis of Studies in the Health Sciences II 3 cr

PUBHBIO 6212 Regression Methods for the Health Sciences 3 cr

PUBHBIO 7245/STAT 7755 Biostatistical Collaboration 2 cr

PUBHEPI 6431 Design & Implementation of Health Surveys 3 cr

STAT 6740 Data Management & Graphics for Stat Analysis 3 cr

STAT 6450 Applied Regression Analysis 4 cr

#### **Selectives: Select two of the following four courses** (6 credits):

PUBHBIO 7235/STAT 6605 Applied Survival Analysis 3 cr

PUBHBIO 7220 Applied Logistic Regression 3 cr

PUBHBIO 7225/STAT 6510 Survey Sampling Methods 3 cr

PUBHBIO 7230 Applied Longitudinal Analysis 3 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*

**Electives (minimum 4 credits)**

Additional courses(s) approved for the specialization are selected in consultation with the advisor.

**Practicum**

PUBHLTH 7189 Practicum in Public Health 2 credits

**Culminating Project**

PUBHLTH 7998 Culminating Project in Public Health 3 credits

**Sample Curriculum Plan for the Master of Public Health in Biostatistics**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6210	3	AU, SP
PUBHEPI 6410	3	AU, SP
STAT 6740	3	AU, SP
CPH CORE COURSE	3	AU, SP
Year 1 Spring Semester		
PUBHBIO 6211	3	SP
STAT 6450	4	SP
CPH CORE COURSE	3	AU, SP
CPH CORE COURSE	3	AU, SP

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6212	3	AU
PUBHEPI 6431	3	AU
PUBHLTH 7189*	2	ANY
SELECTIVE(S)	3-6	AU,SP
Year 2 Spring Semester		
PUBHLTH 7998	3	ANY
PUBHBIO 7245/STAT 7755	2	SP
SELECTIVE or ELECTIVE(S)	4	AU,SP

\*Practicum (Public Health 7189) is to be completed Autumn Semester of Year 2. It may be completed during Summer or Spring with approval from the faculty advisor.

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*



## Curriculum Guide for Master of Science degree program with a specialization in BIostatistics

The Master of Science (MS) degree is intended for students whose interests are academically oriented rather than directed toward professional practice. It is a natural entry point for students who are interested in pursuing a PhD degree or a career in research. Because of this orientation, the emphasis in the MS degree program is on building a strong foundation in a particular specialty field, along with the research methods important in that field. To reflect this research and academic orientation, the MS degree ordinarily requires the preparation of a thesis, though it is available under a non-thesis option at the discretion of the division of specialization.

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 Biostatistics. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks/graduate-student-handbook>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/graduate-school-handbook1.html>).

The masters program with a specialization in Biostatistics presupposes a basic statistical background at the level of Public Health Biostatistics (PUBHBIO) 6210-6211.

### **PROGRAM OF STUDY**

The MS-Biostatistics curriculum consists of a minimum of 45 credits organized into four curricular domains:

1. Epidemiology requirement (3 credits)
2. Biostatistics specialization and Selective courses (27 credits)
3. Electives (12 credits)
4. Thesis (3 credits)

#### **Epidemiology requirement (3 credits)**

PUBHEPI 6410	Principles of Epidemiology	3 cr
--------------	----------------------------	------

#### **Required Courses in the Specialization (18 credits)**

PUBHBIO 6212	Regression Methods for the Health Sciences	3 cr
PUBHBIO 7245/STAT 7755	Biostatistical Collaboration	2 cr
STAT 6740	Data Management and Graphics for Statistical Analyses	3 cr
STAT 6301	Probability for Statistical Inference	3 cr
STAT 6302	Theory of Statistical Analysis	3 cr
STAT 6450	Applied Regression Analysis	4 cr

#### **Selectives: Select three of the following courses (9 credits)**

PUBHBIO 7220	Applied Logistic Regression	3 cr
PUBHBIO 7230	Applied Longitudinal Analysis	3 cr
PUBHBIO 7235/STAT 6605	Applied Survival Analysis	3 cr
PUBHBIO 7225/STAT 6510	Survey Sampling Methods	3 cr
PUBHBIO 7240/STAT 6520	Applied Statistical Analysis with Missing Data	3 cr

**Electives (12 credits)\*\***

Because of the research orientation of the degree, it is essential that students work closely with their advisors to plan their use of electives to build the expected skills and support their thesis.

**Thesis (3 credits)**

PUBHLTH 7999 Master’s Thesis Research in Public Health

3 cr

**Sample Curriculum Plan for the Master of Science in Biostatistics**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6212	3	AU
PUBHEPI 6410	3	AU, SP
STAT 6740	3	AU, SP
STAT 6301	3	AU
Year 1 Spring Semester		
STAT 6302	3	SP
STAT 6450	4	AU, SP
ELECTIVES **	3-6	AU, SP

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
SELECTIVES	3-6	AU, SP
ELECTIVES**	3-6	AU
Year 2 Spring Semester		
PUBHBIO 7245/STAT 7755	2	SP
PUBHLTH 7999	3	ANY
ELECTIVES**	3-6	AU, SP
SELECTIVES	3-6	AU, SP

\*\*A total of 12 hours of electives are required for the degree, however they can be taken during any semester

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

- |                              |                                   |
|------------------------------|-----------------------------------|
| CPH Academic Standards       | Transfer Credit                   |
| Time to Degree (time limits) | Combined Degrees and Dual Degrees |
| Graduate Non-Degree Credit   | Graduation                        |
| Practicum                    | Culminating Project               |
| Career Planning              | Admissions                        |

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

**\*\*\*\*\*Questions regarding the student’s program of study should be directed to their advisor\*\*\*\*\***



## Curriculum Guide for the Interdisciplinary PhD program in Biostatistics PUBLIC HEALTH SPECIALIZATION

The PhD degree requires a significant program of study and research that qualifies the recipient to work independently and 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.

The doctoral program in Biostatistics presupposes a mathematical background that includes linear algebra and advanced calculus. After they declare their specialization during their second year, students in the Interdisciplinary PhD program in Biostatistics who choose the Public Health specialization will be assigned faculty advisors from the Biostatistics faculty (Note: the advisor could be from the Department of Statistics or the Division of Biostatistics in the College of Public Health). This document serves as a quick resource guide to be used by the student and the advisor in planning the program of study for the Public Health specialization. Complete information about the program requirements and associated forms is at <http://biostatprograms.osu.edu/>

For additional information about PhD requirements, students are directed to the College of Public Health (CPH) Student Handbook (<http://cph.osu.edu/students/graduate/handbooks>) and to the Graduate School Handbook (<http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY (minimum of 80 credits, or 50 credits beyond a master's degree)**

#### **Required Courses (44 credits)**

PUBHBIO 7215/STAT 6615	Design and Analysis of Clinical Trials	2 cr
PUBHBIO 7245/STAT 7755	Biostatistical Collaboration	2 cr
PUBHBIO 8230/STAT 7470	Advanced Longitudinal Data Analysis	3 cr
PUBHBIO 8235	Advanced Regression Model Time to Event Data	3 cr
PUBHEPI 6430	Epidemiology I and Lab	4 cr
STAT 6540	Applied Stochastic Processes	3 cr
or STAT 7540	Theory of Stochastic Processes	
STAT 6801	Statistical Theory I	4 cr
STAT 6802	Statistical Theory II	4 cr
STAT 6860	Foundations of the Linear Model	2 cr
STAT 6910	Applied Statistics I	4 cr
STAT 6950	Applied Statistics II	4 cr
STAT 7410	Theory of the Linear Model	3 cr
STAT 7430	Generalized Linear Models	3 cr
STAT 7730	Advanced Computational Statistics	3 cr

**Cognate/Minor Courses (6 credits)** – Courses outside of statistics/biostatistics, in a health-related field, chosen in consultation with the student's advisor and approved by the student's PhD Examination Committee.

**Electives (12 credits)** – Courses chosen in consultation with the student's advisor and approved by the student's PhD Examination Committee (generally from courses at the 7000 level and above in PUBHBIO or 6000 level and above in STAT).

#### **Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu



## Curriculum Guide for Master of Public Health degree program with a specialization in Biomedical Informatics

The Master of Public Health (MPH) degree is intended for students whose interests in Biomedical Informatics (BMI) are oriented towards professional practice within the public health and/or healthcare domains.

Students admitted to the MPH-BMI 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 Biomedical Informatics. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-BMI curriculum consists of a minimum of 48 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Courses required for a specialization in biomedical informatics (19 credits)
3. Elective courses approved for the specialization (9 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

#### **Public Health Core Courses** (15 credits)

Every student in the MPH-BMI program must take the following courses in areas of knowledge basic to public health:

##### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences I 3 cr

##### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

##### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology 3 cr

##### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

##### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

#### **Required Courses in the Specialization** (19 credits)

PUBHBIO 6211 Design & Analysis of Studies in the Health Sciences II 3 cr

BMI 5710 Introduction to Biomedical Informatics 3 cr

BMI 5740 Introduction to Research Informatics 3 cr

BMI 5760 Introduction to Public Health Informatics 3 cr

BMI 7840 Advanced Topics in Biomedical Data Management 3 cr

BMI 7891 Seminars in Biomedical Informatics 2 cr

#### **Recommended Electives\*** (9 credits)

BMI 5720 Introduction to Imaging Informatics	3 cr	PUBHBIO 6212 Regression Methods for Hlth Sci	3 cr
BMI 5730 Introduction to Bioinformatics	3 cr	PUBHHMP 7605 Introduction to Health Policy	3 cr
BMI 5750 Methods in Biomedical Informatics	3 cr	PUBHHMP 7678 Intro Health Services Research	3 cr
BMI 7810 Adv. Topics in Clinical Informatics	3 cr	PUBHHMP 7682 Information Sys Hlth Serv Org	3 cr
BMI 7820 Biological & Medical Image Analysis	3 cr	PUBHBIO 6270 Intro SAS for Public Hlth Studt.	3 cr
BMI 7830 Systems Biology	3 cr	PUBHBIO7220 Applied Logistic Regression	3 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to the faculty advisor\*\*\*\*\*

PUBHBIO7225 Survey Sampling Methods	3 cr	CSE 4221 Intro to Object Oriented (OO) Programming	3 cr
PUBHBIO7235 Applied Survival Analysis	3 cr	CSE 5331 Data Structures & Algorithms	2 cr
PUBHEPI 6412 Prin Clin & Translational Sci	2 cr	CSE 5231 Software Engineering Techniques	2 cr
PUBHEPI 6414 Sci Writing Biomed & Clin Sci	1 cr	CSE 5232 Software Requirements Analysis	2 cr
PUBHEPI 6413 Conduct. & Comm. Research in Clin.&Trans. Sci	2 cr	CSE 5241 Introduction to Database Systems	2 cr
PUBHEPI 6401 Health Data Sources and Uses	3 cr	CSE 5243 Introduction to Data Mining	2 cr
PUBHHBP 7534 Research Methods in HBHP	3 cr	CSE 5521 Survey of Artificial Intel I: Basic Tech	2 cr
PUBHEPI 6431 Des.&Implt. Health Surveys	3 cr	CSE 5522 - Survey of Artificial Intel II: Adv Tech	2 cr
		CSE 5531 Introduction to Cognitive Science	3 cr

\*Students with a background in public health or medicine are encouraged to focus on computer science (CSE) electives to enhance their computational abilities. Similarly, students with backgrounds in computer science, electrical engineering, or information technology are encouraged to focus their electives to enhance their understanding of medicine and public health.

### **Practicum**

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

### **Culminating Project**

PUBHLTH 7998	Culminating Project in Public Health	3 cr
--------------	--------------------------------------	------

### **Sample Curriculum Plan for the Master of Public Health in Biomedical Informatics<sup>1</sup>**

<b>Year 1 Autumn Semester</b>		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6210	3	AU, SP
PUBHEHS 6310	3	AU, SP
PUBHHBP 6510	3	AU, SP
BMI 5710	3	AU
BMI 7891	0-1	AU, SP

<b>Year 2 Autumn Semester</b>		
Course Number	Credit Hours	Semesters Offered
BMI 5760	3	AU
BMI 7840	3	AU
ELECTIVE	3	AU
BMI 7891	0-1	AU, SP

<b>Year 1 Spring Semester</b>		
Course Number	Credit Hours	Semesters Offered
PUBHHMP 6610	3	AU, SP
PUBHEPI 6410	3	AU, SP
PUBHBIO 6211	3	SP
BMI 5740	3	SP
BMI 7891	0-1	SP, AU

<b>Year 2 Spring Semester</b>		
Course Number	Credit Hours	Semesters Offered
PUBHLTH 7998	3	ANY
PHARM 7510	2	SP
ELECTIVE	3	AU, SP
BMI 7891	0-1	AU, SP

<b>Year 1 Summer Term</b>		
Course Number	Credit Hours	Semesters Offered
PUBHLTH 7189	2	ANY
ELECTIVE	3	

### **Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit	Career Planning
Time to Degree (time limits)	Combined Degrees and Dual Degrees	Admissions
Graduate Non-Degree Credit	Graduation	
Practicum	Culminating Project	

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350. OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

1 A sample 3 year program is available by request from the Department of Biomedical Informatics. Please contact [bmi.education@osumc.edu](mailto:bmi.education@osumc.edu)



## Curriculum Guide for Master of Science degree program with a specialization in **BIOMEDICAL INFORMATICS**

The Master of Science (MS) degree is intended for students whose interests in Biomedical Informatics (BMI) are academically oriented rather than directed toward professional practice. It is a natural entry point for students who are interested in pursuing a Ph.D. degree or a career in research. Because of this orientation, the emphasis in the MS degree program is on building a strong foundation in a particular specialty field, along with the research methods important in that field. To reflect this research and academic orientation, the MS degree ordinarily requires the preparation of a thesis, though it is available under a non-thesis option at the discretion of the division of specialization.

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 Biomedical Informatics. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks> and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### ***PROGRAM OF STUDY***

The MS-BMI curriculum consists of a minimum of 48 credits organized into three curricular domains:

1. Courses required for a specialization in Biomedical Informatics (30 hours)
2. Elective courses approved for the specialization (12 credits)
3. Thesis (6 credits)

#### **Required Courses in the Specialization** (30 credits)

PUBHBIO 6210	Design & Analysis of Studies in the Health Sciences I	3 cr
PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3 cr
PUBHBIO 6212	Regression Methods for the Health Sciences	3 cr
PUBHEPI 6430	Epidemiology I & Lab	4 cr
PUBHEPI 7410	Epidemiology II & Lab	4 cr
BMI 5710	Introduction to Biomedical Informatics	3 cr
BMI 5740	Introduction to Research Informatics	3 cr
BMI 7891	Seminars in Biomedical Informatics	2 cr
BMI 8999	Thesis in Biomedical Informatics	6 cr
BMI 7840	Advanced Topics in Biomedical Data Management	3 cr
Varies	Ethics course for Biomedical Research	2 cr

#### **Recommended Electives\*** (12 credits)

BMI 5720	Introduction to Imaging Informatics	3 cr	PUBHBIO7220	Applied Logistic Regression	3 cr
BMI 5730	Introduction to Bioinformatics	3 cr	PUBHBIO7225	Survey Sampling Methods	3 cr
BMI 5750	Methods in Biomedical Informatics	3 cr	PUBHBIO7235	Applied Survival Analysis	3 cr
BMI 5760	Public Health Informatics	3 cr	PUBHEPI 7430	Epidemiology III	4 cr
BMI 7810	Adv. Topics in Clinical Informatics	3 cr	PUBHEPI 6412	Prin Clin and Translational Sci	2 cr
BMI 7820	Biological and Medical Image Analysis	3 cr	PUBHEPI 6413	Conduct. & Communicating	2 cr
BMI 7830	Systems Biology	3 cr		Research in Clinical & Translational Science	
PUBHHMP 6611	Intro Health Care Organization	3 cr	PUBHEPI 6401	Health Data Sources and Uses	3 cr
PUBHHMP 7682	Info Sys Health Services Org	3 cr	PUBHEPI 6414	Sci Writing Biomed and Clin Sci	1 cr
PUBHHMP 7605	Introduction to Health Policy	3 cr	PUBHHBP 7534	Research Methods in HBHP	3 cr
PUBHHMP 7678	Intro Health Services Research	3 cr	PUBHEPI 6431	Design and Implement. Health Surveys	3 cr
PUBHBIO6270	Intro SAS for Pub. Hlth Students	3 cr	CSE 5231	Software Engineering Techniques	2 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to the advisor\*\*\*\*\*

CSE 5232 Software Requirements Analysis	2 cr	CSE 5521 Survey of Artificial Intel I: Basic Tech	2 cr
CSE 5241 Introduction to Database Systems	2 cr	CSE 5522 - Survey of Artificial Intel II: Adv Tech	2 cr
CSE 5243 Introduction to Data Mining	2 cr	CSE 5531 Introduction to Cognitive Science	3 cr

\*Students with a background in public health or medicine are encouraged to focus on computer science (CSE) electives to enhance their computational abilities. Similarly, students with backgrounds in computer science, electrical engineering, or information technology are encouraged to focus their electives to enhance their understanding of medicine and public health.

**Thesis**

6 cr

BMI 8999 Thesis in Biomedical Informatics 6 cr

**Sample 2-year Curriculum Plan for the Master of Science in Biomedical Informatics<sup>1</sup>**

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6210	3	AU
PUBHEPI 6430	3	AU
BMI 5710	3	AU
BMI 7891	0-1	AU, SP

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
BMI 8999	3	AU
PUBHBIO 6212	3	AU
BMI 7840	3	AU
BMI 7891	0-1	AU, SP

Year 1 Spring Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6211	3	SP
PUBHEPI 7410	3	SP
BMI 5740	3	SP
ELECTIVE	3	SP, AU
BMI 7891	0-1	SP, AU

Year 2 Spring Semester		
Course Number	Credit Hours	Semesters Offered
BMI 7999	3	SP
ETHICS Course	2	SP
ELECTIVE	3	AU, SP
BMI 7891	0-1	AU, SP

Year 1 Summer Term		
ELECTIVE	3	
ELECTIVE	3	

<sup>1</sup> A sample 3 year program is available by request from the Department of Biomedical Informatics. Please contact [bmi.education@osumc.edu](mailto:bmi.education@osumc.edu)

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 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\*\*\*\*\*



## Curriculum Guide for Master of Public Health degree program with a specialization in CLINICAL TRANSLATIONAL SCIENCE

Students admitted to the Master of Public Health (MPH) 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 faculty advisor in planning a program with a specialization in Clinical Translational Science (CTS). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-CTS curriculum consists of a minimum of 45 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (16 credits)
2. Courses required for a specialization in CTS (17-18 credits)
3. Elective courses approved for the specialization (6-7 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

### **Public Health Core Courses** (16 credits)

Every student in the MPH-CTS program must take the following courses in areas of knowledge basic to public health:

#### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences I 3 cr

#### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

#### **Epidemiology**

PUBHEPI 6430\*\* Epidemiology I & Lab 4 cr

#### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

#### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

*\*\*Students who pass a waiver examination for PUBHEPI 6430 may substitute an elective course*

### **Required Courses in the Specialization** (17-18 credits)

PUBHBIO 6211 Design & Analysis of Studies in the Health Sciences II 3 cr

PUBHEPI 6412 Basic Principles in CTS 2 cr

PUBHEPI 6413 Conducting & Communicating Research in CTS 2 cr

PUBHEPI 7410 Epidemiology II & Lab 4 cr

PUBHEPI 7412 Principles & Procedures for Human Clinical Trials 3 cr

PUBHBIO 7194\* Methods for Modeling binary outcome & time to event data 3 cr

\* offered May Session 2014 only

### **Recommended Electives** (6-7 credits)

**\*\*\*\*\*Questions regarding the student's program of study should be directed to the faculty advisor\*\*\*\*\***

PUBHHBP 7520	Community Health Assessment	3 cr
PUBHHBP 7522	Program Planning and Implementation	3 cr
PUBHHBP 7532	Program Evaluation in Public Health	3 cr
PUBHHBP 7554	Fundamental Determinants of Population Health	3 cr
PUBHHBP 7558	Social-Ecological Strategies in Prevention	2 cr
PUBHHMP 7678	Approaches to Health Services Research	3 cr

### **Practicum**

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

### **Culminating Project**

PUBHLTH 7998	Culminating Project in Public Health	3 cr
--------------	--------------------------------------	------

### **Sample Curriculum Plan for the Master of Public Health in Clinical Translational Science**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6210	3	AU, SP
PUBHEPI 6412^	2	AU
PUBHEPI 6430^	4	AU
PUBHHBP 6510	3	AU, SP
PUBHEHS 6310	3	AU, SP
Year 1 Spring Semester		
PUBHBIO 6211	3	SP
PUBHEPI 6413	2	SP
PUBHEPI 7410	4	SP
PUBHEPI 7412	3	SP
PUBHHMP 6610	3	AU, SP
Summer Term		
PUBHLTH 7189	2	ANY
PUBHBIO 7194	3	MAY SESSION ONLY

Year 2 Autumn Semester		
ELECTIVE	3-4	AU
ELECTIVE	3	AU
PUBHLTH 7998	3	ANY
ELECTIVE	3-4	

^ PUBHEPI 6412 and 6430 have a small time overlap autumn semester of Year 1, so students will need to email [register@cph.osu.edu](mailto:register@cph.osu.edu) to request that the courses get added with the time conflict.

### **Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 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 faculty advisor\*\*\*\*\*



## 2013-2014 Curriculum Guide for Master of Public Health degree program with a specialization in **ENVIRONMENTAL HEALTH SCIENCES**

The MPH degree program is designed to provide students with the knowledge and skills to be practitioners of public health. It includes courses within public health's core disciplines of biostatistics, environmental health science, epidemiology, health behavior & health promotion, and health services management and policy. This broad training is complemented by the more in-depth course work within your specialization. Course work is combined with a practicum and culminating experience to provide students with the knowledge, experience, and skill to work within a broad range of public and private organizations as environmental health specialists.

MPH students are assigned faculty advisors who will provide guidance regarding their courses, practicum, and culminating project. Students are encouraged to get to know their advisor and meet with him/her at least twice each semester. This document serves as a resource to be used by the student and the advisor in planning a program with a specialization in Environmental Health Sciences (EHS). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <https://cph.osu.edu/students/graduate/handbooks/graduate-student-handbook>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-EHS curriculum consists of a minimum of 45 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Courses required for a specialization in EHS (19 credits)
3. Approved electives (6 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

#### **Public Health Core Courses** (15 credits)

Every student in the MPH-EHS program must take the following courses in areas of knowledge basic to public health:

##### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences 3 cr

##### **Environmental Health Sciences**

PUBHEHS 6315 Advanced Environmental Health Science 3 cr

##### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology 3 cr

##### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

##### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

#### **Required Courses in the Specialization** (19 credits)

PUBHEHS 5315	Principles of Toxicology	3 cr
PUBHEHS 5325	Principles of Occupational Health Science	3 cr
PUBHEHS 6320	Global Health and Environmental Microbiology	3 cr
PUBHEHS 7390	Major Human Diseases in Global Public Health	3 cr
PUBHEHS 7365	Principles of Risk Assessment	3 cr
PUBHEHS 7380	Exposure Science Monitoring Techniques	3 cr
PUBHEHS 7899	Seminar in Environmental Health Sciences	1 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*

**Electives** (Choose courses to bring the total credits in the program to 45 credits)

Additional electives may be selected from other courses offered by the EHS Division, by the College of Public of Health, or elsewhere in the University with approval of the advisor.

PUBHEHS 5320 Climate Change and Human Health	3 cr
PUBHEHS 7193 Individual Studies in Environmental Health Sciences	1-4 cr
PUBHEHS 7194 Group Studies in Environmental Health Sciences	1-3 cr
PUBHEHS 7340 Environmental Law and Policy for Public Health	3 cr
PUBHEHS 7345 Principles of Environmental Health Management	3 cr
PUBHEHS 7546 Advanced Food Microbiology II	2 cr
PUBHEHS 7360 Water Contamination: Sources and Health Impact	2 cr
PUBHEHS 8340 Molecular Techniques for EHS	3 cr
PUBHEPI 6437 Cancer Epidemiology	3 cr
PUBHLTH 6189.01 Field Experience in Public Health	1-6 cr
PUBHLTH 6189.02 Field Experience in Global Public Health	1-6 cr

**Practicum**

PUBHLTH 7189 Practicum in Public Health	2 credits
---	-----------

**Culminating Project**

PUBHLTH 7998 Culminating Project in Public Health	3 credits
---	-----------

**Sample Curriculum Plan for the Master of Public Health in Environmental Health Sciences**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHBIO 6210	3	AU, SP
PUBHEHS 6315	3	AU
PUBHEHS 6320	3	AU
PUBHEPI 6410	3	AU, SP
Year 1 Spring Semester		
PUBHEHS 5315	3	SP
PUBHEHS 7390	3	SP
PUBHEHS 7365	3	SP
PUBHEHS 7899	1	
EHS ELECTIVES	6	
Summer Term		
PUBHLTH 7189	2	ANY

Year 2 Autumn Semester		
PUBHEHS 5325	3	AU
PUBHEHS 7380	3	AU
PUBHHMP 6610	3	AU, SP
PUBHLTH 7998	3	ANY
PUBHHBP 6510	3	AU, SP

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*



## 2013-2014 Curriculum Guide for Master of Science degree program with a specialization in ENVIRONMENTAL HEALTH SCIENCES

The Master of Science (MS) degree is intended for students whose interests in Environmental Health Sciences are research oriented rather than directed toward professional practice. It is a natural entry point for students who are interested in pursuing a Ph.D. degree or a career in research. Because of this orientation, the emphasis in the MS degree program is on building a strong foundation in a particular specialty field, along with the research methods important in that field. To reflect this research and academic orientation, the MS degree ordinarily requires the preparation of a thesis, though it is available under a non-thesis option at the discretion of the division.

Students admitted to the MS degree program are assigned a faculty advisor who will provide guidance throughout the program. Students are encouraged to get to know their advisor and meet with him/her at least twice each semester. This document serves as a resource to be used by the student and the advisor in planning a program with a specialization in Environmental Health Sciences (EHS). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/academics/handbooks.cfm>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

Although the focus of the MS degree program of study is in EHS, students are required to show coverage in epidemiology and biostatistics.

The MS-EHS curriculum consists of a minimum of 45 credits organized into three curricular domains:

1. Courses required for a specialization in EHS (30 credits)
2. Elective courses approved for the specialization (6 credits)
3. Thesis (9 credits)

#### **Required Courses in the Specialization (30 credits)**

PUBHEHS 5315	Principles of Toxicology	3 cr
PUBHEHS 6320	Global Health and Environmental Microbiology	3 cr
PUBHEHS 7365	Principles of Risk Assessment	3 cr
PUBHEHS 7380	Exposure Science Monitoring Techniques	3 cr
PUBHEHS 8340	Molecular Techniques	3 cr
PUBHEHS 7899	Seminar in Environmental Health	1, 1, 1 (3 credits total)

#### *Core Course Requirements:*

PUBHEHS 6315	Advanced Environmental Health Science	3 cr
PUBHEPI 6410	Principles of Epidemiology	3 cr
PUBHBIO 6210	Design & Analysis of Studies in Health Science I	3 cr
PUBHBIO 6211	Design & Analysis of Studies in Health Science II	3 cr

#### **Electives (6 credits)**

Additional electives may be selected from other courses offered by the EHS Division, by the College of Public of Health, or elsewhere in the University with approval of the advisor.

PUBHEHS 5320	Climate Change and Human Health	3 cr
PUBHEHS 7193	Individual Studies in Environmental Health Sciences	1-3 cr
PUBHEHS 7194	Group Studies in Environmental Health Sciences	1-3 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*

PUBHEHS 7340	Environmental Law and Policy for Public Health	3 cr
PUBHEHS 7345	Principles of Environmental Health Management	3 cr
PUBHEHS 7546	Advanced Food Microbiology II	2 cr
PUBHEHS 7360	Water Contamination: Sources and Health Impact	3 cr
PUBHEPI 6437	Cancer Epidemiology	3 cr
PUBHLTH 6189.01	Field Experience in Public Health	1-6 cr
PUBHLTH 6189.02	Field Experience in Global Public Health	1-6 cr

### **Thesis**

The thesis is an integral part of the MS degree, allowing the student the opportunity to investigate a topic of personal interest and importance to the field and to integrate and synthesize from the knowledge and skills presented in the program.

PUBHLTH 7999 Master's Thesis Research in Public Health 3, 3, 3 (9 credits total)

### ***Sample Curriculum Plan for the Master of Science in Environmental Health Sciences***

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

<b>Year 1 Autumn Semester</b>		
<b>Course Number</b>	<b>Credit Hours</b>	<b>Semesters Offered</b>
PUBHBIO 6210	3	AU, SP
PUBHEHS 6315	3	AU
PUBHEHS 6320	3	AU
PUBHEHS 7899	1	AU, SP
PUBHEPI 6410	3	ANY
<b>Year 1 Spring Semester</b>		
PUBHBIO 6211	3	SP
PUBHEHS 5315	3	SP
PUBHEHS 7899	1	AU, SP
PUBHEHS 7365	3	SP
PUBHEHS 8340	3	SP
EHS ELECTIVE	3	
<b>Summer Term</b>		
PUBHLTH 7999	6	ANY

<b>Year 2 Autumn Semester</b>		
<b>Course Number</b>	<b>Credit Hours</b>	<b>Semesters Offered</b>
PUBHEHS 7899	1	AU, SP
PUBHEHS 7999	3	ANY
PUBHEHS 7380	3	AU
EHS ELECTIVE	3	

### **Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

**\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\***





## 2013-2014 Curriculum Guide for PhD degree program with a specialization in ENVIRONMENTAL HEALTH SCIENCES

The PhD degree requires a significant program of study and research that qualifies the recipient to work independently and 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 faculty advisors who will provide guidance throughout the program. Students are encouraged to get to know their advisor and meet with him/her at least twice each semester. 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 Environmental Health Science. For additional information about PhD requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online <http://cph.osu.edu/students/graduate/handbooks/graduate-student-handbook>) and to the Graduate School Handbook (available online at <http://www.gradsch.osu.edu/>).

### **PROGRAM OF STUDY**

The PhD program in Environmental Health Sciences requires a minimum total of 90 semester credits or 60 credits beyond a master's degree. Some of the specified courses may have been included in a prior master's degree. A maximum of 30 semester credits of master's degree work may be applied to PhD requirements if approved by the advisor.

#### **Major Field (24 credits)**

##### **Required Courses:**

PUBHEHS 5315	Principles of Toxicology	3 cr
PUBHEHS 5325	Principles of Occupational Health Sciences	3 cr
PUBHEHS 6315	Advanced Environmental Health Science	3 cr
PUBHEHS 6320	Global Health and Environmental Microbiology	3 cr
PUBHEHS 7365	Principles of Risk Assessment	3 cr
PUBHEHS 7380	Exposure Science Monitoring Techniques	3 cr
PUBHEHS 8340	Molecular Techniques	3 cr
PUBHEHS 8999	Doctoral Seminar in Environmental Health Sciences	1, 1, 1 (3 cr total)

#### **Research Methods (24 credits)**

##### **Required Courses:**

PUBHBIO 6210	Design and Analysis of Studies in the Health Sciences I	3 cr
PUBHBIO 6211	Design and Analysis of Studies in the Health Sciences II	3 cr

##### *Select one of four:*

PUBHBIO 6212	Regression Methods for the Health Sciences	3 cr
PUBHBIO 6410	Design and Analysis of Experiments	3 cr
PUBHBIO 7220	Applied Logistic Regression	3 cr
PUBHBIO 7230	Applied Longitudinal Data Analysis	3 cr

##### **Epidemiology Requirement:**

PUBHEPI 6410	Principles of Epidemiology	3 cr
--------------	----------------------------	------

##### *Select one of two:*

PUBHEPI 6401	Health Data Sources & Uses	3 cr
PUBHEPI 6431	Design & Implementation of Health Surveys	3 cr

*Additional Research Methods courses* 9 cr

In consultation with their faculty advisors, students select an additional 9 credits of research methods courses

### Electives (6 credits)

Students choose 6 credits of electives in consultation with their advisors. Courses chosen should complement the student's major, minor, and research methods. Electives may be taken any term available, however, students are discouraged from registering for >15 (Autumn/Spring) or >9 (Summer) total credits.

PUBHEHS 4530 /FST 4536	Food Safety and Public Health	3 cr
PUBHEHS 5320	Climate Change and Human Health	3 cr
PUBHEHS 7193	Individual Studies in Environmental Health Sciences	1-4 cr
PUBHEHS 7194	Group Studies in Environmental Health Sciences	1-3 cr
PUBHEHS 7325	Advanced Toxicology	3 cr
PUBHEHS 7340	Environmental Law and Policy for Public Health	3 cr
PUBHEHS 7345	Principles of Environmental Health Management	3 cr
PUBHEHS 7546	Advanced Food Microbiology II	2 cr
PUBHEHS 7360	Water Contamination: Sources and Health Impact	2 cr
PUBHEHS 7370	Human Health Risk Assessment of Microbial Agents	3 cr
PUBHEHS 7899	Seminar in Environmental Health Science	1 cr
PUBHEPI 6437	Cancer Epidemiology	3 cr
PUBHEPI 7411	Epidemiology in Environmental Health	3 cr
PUBHLTH 6189.01	Field Experience in Public Health	1-6 cr
PUBHLTH 6189.02	Field Experience in Global Public Health	1-6 cr
ENTMLGY 5605	Human Health Entomology	3 cr

### Minor Cognate Field (12 credits)

Additional credits are required in a minor cognate field that is relevant to the student's research interests. Depending on the student's interests, the minor area may occur within the College of Public Health (e.g., biostatistics or epidemiology) or within other disciplines (e.g., chemistry, microbiology, engineering). Students select their minor cognate and courses with advisor approval.

### Dissertation (24 credits)

PUBHLTH 8998/PUBHLTH 8999 Pre-Candidacy Research and Post-Candidacy Research Dissertation Credits	24 cr
---	-------

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

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu



## Curriculum Guide for Master of Public Health degree program with a specialization in EPIDEMIOLOGY

Students admitted to the Master of Public Health (MPH) 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. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### PROGRAM OF STUDY

The MPH-Epidemiology curriculum consists of a minimum of 48 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (16 credits)
2. Courses required for a specialization in epidemiology (19-22 credits)
3. Elective courses approved for the specialization (5-8 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

### Public Health Core Courses (16 credits)

Every student in the MPH-Epidemiology program must take the following courses in areas of knowledge basic to public health:

#### Biostatistics

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences I 3 cr

#### Environmental Health Sciences

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

#### Epidemiology

PUBHEPI 6430 Epidemiology I & Lab 4 cr

#### Social and Behavioral Sciences

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

#### Health Services Administration

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

### Required Courses in the Specialization (19-22 credits)

PUBHBIO 6211 Design & Analysis of Studies in the Health Sciences II 3 cr

PUBHBIO 6212 Regression Methods for the Health Sciences 3 cr

PUBHBIO 6270 Introduction to SAS for Public Health Students 2 cr

PUBHEPI 6411\* Biological Basis of Public Health 3 cr

PUBHEPI 6431 Design & Implementation of Health Surveys 3 cr

PUBHEPI 7410 Epidemiology II & Lab 4 cr

PUBHEPI 7430 Epidemiology III 4 cr

\*Required for students who do not have an MD, DVM, or equivalent clinical degree

## Electives

(Choose courses to bring the total credits in your program to 48 credits)

PUBHEPI 6415	Nutrition in Public Health	3 cr	PUBHEPI 6440	Reproductive and Perinatal Epi	3 cr
PUBHEPI 6432	Injury Epidemiology	2 cr	PUBHEPI 6441	Women's Health Issues	3 cr
PUBHEPI 6433	Psychiatric Epidemiology	2 cr	PUBHEPI 7411	Environmental Epidemiology	3 cr
PUBHEPI 6434	Tuberculosis: a Public Health Issue	2 cr	PUBHEPI 7412	Princ & Proc for Human Clin Trials	3 cr
PUBHEPI 6435	Chronic Disease Epidemiology	3 cr	PUBHEPI 7413	Molecular Epi of Cancer	3 cr
PUBHEPI 6436	Infectious Disease Epidemiology	3 cr	PUBHEPI 7414	Molecular Epi of Infectious Disease	3 cr
PUBHEPI 6437	Cancer Epidemiology	3 cr	PUBHEPI 8411	Epidemiology of Obesity	3 cr
PUBHEPI 6438	Cardiovascular Disease Epi	3 cr	PUBHEPI 8412	Group-Randomized Trials	3 cr
PUBHEPI 6439	Genetic Epidemiology	3 cr			

## Practicum

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

## Culminating Project

PUBHEPI 7998	Culminating Project Seminar	1 cr
PUBHLTH 7998	Culminating Project in Public Health	2 cr

## Sample Curriculum Plan for the Master of Public Health in Epidemiology

(This is one option. Other options that are consistent with curriculum guide are acceptable. Students are advised to consult their advisor)

Year 1 Autumn Semester		
Course Number	Credit Hr	Semester Taken
PUBHEPI 6411*	3	AU
PUBHEPI 6430	4	AU
PUBHBIO 6210	3	AU
PUBHBIO 6270	2	AU
Year 1 Spring Semester		
PUBHEPI 6431	3	SP
PUBHEPI 7410	4	SP
PUBHBIO 6211	3	SP
Summer Term		
PUBHLTH 7189	2	ANY

Year 2 Autumn Semester		
Course Number	Credit Hr	Semester Taken
PUBHEPI 7430	4	AU
PUBHBIO 6212	3	AU
ELECTIVE	3	
PUBHEPI 7998	1	AU
PUBHHBP 6510	3	AU or SP
or		
PUBHEHS 6310	3	AU or SP
Year 2 Spring Semester		
PUBHHMP 6610	3	AU or SP
PUBHLTH 7998	2	ANY
ELECTIVE	2	
PUBHHBP 6510	3	AU or SP
or		
PUBHEHS 6310	3	AU or SP

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

Staff are available in to provide assistance with College and University policies and procedures.

In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 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\*\*\*\*\*



## 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. It is a natural entry point for students who are interested in pursuing a Ph.D. degree or a career in research. Because of this orientation, the emphasis in the MS degree program is on building a strong foundation in a particular specialty field, along with the research methods important in that field. To reflect this research and academic orientation, the MS degree ordinarily requires the preparation of a thesis, though it is available under a non-thesis option at the discretion of the division of specialization.

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. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### PROGRAM OF STUDY

The MS-Epidemiology curriculum consists of a minimum of 48 credits organized into three curricular domains:

1. Courses required for a specialization in epidemiology (35-39 credits)
2. Elective courses approved for the specialization (6-7 credits)
3. Thesis (3 credits)

### Required Courses in the Specialization (35-39 credits)

PUBHBIO 6210	Design & Analysis of Studies in the Health Sciences I	3 cr
PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3 cr
PUBHBIO 6212	Regression Methods for the Health Sciences	3 cr
PUBHBIO 6270	Introduction to SAS for Public Health Students	2 cr
PUBHEPI 6411*	Biological Basis of Public Health	3 cr
PUBHEPI 6430	Epidemiology I & Lab	4 cr
PUBHEPI 6431	Design & Implementation of Health Surveys	3 cr
PUBHEPI 7410	Epidemiology II & Lab	4 cr
PUBHEPI 7430	Epidemiology III	4 cr
PUBHEPI 7431	Epidemiological Methods	3 cr

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

Select two of the following four courses\*\*:

PUBHBIO 7220	Applied Logistic Regression	3 cr
PUBHBIO 7230	Longitudinal Data Analysis	3 cr
PUBHBIO 7235	Applied Survival Analysis	3 cr
STAT 6450	Linear Regression	4 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to the advisor\*\*\*\*\*

## Electives\*\*

(Choose courses to bring the total credits in your program to 48 credits)

PUBHEPI 6415	Nutrition in Public Health	3 cr	PUBHEPI 6440	Reproductive and Perinatal Epi	3 cr
PUBHEPI 6432	Injury Epidemiology	2 cr	PUBHEPI 6441	Women's Health Issues	3 cr
PUBHEPI 6433	Psychiatric Epidemiology	2 cr	PUBHEPI 7411	Environmental Epidemiology	3 cr
PUBHEPI 6434	Tuberculosis: a Public Health Issue	2 cr	PUBHEPI 7412	Princ & Proc for Human Clin Trials	3 cr
PUBHEPI 6435	Chronic Disease Epidemiology	3 cr	PUBHEPI 7413	Molecular Epi of Cancer	3 cr
PUBHEPI 6436	Infectious Disease Epidemiology	3 cr	PUBHEPI 8411	Epidemiology of Obesity	3 cr
PUBHEPI 6437	Cancer Epidemiology	3 cr	PUBHEPI 8412	Group-Randomized Trials	3 cr
PUBHEPI 6438	Cardiovascular Disease Epi	3 cr	PUBHEPI 8413	Molecular Epi of Infectious Disease	3 cr
PUBHEPI 6439	Genetic Epidemiology	3 cr			

## Thesis

PUBHLTH 7999 Master's Thesis Research in Public Health 3 cr

## Sample Curriculum Plan for the Master of Science in Epidemiology\*\*

(This is one option. Other options that are consistent with curriculum guide are acceptable. Students are advised to consult their advisor)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semester Taken
PUBHEPI 6411*	3	AU
PUBHEPI 6430	4	AU
PUBHBIO 6210	3	AU
PUBHBIO 6270	2	SP
Year 1 Spring Semester		
PUBHEPI 6431	3	SP
PUBHEPI 7410	4	SP
PUBHBIO 6211	3	SP

Year 2 Autumn Semester		
Course Number	Credit Hours	Semester Taken
PUBHEPI 7430	4	AU
PUBHEPI 7431	3	AU
PUBHBIO 6212	3	AU
Year 2 Spring Semester		
PUBHLTH 7999	3	ANY

\*\*The sample plan does not include a specific semester in which elective courses or advanced biostatistics courses can be taken as they are offered various times during the year.

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

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
OAPSS address: 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\*\*\*\*\*



## Curriculum Guide for PhD degree program with a specialization in EPIDEMIOLOGY

Students admitted to the PhD degree program are assigned faculty advisors 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.

For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### PROGRAM OF STUDY

All PhD students in epidemiology are expected to enter the program with a master's or equivalent in Epidemiology. The doctoral program requires a minimum of 60 semester credits beyond a master's degree for a total of 90 credits. Of the 90 credits, a maximum of 30 credits may be given for dissertation research.

Following are the courses required for the PhD curriculum in Epidemiology. Many students will have completed a number of these courses at the master's level before admission to the PhD degree program. Students should work closely with their advisor to develop a tentative curriculum plan during the first semester of enrollment.

### Preliminary Courses (Students may be required to take these courses if they have not taken them or equivalent courses elsewhere)

PUBHBIO 6210	Design & Analysis of Studies in the Health Sciences I	3 cr
PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3 cr
PUBHBIO 6270	Introduction to SAS for Public Health Students	2 cr
PUBHEPI 6430	Epidemiology I & Lab	4 cr
PUBHEPI 6431	Design & Implementation of Health Surveys	3 cr
PUBHEPI 7410	Epidemiology II & Lab	4 cr

### MAJOR FIELD (30 credits)

#### Required Courses:

PUBHEPI 6411*	Biological Basis of Public Health	3 cr
PUBHEPI 7430	Epidemiology III	4 cr
PUBHEPI 8430	Epidemiology IV	4 cr
PUBHEPI 8899.01	Doctoral Seminar: Research	2 cr
PUBHEPI 8899.02	Doctoral Seminar: Teaching	2 cr
PUBHHBP 8899.02	Grantmanship course	2 cr

\*Required for students who do not have an MD, DVM, or equivalent clinical degree

**Suggested Electives:***(Choose courses to bring the total credits in your program to 30 credits for the major field)*

PUBHEPI 6415	Nutrition in Public Health	3 cr		
PUBHEPI 6432	Injury Epidemiology	2 cr	PUBHEPI 6440	Reproductive and Perinatal Epi 3 cr
PUBHEPI 6433	Psychiatric Epidemiology	2 cr	PUBHEPI 6441	Women's Health Issues 3 cr
PUBHEPI 6434	Tuberculosis: a Public Health Issue	2 cr	PUBHEPI 7411	Environmental Epidemiology 3 cr
PUBHEPI 6435	Chronic Disease Epidemiology	3 cr	PUBHEPI 7412	Princ & Proc for Human Clin Trials 3 cr
PUBHEPI 6436	Infectious Disease Epidemiology	3 cr	PUBHEPI 7413	Molecular Epi of Cancer 3 cr
PUBHEPI 6437	Cancer Epidemiology	3 cr	PUBHEPI 8411	Epidemiology of Obesity 3 cr
PUBHEPI 6438	Cardiovascular Disease Epi	3 cr	PUBHEPI 8413	Molecular Epi of Infectious Disease 3 cr
PUBHEPI 6439	Genetic Epidemiology	3 cr		

**Research Methods (30 credits)****Required Courses:**

PUBHBIO 6212	Regression Methods for the Health Sciences	3 cr
PUBHBIO 7220	Applied Logistic Regression	3 cr
PUBHBIO 7230	Applied Longitudinal Data Analysis	3 cr
PUBHBIO 7235	Applied Survival Analysis	3 cr
PUBHEPI 7431	Epidemiological Methods	3 cr
STAT 6450	Linear Regression	4 cr

**Suggested Electives:***(Choose courses to bring the total credits in your program to 30 credits for research methods)*

PUBHBIO 7215	Design and Analysis of Clinical Trials	2 cr
PUBHEPI 8412	Design and Analysis of Group-Randomized Trials	3 cr

**Minor Field (15 credits)****Dissertation (15 credits)**

PUBHLTH 8998/8999	Pre-Candidacy and Post-Candidacy Dissertation Credits	15 cr
-------------------	---	-------

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu





## Curriculum Guide for Master of Public Health degree program with a specialization in **HEALTH BEHAVIOR AND HEALTH PROMOTION**

Students admitted to the Master of Public Health (MPH) 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 Health Behavior and Health Promotion (HBHP). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks/graduate-student-handbook> and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-HBHP curriculum consists of a minimum of 45 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Courses required for a specialization in Health Behavior and Health Promotion (20 credits)
3. Elective courses approved for the specialization (4 credits)
4. Practicum (2 credits minimum)
5. Culminating Project and Culminating Project seminar (4 credits)

#### **Public Health Core Courses** (15 credits)

Every student in the MPH-HBHP program must take the following courses in areas of knowledge basic to public health:

##### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences 3 cr

##### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

##### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology 3 cr

##### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

##### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

#### **Required Courses in the Specialization** (20 credits)

PUBHHBP 7520 Community Health Assessment 3 cr

PUBHHBP 7522 Program Planning and Implementation 3 cr

PUBHHBP 7528 Foundations of Professional Practice in Health Promotion 3 cr

PUBHHBP 7562 Theoretical Approaches to Health Behavior Change in PH Applications 2 cr

PUBHBIO 6211 Design and Analysis of Studies in the Health Sciences II 3 cr

PUBHHBP 7532 Program Evaluation in Public Health 3 cr

OR

PUBHHBP 7534 Research Methods in Health Behavior and Health Promotion 3 cr

PUBHHBP 7542 Settings and Special Populations in Health Promotion 3 cr

OR

PUBHHBP 7544 Fundamental Determinants of Population Health & Implications 3 cr

\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\*

**Recommended Electives for HBHP (4 credits)***(Although any graduate-level course in Public Health can be used as an HBHP elective)*

PUBHHBP 7552	Substance Abuse Prevention	2 cr
PUBHHBP 7554	Cancer Behavioral Science	2 cr
PUBHHBP 7558	Social-Ecological Strategies in Prevention	2 cr
PUBHHBP 7560	Public Health in Action	2 cr

**Practicum**

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

**Culminating Project and Culminating Project Seminar (4 credits)**

PUBHLTH 7998	Culminating Project in Public Health	2 cr
PUBHHBP 7899.01	Culminating Project Seminar I	1 cr
PUBHHBP 7899.02	Culminating Project Seminar II	1 cr

**Sample Curriculum Plan for the Master of Public Health in Health Behavior and Health Promotion***(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)*

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHBP 6510	3	AU, SP
PUBHHBP 7562	2	AU
PUBHHBP 7520	3	AU
PUBHBIO 6210	3	AU, SP
Year 1 Spring Semester		
PUBHHBP 7522	3	SP
CPH CORE COURSE	3	AU, SP
PUBHHBP 7532 or 7534	3	SP
PUBHBIO 6211	3	SP
Summer Term		
PUBHLTH 7189	2	ANY

Year 2 Autumn Semester		
PUBHHBP 7542 OR 7544	3	AU
PUBHHBP 7899.01	1	AU
CPH CORE COURSE	3	AU, SP
ELECTIVE	2	AU, SP
Year 2 Spring Semester		
PUBHHBP 7528	3	AU, SP
PUBHHBP 7899.02	1	
PUBHLTH 7998	2	
CPH CORE COURSE	3	AU, SP
ELECTIVE	2	

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

**\*\*\*\*\*Questions regarding the student's program of study should be directed to their advisor\*\*\*\*\***



## Curriculum Guide for PhD degree program with a specialization in **HEALTH BEHAVIOR AND HEALTH PROMOTION**

The PhD degree requires a significant program of study and research that qualifies the recipient to work independently and 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 a program with a specialization in Health Behavior and Health Promotion (HBHP). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks/graduate-student-handbook>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The PhD program requires a minimum of 80 semester credits or 50 semester credits beyond a master's degree. Some of the specified courses may have been included in a prior master's degree. A maximum of 30 semester credits of master's degree work may be applied to PhD requirements if approved by the advisor.

#### **Major Field (31 credits)**

##### **Required Courses:**

PUBHHBP 7562	Theoretical Approaches to Health Behavior Change in PH Applications	2 cr
PUBHHBP 8562	Advanced Theory of Health Behavior Change in PH Applications	2 cr
PUBHHBP 7193	Research Rotation (Independent Study)	4 cr
PUBHHBP 8899.01	1 <sup>st</sup> Year Doctoral Seminar in HBHP	2 cr
PUBHHBP 8899.02	2 <sup>nd</sup> Year Doctoral Seminar in HBHP	2 cr

*Choose additional courses from the major or closely related courses to bring the total credits in the program to 31 credits for the major field*

PUBHHBP 6510	Preventing Disease and Promoting Health through Behavioral Science	3 cr
PUBHHBP 7520	Community Health Assessment	3 cr
PUBHHBP 7522	Program Planning and Implementation	3 cr
PUBHHBP 7532	Program Evaluation in Public Health	3 cr
PUBHHBP 7542	Settings and Special Populations in Health Promotion	3 cr
PUBHHBP 7544	Fundamental Determinants of Population Health	3 cr
PUBHHBP 7552	Substance Abuse Prevention	2 cr
PUBHHBP 7554	Cancer Behavioral Science	2 cr
PUBHHBP 7558	Social-Ecological Strategies in Prevention	2 cr
PUBHHBP 7560	Public Health in Action	2 cr
PUBHLTH 6000	Introduction to Global Health	2 cr

### Research Methods (31 credits)

**Required Courses:**

PUBHBIO 6210	Design and Analysis of Studies in the Health Sciences I	3 cr
PUBHBIO 6211	Design and Analysis of Studies in the Health Sciences II	3 cr
PUBHEPI 6430	Epidemiology I and Lab	4 cr
PUBHEPI 7410	Epidemiology II and Lab	4 cr
PUBHHBP 7534	Research Methods in Health Behavior and Health Promotion	3 cr

**Qualitative Methods coursework** 5 cr minimum

**Quantitative Methods coursework** 15 cr minimum

### Minor Field (12 credits)

### Dissertation (Minimum 6 credits)

PUBHLTH 8998/8999	Pre-Candidacy and Post-Candidacy Dissertation Credits	6 cr
-------------------	---	------

---

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

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

## Curriculum Guide for Master of Health Administration Degree

Students admitted to the Master of Health Administration (MHA) degree program are assigned faculty advisors who will provide guidance throughout the program. This document serves as a resource to be used by the student and the advisor. For additional information about requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <https://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### PROGRAM OF STUDY

The Master of Health Administration curriculum consists of a minimum of 60 credits organized into four curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Required courses (37.5 credits)
3. Elective courses (7.5 credits)
4. Administrative Residency (between year one and two)

#### Public Health Core Courses (15 credits)

Every student in the MHA program must take the following courses in areas of knowledge basic to public health:

##### Biostatistics

PUBHBIO 6210	Design and Analysis of Studies in the Health Sciences I	3 cr
--------------	---	------

##### Environmental Health Sciences

PUBHEHS 6310	Principles of Environmental Health Science	3 cr
--------------	--	------

##### Epidemiology

PUBHEPI 6410	Principles of Epidemiology	3 cr
--------------	----------------------------	------

##### Social and Behavioral Sciences

PUBHHBP 6510	Preventing Disease and Promoting Health through Behavioral Science	3 cr
--------------	--	------

##### Health Services Administration

PUBHHMP 6611	Health Care Organization	3 cr
--------------	--------------------------	------

#### Required Courses (37.5 credits)

PUBHHMP 7601	Financing for Health Care	3 cr
PUBHHMP 7602	Economic Analysis of Health Services	3 cr
PUBHHMP 7605	Introduction to Health Policy	3 cr
PUBHHMP 7611	Legal Environment of Health Care	3 cr
PUBHHMP 7615	Health Services Organizational Management	3 cr
PUBHHMP 7620	Health Services Finance I*	3 cr
PUBHHMP 7621	Health Services Finance II	3 cr
PUBHHMP 7622	Health Services Financial Decision-Making	1.5 cr
PUBHHMP 7631	Strategic Management & Program Development	3 cr
PUBHHMP 7672	Clinical Rotations	1.5 cr
PUBHHMP 7673	Understanding Health Care Organization Data	1.5 cr
PUBHHMP 7675	Human Resources Mgmt in Health Care	1.5 cr
PUBHHMP 7676	Health Care Marketing	1.5 cr
PUBHHMP 7680	Ops Mgmt for Health Service Orgs	3 cr
PUBHHMP 7682	Info Sys for Health Svcs Orgs	3 cr

\*PUBHHMP 7620 requires an introductory accounting course as a prerequisite

\*\*\*\*\*Questions regarding the student's program of study should be directed to the advisor\*\*\*\*\*

## Electives

(Choose courses to bring the total credits in your program to 60 credits)

Students can choose electives from a variety of inter-professional disciplines, including (but not limited to) business, public administration, public affairs, nursing, and sociology. A list of approved electives can be found in the CPH Graduate Student Handbook. Other courses can be taken with approval of the MHA Program director.

## Administrative Residency

Each MHA student is required to satisfy a practice placement requirement, which is ordinarily accomplished through an administrative residency during the summer between the first and second academic years.

Complete details on the process for seeking and confirming the residency, as well as detailed policies governing the residency, are found in the CPH Graduate Student Handbook.

## Sample Curriculum Plan for the MHA

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHMP 6611	3	AU
PUBHHMP 7605	3	AU
PUBHHMP 7615	3	AU
PUBHHMP 7620	3	AU
PUBHHMP 7602	3	
Year 1 Spring Semester		
PUBHEPI 6410	3	AU, SP
PUBHHMP 7621	3	SP
PUBHHMP 7672	1.5	SP
PUBHHMP 7675	1.5	SP
PUBHHMP 7680	3	SP
PUBHBIO 6210	3	AU, SP
Summer Term		
Administrative Residency		

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHMP 7601	3	AU
PUBHHMP 7622	1.5	AU
PUBHHMP 7673	1.5	AU
PUBHHMP 7682	3	AU
PUBHEHS 6310	3	AU, SP
ELECTIVES	3	AU, SP
Year 2 Spring Semester		
PUBHHMP 7611	3	SP
PUBHHMP 7631	3	SP
PUBHHMP 7676	1.5	SP
PUBHHBP 6510	3	AU, SP
ELECTIVES	4.5	ANY

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

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 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\*\*\*\*\*



## Curriculum Guide for Master of Public Health degree program with a specialization in **HEALTH SERVICES MANAGEMENT & POLICY**

Students admitted to the Master of Public Health (MPH) 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 Health Services Management & Policy (HSMP). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <https://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The MPH-HSMP curriculum consists of a minimum of 48 credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15 credits)
2. Courses required for a specialization in HSMP (21 credits)
3. Elective courses approved for the specialization (7 credits)
4. Practicum (2 credits)
5. Culminating project (3 credits)

#### **Public Health Core Courses** (15 credits)

Every student in the MPH-HSMP program must take the following courses in areas of knowledge basic to public health:

##### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences I 3 cr

##### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

##### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology 3 cr

##### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

##### **Health Services Administration**

PUBHHMP 6611 Health Care Organization 3 cr

#### **Required Courses in the Specialization** (21 credits)

PUBHHMP 7601	Financing for Health Care	3 cr
PUBHHMP 7602	Economic Analysis of Health Services	3 cr
PUBHHMP 7605	Introduction to Health Policy	3 cr
PUBHHMP 7611	Legal Environment of Health Care	3 cr
PUBHHMP 7615	Health Services Organizational Management	3 cr
PUBHHMP 7673	Understanding Health Care Organization Data	1.5 cr
PUBHHMP 7678	Approaches to Hlth Svcs Research	3 cr
PUBHHMP 7679	Quality and Patient Safety	1.5 cr

**Selective Courses** (7-8 credits) – selectives are courses chosen from a limited course list

(Choose one course from each of the two categories:)

**Public Policy:**

PUBAFRS 6000	Public Policy Form & Implement	4 cr
PUBAFRS 6050	Managing Public Sector Orgs	4 cr
PUBAFRS 6080	Public Affairs Program Eval	4 cr

**Finance:**

PUBHHMP 7620	Health Services Finance I	3 cr
PUBHHMP 7607	Financial Mgmt of Pub Hlth Prog	3 cr
PUBAFRS 6040	Public Budgeting and Finance	4 cr

**Practicum**

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

**Culminating Project**

PUBHLTH 7998	Culminating Project in Public Health	3 cr
--------------	--------------------------------------	------

**Sample Curriculum Plan for the Master of Public Health in Health Services Management & Policy**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHMP 6611	3	AU
PUBHHMP 7605	3	AU
PUBHHMP 7615	3	AU
PUBHHBP 6510	3	AU, SP
Year 1 Spring Semester		
PUBHHMP 7611	3	SP
PUBHHMP 7678	3	SP
PUBHBIO 6210	3	AU, SP
PUBHEHS 6310	3	AU, SP
Summer Term		
PUBHLTH 7189	2	ANY

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHMP 7601	3	AU
PUBHHMP 7602	3	AU
PUBHHMP 7673	1.5	AU
PUBHHMP 7679	1.5	AU
SELECTIVE	3-4	AU, SP
Year 2 Spring Semester		
PUBHLTH 7998	3	ANY
PUBHEPI 6410	3	AU, SP
SELECTIVE	3-4	AU, SP

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

- |                              |                                   |
|------------------------------|-----------------------------------|
| CPH Academic Standards       | Transfer Credit                   |
| Time to Degree (time limits) | Combined Degrees and Dual Degrees |
| Graduate Non-Degree Credit   | Graduation                        |
| Practicum                    | Culminating Project               |
| Career Planning              | Admissions                        |

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 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\*\*\*\*\*





## Curriculum Guide for PhD degree program with a specialization in **HEALTH SERVICES MANAGEMENT & POLICY**

Students admitted to the PhD degree program are assigned faculty advisors 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 Health Services Management & Policy (HSMP).

For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The PhD in HSMP requires a minimum of 50 semester credits beyond a master's degree for a total of 80 credits. Of the 80 credits, a maximum of 30 credits may be applied to the degree, with a maximum of 20 credits applied for dissertation research.

Following are the courses required for the PhD curriculum in HSMP:

#### **MAJOR FIELD (25 credits)**

##### **Required Courses:**

PUBHHMP 6611	Health Care Organization	3 cr
PUBHHMP 7602	Economic Analysis of Health Services	3 cr
PUBHHMP 7605	Introduction to Health Policy	3 cr
PUBHHMP 7615	Health Services Organization Management	3 cr
PUBHHMP 8899	Doctoral Seminar (2 semesters x 1.5 cr)	3 cr

##### **Additional Major Courses:**

*Choose 9 semester credits (approximately three courses) to reach the 25 credits for the major field*

Additional courses, within the division or elsewhere in the university, representing approaches to health services research or areas of inquiry (e.g., quality and outcomes measurement, economic evaluation, policy analysis, health informatics, health disparities) may be counted toward the 25 semester credit major requirement with advisor approval and concurrence of the PhD program director.

#### **Research Methods (24 credits)**

Research methods courses must be selected with the approval of the advisor and concurrence of the PhD program director and should include the following:

- Course in epidemiology (e.g., PUBHEPI 6410: Principles of Epidemiology, or equivalent)
- Course in research design (e.g., PUBHHMP 8671: Health Care Outcomes Measurement, or equivalent)
- Appropriate sequence of statistics courses (e.g., PUBHBIO 6210: Design and Analysis of Studies in the Health Sciences I and PUBHBIO 6211: Design and Analysis of Studies in the Health Sciences II, or equivalent and at least 1 additional advanced statistics course)
- 9 semester credits of research courses to complement student's major, minor and research interests (e.g., PUBHEPI 6431: Design & Implementation of Health Surveys, PUBHEPI 6401: Health Data Sources and Uses)

### **Minor Field (15 credits)**

The minor is a cognate field with sufficient methodological depth to serve as a useful complement and foundation for doctoral level study and research. Typical fields include economics, political science, epidemiology, health behavior and health promotion, public policy and management, etc.

### **Electives (7 credits)**

Select electives from courses within the division or elsewhere in the university with advisor approval and concurrence of the PhD program director.

### **Dissertation (9-20 credits)**

PUBHLTH 8998/8999 Pre and Post-Candidacy Dissertation Credits

9-20 cr

---

### **Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

CPH Academic Standards	Transfer Credit
Time to Degree (time limits)	Combined Degrees and Dual Degrees
Graduate Non-Degree Credit	Graduation
Practicum	Culminating Project
Career Planning	Admissions

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu



## Curriculum Guide for Master of Public Health degree program PROGRAM FOR EXPERIENCED PROFESSIONALS

Students admitted to the Master of Public Health (MPH-PEP) 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 to meet the student's needs and interests. For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks> and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

The curriculum for the MPH-Program for Experienced Professionals (PEP) is similar to that for the full-time MPH. 45 credit hours are required. However, PEP students do not specialize, other than through their use of electives and their choices for the practicum and culminating experience.

The specific PEP course requirements recognize the needs and interests of more experienced students, with emphasis on general preparation for positions of leadership in public health. The overall distribution of course work is as follows:

1. Required courses (28 credits)
2. Elective courses (12 credits)
3. Practicum (2 credits minimum)
4. Culminating project (3 credits minimum)

### **Required Courses** (28 credits)

PUBHLTH 7040	Public Health Organization	3 cr
PUBHBIO 6200*	Statistical Methods for Public Health Practice I	2 cr
PUBHBIO 6201*	Statistical Methods for Public Health Practice II	2 cr
PUBHEHS 6305	Principles of Environmental Health Sciences for Professionals	3 cr
PUBHEPI 6400	Epidemiology for Experienced Health Professionals	3 cr
PUBHHBP 6510	Preventing Disease and Promoting Health through Behavioral Science	3 cr
PUBHHBP 7532	Program Evaluation in Public Health	3 cr
PUBHHMP 6609	Health Care Organizations for Experienced Professionals	3 cr
PUBHHMP 7615	Health Services Organization and Management	3 cr
PUBHHMP 7194 (7624)	Economic Evaluation of Health Care Programs and Services	3 cr

\*students who are interested in taking advanced biostatistics classes should enroll in the PUBHBIO 6210 and 6211 sequence instead of PUBHBIO 6200 and 6201.

### **Electives** (12 credits)

Any course offered by the College of Public Health is an approved elective for the PEP program. Other courses may be approved with permission of the faculty advisor. Students should refer to the CPH Graduate Student Handbook for further details about the elective approval process.

\*\*\*\*\*Questions regarding the student's program of study should be directed to the advisor\*\*\*\*\*

**Practicum**

PUBHLTH 7189	Practicum in Public Health	2 cr
--------------	----------------------------	------

**Culminating Project**

PUBHLTH 7998	Culminating Project in Public Health	3 cr
--------------	--------------------------------------	------

**Sample Curriculum Plan for the MPH Program for Experienced Professionals**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Summer Session		
Course Number	Credit Hours	Semesters Offered
PUBHLTH 7040	3	SU
Year 1 Autumn Semester		
Weekends of 8/23, 9/20, 10/11, and 11/15		
PUBHBIO 6200	2	AU
PUBHHBP 6510	3	AU
Year 1 Spring Semester		
Weekends of 1/10, 2/7, 3/7, and 4/4		
PUBHHMP 6609	3	SP
PUBHEPI 6400	3	SP
PUBHBIO 6201	2	SP
Summer Term		
PUBHLTH 7189	2	ANY
ELECTIVE*	3	ANY

Year 2 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
PUBHHBP 7532	3	AU
PUBHHMP 7615	3	AU, SP
ELECTIVE*	3	ANY
Year 2 Spring Semester		
PUBHHMP 7194	3	SP
PUBHEHS 6305	3	SP
ELECTIVE*	3	ANY
Summer Term		
PUBHLTH 7998	3	ANY
ELECTIVE*	3	ANY

\*Electives can be taken at any time during the program

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

- |                              |                                   |
|------------------------------|-----------------------------------|
| CPH Academic Standards       | Transfer Credit                   |
| Time to Degree (time limits) | Combined Degrees and Dual Degrees |
| Graduate Non-Degree Credit   | Graduation                        |
| Practicum                    | Culminating Project               |
| Career Planning              | Admissions                        |

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.  
 OAPSS address: 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\*\*\*\*\***



## Curriculum Guide for Master of Public Health degree program with a specialization in VETERINARY PUBLIC HEALTH

Students admitted to the Master of Public Health (MPH) 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 Veterinary Public Health (VPH). For detailed additional information about specific requirements, students are directed to the College of Public Health (CPH) *Graduate Student Handbook* (available online at <http://cph.osu.edu/students/graduate/handbooks>) and to the *Graduate School Handbook* (available online at <http://www.gradsch.ohio-state.edu/>).

### **PROGRAM OF STUDY**

Students in the VPH Specialization may choose one from two possible tracks: General\* or Epidemiology\*\*. The curriculum for each track consists of a minimum of 45 semester credits organized into five curricular domains:

1. Core courses in areas of knowledge basic to public health (15-16 credits)
2. Required courses in the Specialization for both tracks (15-16 credits)
3. Elective courses approved for the specialization (10 credits)
4. Practicum (2 credits minimum)
5. Culminating project (3 credits minimum)

### **Public Health Core Courses** (15-16 credits)

Every student in the MPH-VPH program must take the following courses in areas of knowledge basic to public health:

#### **Biostatistics**

PUBHBIO 6210 Design and Analysis of Studies in the Health Sciences I 3 cr

#### **Environmental Health Sciences**

PUBHEHS 6310 Principles of Environmental Health Science 3 cr

#### **Epidemiology**

PUBHEPI 6410 Principles of Epidemiology (for **General\*** track) 3 cr

OR

PUBHEPI 6430 Epidemiology I & Lab (for **Epidemiology\*\*** track) 4 cr

#### **Social and Behavioral Sciences**

PUBHHBP 6510 Preventing Disease and Promoting Health through Behavioral Science 3 cr

#### **Health Services Administration**

PUBHHMP 6610 Introduction to Health Care Organization 3 cr

### **Required Courses in the Specialization for both tracks** (15-16 credits)

VEIPREV 7721 Zoonotic Diseases 3 cr

VEIPREV 7722 Food-Borne Diseases and Food Safety 3 cr

VEIPREV 7723 Biosecurity and Environmental Health 3 cr

PUBHBIO 6211 Design Analysis in the Health Sciences II 3 cr

**Required course in the Specialization by track:**

**General Track\*:**

VETPREV 7724                      Veterinary Epidemiology                      3 cr

**Epidemiology Track\*\*:**

PUBHEPI 7410                      Epidemiology II & Lab                      4 cr

**Electives** (10 credits minimum)

Students are advised to work with their advisor for approval of electives for the program.

**Practicum**

PUBHLTH 7189                      Practicum in Public Health                      2 cr

**Culminating Project**

VETPREV 8999                      Research in Veterinary Public Health                      3 cr  
 (Culminating Project in Public Health)

**Sample Curriculum Plan for the Master of Public Health in Veterinary Public Health**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

Year 1 Autumn Semester		
Course Number	Credit Hours	Semesters Offered
VETPREV 7721	3	AU
PUBHBIO 6210	3	AU, SP
PUBHHMP 6610	3	AU, SP
PUBHEHS 6310	3	AU, SP
PUBHEPI 6410*	3	AU, SP
OR		
PUBHEPI 6430**	4	AU
Year 1 Spring Semester		
VETPREV 7722	3	SP
VETPREV 7723	3	SP
PUBHBIO 6211	3	SP
PUBHHBP 6510	3	AU, SP
VETPREV 7724*	3	SP
OR		
PUBHEPI 7410**	4	SP

May Session		
ELECTIVES^		
Summer Session		
PUBHLTH 7189	2	ANY
Year 2 Autumn/Spring Semester		
VETPREV 8999■	3	ANY
ELECTIVES^		

^Students are required to complete 10 credit hours of elective courses

■ Students will enroll VETPREV 8999 the semester in which he/she is planning to defend the culminating project.

**Office of Academic Programs and Student Service (OAPSS)**

Staff are available in to provide assistance with College and University policies and procedures. In addition, staff are able to answer questions regarding the following:

- |                              |                                   |
|------------------------------|-----------------------------------|
| CPH Academic Standards       | Transfer Credit                   |
| Time to Degree (time limits) | Combined Degrees and Dual Degrees |
| Graduate Non-Degree Credit   | Graduation                        |
| Practicum                    | Culminating Project               |
| Career Planning              | Admissions                        |

Students can make an appointment with a staff member in OAPSS by calling (614)292-8350.

OAPSS address: 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\*\*\*\*\*