2025-2026 PROGRAM GUIDE: Graduate Certificate - Biostatistics

Information in this document is updated annually. Please refer to the document for the year you entered the program. Student resources, policies, and procedures applicable to all School of Public Health graduate students can be found on the SPH website, http://ohsu-psu-sph.org.

Overview

Director: Rongwei (Rochelle) Fu, PhD
ohsu-psu-sph.org/certificate-in-biostatistics

The Biostatistics Graduate Certificate Program is designed to provide basic to intermediate graduate-level biostatistics training for a diverse range of students in health sciences. It is primarily aimed at those wishing to become more skilled in applied biostatistics methods.

Program Competencies

Graduates of the certificate program will be equipped with well-rounded knowledge in applied biostatistics and skills to:

- Perform a broad range of basic and intermediate level applied statistical procedures that are required in basic, clinical, population and translational sciences for individual or collaborative health sciences research projects.
- Interpret and summarize analysis results and communicate them to individuals with varying degrees of statistical knowledge.
- Apply ethical and equitable data principles that govern statistical practice.

GC: Biostatistics Program of Study

Course Number	Course Title	Credits
Required Coursework (15 Credits)		
BSTA 511	Estimation and Hypothesis Testing for Applied Biostatistics	4
BSTA 512	Linear Models	4
BSTA 513	Categorical Data Analysis	4
BSTA 530	Biostatistics Lab	3
Elective Coursework (9 Credits)		
BMI 510	Introduction to Biomedical Informatics & AI	3
BMI 525	Principles and Practice of Data Visualization	3
BMI 550	Bioinformatics and Computational Biology I: Algorithms	4
BMI 551	Bioinformatics and Computational Biology II: Statistical	4
BSTA 500	Reading and Research in Biostatistics	1-3
BSTA 504	Topics in Biostatistics	1-3
BSTA 514	Statistical Analysis of Time-to-Event Data	3
BSTA 515	Data Management and Analysis in SAS	3
BSTA 516	Design and Analysis of Surveys	3
BSTA 517	Statistical Methods in Clinical Trials	3
BSTA 519	Applied Longitudinal Data Analysis	3
BSTA 522	Statistical Learning and Big Data	3
BSTA 523	Design of Experiments: Statistical Principles of Research Design & Analysis	3
BSTA 526	R Programming for Health Data Science	3
EPI 512	Epidemiology I	4
EPI 513	Epidemiology II (Methods)	4

NURS 630	Advanced measurement	3
NURS 648	Introduction to Structural Equation Modeling	3
UNI 511	Data equity for Health Professionals	2
	Other courses with program approval	
	Total Credits	**24**

Graduate Certificate Biostatistics: Sample Course Schedule

Below are sample schedules if you plan to finish the certificate in one year. Other schedules are possible; always consult your Faculty Advisor regarding your program of study and course selection to determine the schedule that fits best for you.

One Year - Sample Schedule			
Fall	**Winter**	**Spring**	**Summer**
BSTA 511 Est/Hypothesis Tstng Applied BIOS (4 cr.)	BSTA 512 Linear Models (4 cr.)	BSTA 513 Categorical Data Anlys (4 cr.)	
Elective: e.g., EPI 512 Epidemiology I (4 cr.) or BMI 510 Intro to Biomed Informatics & AI (3 cr.)	Elective: e.g., BSTA 526 R Programming for Health Data Science (3 cr.) or EPI 513 Epidemiology II (4 cr.)	BSTA 530 Biostats Lab (3 cr.) Elective: e.g., BMI 525 Principles & Practice of Data Viz (3 cr.) or BSTA 516 Design & Anlys Surveys (3 cr.) or BSTA 523 Design of Experiments	
Attend Fall Welcome			

One Year - Sample Schedule			
Fall	**Winter**	**Spring**	**Summer**
BSTA 511 Est/Hypothesis Tstng Applied BIOS (4 cr.)	BSTA 512 Linear Models (4 cr.)	BSTA 513 Categorical Data Anlys (4 cr.)	BSTA 517 Stat Mthds in Clinical Trials (3 cr.)
Elective: e.g., EPI 512 Epidemiology I (4 cr.) or BMI 510 Intro to Biomed Informatics (3 cr.)	Elective: e.g., BSTA 526 R Programming for Health Data Science (3 cr.) or EPI 513 Epidemiology II (4 cr.)	BSTA 530 Biostats Lab (3 cr.)	

Continuation to the MS or MPH in Biostatistics Program

Students in the Graduate Certificate may apply to the MS in Biostatistics or MPH in Biostatistics or Epidemiology programs if they wish to pursue more training in Biostatistics beyond the Graduate Certificate. The graduate certificate program in Biostatistics is a sequential progressive stacked track to the MS in Biostatistics (OHSU Policy No. 02-50-055). That is, all credits (100%) earned in the graduate certificate program in Biostatistics will be applied to the degree requirements of MS in Biostatistics if 1) a student earns a graduate Certificate in Biostatistics, and then pursues a degree in MS in Biostatistics; 2) the courses are completed no more than seven years prior to the intended date of enrollment.

The graduate certificate program in Biostatistics is also a sequential progressive stacked track to the MPH in Biostatistics and MPH in Epidemiology (OHSU Policy No. 02-50-055). All applicable credits earned in the graduate certificate program in Biostatistics will be applied to the degree requirements of MPH in Biostatistics or MPH in Epidemiology if 1) a student earns a graduate Certificate in Biostatistics, and then pursues a degree in MPH in Biostatistics or MPH in Epidemiology; 2) the courses are completed no more than seven years prior to the intended date of enrollment; 3) the courses also satisfy requirements of either MPH program.

Grades

Students are not permitted to progress through the BSTA 511-513 course sequence unless they achieve at least a B- in each of the courses.

Biostatistics & Design Program (BDP)

The Biostatistics & Design Program (BDP) is one of the OHSU shared resource cores, and is hosted by the Biostatistics group. BDP provides biostatistics support to basic, clinical and population science at all phases of research from grant submission, protocol development, and study design to statistical analysis, interpretation of analysis results and manuscript preparation. Many biostatistics faculty are involved in BDP work, and BDP also has many PhD and MS level staff providing statistical support and consultation. The BDP handles hundreds of research projects each year and provides internship opportunities for students. Students should contact BDP Director, Dr. Jodi Lapidus, or the research project manager Dr. Amy Laird, for internship opportunities and/or research experience.

Knight Cancer Institute Biostatistics Shared Resources (Knight BSR)

The Knight Cancer Institute Biostatistics Shared Resource (Knight BSR) is supported by the National Cancer Institute's Cancer Center Support Grant. Knight BSR provides comprehensive and integrated biostatistics support to basic, clinical and population science researchers conducting cancer research at OHSU. The BSR also provides students with opportunities to work on ongoing cancer research projects. Students should contact the BSR Director, Dr. Byung Park, for opportunities for an internship and/or research experience.

Graduate Student Resources, Policies, and Procedures

Policies and procedures applicable to all School of Public Health graduate students can be found on the SPH website at https://ohsu-psu-sph.org/graduate-students-policies-and-procedures/. Please review the student policies and procedures listed there, including but not limited to the following sections:

- ☐ Advising
- ☐ Academic Standing
- ☐ Academic Dismissal
- ☐ Academic Dishonesty
- ☐ Codes of Conduct
- ☐ Educational Records Privacy
- ☐ Minimum Course Grade Requirements
- ☐ Recognition of Prior Earned Credit
- ☐ Course Waiver Policy
- ☐ Incomplete Coursework
- ☐ Course Approvals (Electives)
- ☐ Independent Study
- ☐ International Travel and Coursework
- ☐ Continuous Enrollment
- ☐ Leave of Absence
- ☐ Withdrawal Policy
- ☐ Time Limits
- ☐ Grievance Resolution
- ☐ Degree and Certificate Conferral

Academic resources and student support services available to SPH graduate students are listed on the SPH website, www.ohsu-psu-sph.org. Please review the resources listed there.