



2021-2022 Curriculum Guide for Master of Public Health degree program with a specialization in BIOSTATISTICS

The MPH degree program is designed to provide students with the knowledge and skills for general and specialized applied public health practice, both in the public sector and in private sector careers related to population health. It includes courses within public health's foundation 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 the specialization including an applied practice experience and integrative learning project.

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, but is not inclusive of all important degree, college, and university requirements. All students are expected to be familiar with the College of Public Health (CPH) *Graduate Student Handbook*: <http://cph.osu.edu/students/graduate/handbooks>, the *Graduate School Handbook* <http://www.gradsch.ohio-state.edu/>) and the CPH competencies: <https://go.osu.edu/cphcompetencies>.

PROGRAM OF STUDY

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

1. MPH Integrated Foundational curriculum (12 credits)
2. Required courses for the specialization (12 credits)
3. Elective courses (16 credits)
4. Applied Practice Experience (2 credits)
5. Integrative Learning Experience (3 credits)

MPH Integrated Foundational curriculum # (12 credits)

Every student in the MPH-Biostatistics program must take the following MPH Integrated Foundational curriculum:

PUBH TLH 6001	Methods in Quantitative Data Analysis	4 credits
PUBH LTH 6002	History, Values and Essential Services of the U.S. Public Health System	2 credits
PUBH LTH 6003	Methods in Public Health Planning and Evaluation	2 credits
PUBH LTH 6004	Essentials of Population Health	4 credits

Biostatistics Specialization Courses (12 credits)

PUBH BIO 6260	Ethics in Biostatistics	1 credit
PUBH BIO 6211	Design & Analysis of Studies in the Health Sciences II	3 credits
PUBH BIO 6270	Introduction to SAS for Public Health students	2 credits
PUBH BIO 7245/STAT 7755	Biostatistical Collaboration	2 credits
STAT 6450	Applied Regression Analysis	4 credits

Electives (16 credits)

Select a minimum of 16 credits from this list. Other courses may be approved to fulfill this requirement with permission of the advisor:

PUBH BIO 5280	Introduction to Genomic Data Analysis	2 credits
PUBH BIO 7215	Design and Analysis of Clinical Trials	2 credits
PUBH BIO 7220	Applied Logistic Regression	3 credits
PUBH BIO 7225/STAT 6510	Survey Sampling Methods	3 credits
PUBH BIO 7230	Applied Longitudinal Data Analysis	3 credits
PUBH BIO 7235/STAT 6605	Applied Survival Analysis	3 credits

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

PUBHBIO 7240/STAT 6520	Applied Statistical Analysis with Missing Data	3 credits
PUBHBIO 7255	Introduction to Causal Inference in Health Science Research	3 credits
PUBHBIO 8450	Stochastic Epidemic Models	3 credits
PUBHEPI 6431	Design & Implementation of Health Surveys	3 credits
PUBHLTH 5015	Public Health Data Analytics I	3 credits
STAT 6625	Statistical Analysis of Genetic Data	3 credits
STAT 6730	Introduction to Computational Statistics	2 credits

Applied Practice Experience

PUBHLTH 7189	Applied Practice Experience in Public Health	2 credits
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Integrative Learning Experience

PUBHLTH 7998	Integrative Learning Experience in Public Health	3 credits
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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	PUBHLTH 6001†	Methods in Quantitative Data Analysis	4 credits	AU
	PUBHLTH 6002†	History, Values and Essential Services of the U.S. Public Health System	2 credits	AU
	PUBHBIO 6260	Ethics in Biostatistics	1 credit	AU
	PUBHBIO 6270	Introduction to SAS for Public Health students	2 credits	AU, SP
	PUBHBIO 7215* or other Elective	Design and Analysis of Clinical Trials	2 credits	AU
Year 1 Spring	PUBHLTH 6003†	Methods in Public Health Planning and Evaluation	2 credits	SP
	PUBHLTH 6004†	Essentials of Population Health	4 credits	SP
	PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3 credits	AU, SP
	STAT 6450	Applied Regression Analysis	4 credits	
Year 2 Autumn	PUBHLTH 7189^	Applied Practice Experience	2 credits	ANY
	ELECTIVE(S)	SELECT 3 PRE-APPROVED ELECTIVE COURSES	8-9 credits	AU, SP
Year 2 Spring	PUBHLTH 7998	Integrative Learning Experience in Public Health	3 credits	ANY
	PUBHBIO 7245/STAT 7755	Biostatistical Collaboration	2 credits	SP
	ELECTIVE(S)	SELECT 2 PRE-APPROVED ELECTIVE COURSES	5-6 credits	

†PUBHLTH 6001-6004: Students will be enrolled by The College of Public Health Office of Academic Programs and Student Services for these courses.

*PUBHBIO 7215 is the recommended elective to take in the first semester; a different elective may be selected in consultation with the faculty advisor.

^The Applied Practice Experience (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.

Grade Policy

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

Office of Academic Programs and Student Services (OAPSS)

OAPSS staff are available to provide assistance with College, Graduate School and University policies and procedures.

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

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