

2023-2024 Curriculum Guide for Online Master of Public Health degree program with a specialization in BIostatistics

The Online 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 experience 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* <https://gradsch.osu.edu/handbook> and the CPH competencies: <https://go.osu.edu/cphcompetencies>.

PROGRAM OF STUDY

The MPH-Biostatistics curriculum consists of a minimum of 42 credit hours organized into five curricular domains:

1. MPH Integrated Foundational curriculum including the Buck-IPE* (12 credit hours)
2. Required courses for the specialization (8 credit hours)
3. Elective courses (17 credit hours)
4. Applied Practice experience (2 credit hours)
5. Integrative Learning Experience (3 credit hours)

*In addition to credit hour requirements, The Ohio State University College of Public Health requires all Master of Public Health students to participate in interprofessional practice and education activities. To meet this requirement, first-year students will participate in Buck-IPE, a longitudinal curriculum for students in health science and allied health professional programs at The Ohio State University. Information about participation and assessment will be shared with MPH students as part of the Integrated Foundational Curriculum (in PUBHLTH 6002 and 6004).

MPH Integrated Foundational curriculum (12 credit hours)

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

PUBHLLH 6001	Methods in Quantitative Data Analysis	4 credit hours
PUBHLTH 6002	History, Values and Essential Services of the U.S. Public Health System	2 credit hours
PUBHLTH 6003	Methods in Public Health Planning and Evaluation	2 credit hours
PUBHLTH 6004	Essentials of Population Health	4 credit hours

Biostatistics Specialization courses (8 credit hours)

PUBHBIO 6260	Ethics in Biostatistics	1 credit hour
PUBHBIO 6211	Applied Biostatistics II	3 credit hours
PUBHBIO 6270	Introduction to SAS for Public Health students	2 credit hours
PUBHBIO 7245	Biostatistical Collaboration	2 credit hours

Electives: (17 credit hours)

Select a minimum of 17 credit hours from this list. Other didactic courses that include a strong data analysis component may be approved to fulfill this requirement with permission of the advisor. ♦ denotes courses that are offered as online courses. Courses other than those denoted by ♦ will incur a higher course registration fee for students enrolled on an online MPH program.

PUBHBIO 5280 ♦	Introduction to Genomic Data Analysis	3 credit hours
PUBHBIO 7215 ♦	Design and Analysis of Clinical Trials	2 credit hours
PUBHBIO 7220 ♦	Applied Generalized Linear Models in Public Health	3 credit hours
PUBHBIO 7225/STAT 6510	Survey Sampling Methods	3 credit hours
PUBHBIO 7230 ♦	Applied Longitudinal Analysis	3 credit hours
PUBHBIO 7235 ♦/STAT 6605	Applied Survival Analysis	3 credit hours
PUBHBIO 7240/STAT 6520	Applied Statistical Analysis with Missing Data	3 credit hours
PUBHBIO 7255 ♦	Introduction to Causal Inference	3 credit hours
PUBHBIO 8450	Stochastic Epidemic Models	3 credit hours
PUBHEPI 6431	Design & Implementation of Health Surveys	3 credit hours
PUBHLTH 5015	Public Health Data Analytics I	3 credit hours
STAT 6625	Statistical Analysis of Genetic Data	3 credit hours
STAT 6730	Introduction to Computational Statistics	2 credit hours

Applied Practice Experience

PUBHLTH 7189	Applied Practice Experience in Public Health	2 credit hours
--------------	--	----------------

Integrative Learning Experience

PUBHLTH 7998	Integrative Learning Experience in Public Health	3 credit hours
--------------	--	----------------

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)

TERM	COURSE	COURSE TITLE	CREDIT HOURS	TERM
Year 1 Autumn	PUBHLTH 6001	Methods in Quantitative Data Analysis	4	AU
	PUBHLTH 6002	Foundations of Public Health with Applied Integrative Lab	2	AU
	PUBHBIO 6260	Ethics in Biostatistics	1	AU
	PUBHBIO 6270	Introduction to SAS for Public Health students	2	AU
	PUBHBIO 7215	Design and Analysis of Clinical Trials	2	AU
Year 1 Spring	PUBHLTH 6003	Methods in Public Health Planning and Evaluation	2	SP
	PUBHLTH 6004	Foundations of Health Systems and Policy with Applied Integrative Lab	4	SP
	PUBHBIO 6211	Applied Biostatistics II	3	AU, SP
Year 2 Autumn	PUBHLTH 7189 [^]	Applied Practice Experience	2	ANY
	PUBHBIO 5280	Introduction to Genomic Data Analysis	3	AU
	PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3	AU
	PUBHBIO 7255	Introduction to Causal Inference	3	AU
Year 2 Spring	PUBHLTH 7998	Integrative Learning Experience in Public Health	3	ANY
	PUBHBIO 7245	Biostatistical Collaboration	2	SP
	PUBHBIO 7230	Applied Longitudinal Analysis	3	SP
	PUBHBIO 7235	Applied Survival Analysis	3	SP

[^]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. Questions regarding the student's program of study should be directed to their advisor.