THE OHIO STATE UNIVERSITY
COLLEGE OF PUBLIC HEALTH

2026-2027 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 in biostatistics are academically oriented rather than directed toward professional practice. MS graduates will have the knowledge and skills to participate in basic and applied research and will have the foundation to enter into a research-oriented career. The MS degree may also serve as an entry point for students who are qualified to pursue a PhD degree which requires broader scope and depth of content via additional didactic courses and more intensive research emphasis. The MS degree requires preparation and defense of a thesis on Biostatistical methods/applications. The MS degree typically can be completed within two years.

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, but is not inclusive of all important degree, college, and university requirements. This is not considered an online degree program; however, students will enroll in a combination of courses designed for on-campus in-person delivery (IP), distance learning (DL), or hybrid (HY). All students are expected to be familiar with the College of Public Health (CPH) *Graduate Student Handbook*: https://cph.osu.edu/students/graduate/student-handbook, the *Graduate School Handbook:* https://gradsch.osu.edu/graduate-school-handbook-gsh and the CPH competencies: https://go.osu.edu/cphcompetencies.

PROGRAM OF STUDY

The MS Biostatistics curriculum consists of a minimum of 42 credit hours.

Required Foundation Courses (9 credit hours)

PUBHLTH 6010	Essentials of Public Health	3 credit hours
PUBHBIO 6210	Applied Biostatistics I	3 credit hours
PUBHEPI 6410	Principles of Epidemiology	3 credit hours

Required Specialization Courses (19 credit hours)

PUBHBIO 6211	Applied Biostatistics II	3 credit hours
PUBHBIO 6260	Ethics in Biostatistics	1 credit hour
PUBHBIO 6270	Introduction to SAS for Public Health Students	2 credit hours
PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3 credit hours
PUBHBIO 7245	Biostatistical Collaboration	2 credit hours
STAT 5731 & STAT 5732	Introduction to R for Data Science I and II	2 credit hours
STAT 6301	Probability for Statistical Inference	3 credit hours
STAT 6302	Theory of Statistical Analysis	3 credit hours

Electives (8 credit hours)

Choose a minimum of 8 credit hours from this list, or other courses approved by the advisor.

PUBHBIO 5280	Introduction to Genomic Data Analysis	3 credit hours
PUBHBIO 7215	Design and Analysis of Clinical Trials	2 credit hours
PUBHBIO 7225/STAT 6510	Survey Sampling Methods	3 credit hours
PUBHBIO 7230	Applied Longitudinal Data 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 in Health Science Research	3 credit hours
PUBHBIO 8450	Stochastic Epidemic Models	3 credit hours
STAT 6625	Statistical Analysis of Genetic Data	3 credit hours
STAT 6730	Introduction to Computational Statistics	2 credit hours

Thesis (6 credit hours)

PUBHLTH 7999	Thesis Research in Public Health	6 credit hours

Sample Curriculum Plan for the Master of Science in Biostatistics

TERM	COURSE	COURSE TITLE	CREDIT HOURS	TERM(S) OFFERED	DELIVERY MODE
Year 1 Autumn	PUBHBIO 6210	Applied Biostatistics I	3 credits	AU	IP or DL
	PUBHBIO 6260	Ethics in Biostatistics	1 credit	AU	IP OR DL
	PUBHBIO 6270	Introduction to SAS for PH Students	2 credits	AU	IP
	STAT 6301	Probability for Statistical Inference	3 credits	AU	IP
	PUBHEPI 6410	Principles of Epidemiology	3 credits	AU	DL
Year 1 Spring	PUBHBIO 6211	Applied Biostatistics II	3 credits	AU, SP	IP OR DL
	STAT 5731 & 5732	Introduction to R for Data Science I & II	2 credits	AU, SP, SU	DL
	STAT 6302	Theory of Statistical Analysis	3 credits	SP	IP
	PUBHLTH 6010	Essentials of Public Health	3 credits	SP	HY
Year 2 Autumn	PUBHLTH 7999	Thesis Research in Public Health	3 credits		
	PUBHBIO 7220	Applied Generalized Linear Models in Public Health	3 credits	AU	IP
	Elective		2-3 credits		
	Elective		3 credits		
Year 2 Spring	PUBHLTH 7999	Thesis Research in Public Health	3 credits		
	PUBHBIO 7245	Biostatistical Collaboration	2 credits	SP	IP
	Elective		3 credits		

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 12 of the College of Public Health Graduate Student Handbook.

College of Public Health - Office of Academic Programs and Student Services (OAPSS)

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

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