

BIOSTATISTICS, PH.D.

Degree Requirements (53 credit hours or 44 credit hours for advanced standing)

Coursework (53 credit hours)

The following courses or their equivalent must be completed prior to matriculation of their Ph.D.: **BIOS 701 & BIOS 757.**

Course	Title	Credits
Public Health Core		
PUBH 700	Perspectives in Public Health	3
Statistics Core		
STAT 712	Mathematical Statistics I	3
STAT 713	Mathematical Statistics II	3
STAT 714	Linear Statistical Models	3
Department Core		
BIOS 825	Multivariate Biostatistics	3
or BIOS 820	Bayesian Biostatistics and Computation	
Select three 800 level 3 credit hour statistics courses		9
Seminar and Practica		
BIOS 845	Doctoral Seminar	2
BIOS 890	Independent Study	3
Cognate		3
Electives - Select from the following:		9
BIOS 758	Advanced Linear Models in Biostatistics	
BIOS 759	Theory and Methods of Discrete Data Analysis	
BIOS 760	Biostatistical Methods in Clinical Trials	
BIOS 761	Survival Analysis	
BIOS 765	Research Design in the Biomedical Sciences	
BIOS 770	Applied Longitudinal Data Analysis	
BIOS 775	Biostatistical Aspects of Bioinformatics	
BIOS 780	Introduction to Quantile Regression	
BIOS 794	Selected Topics in Biostatistics	
BIOS 811	Survival Analysis II	
BIOS 815	Generalized Linear Models	
BIOS 820	Bayesian Biostatistics and Computation	
BIOS 822	Statistical Methods in Spatial Epidemiology	
BIOS 825	Multivariate Biostatistics	
BIOS 835	Biostatistical Machine Learning for Public Health	
BIOS 890	Independent Study	
BIOS 894	Selected Topics in Biostatistics	
STAT 715	Nonlinear Statistical Models	
STAT 720	Time Series Analysis	
STAT 721	Stochastic Processes	
STAT 750	Response Surface Methodology	
STAT 761	Reliability and Life Testing	
STAT 778	Item Response Theory	
or any other advisor approved BIOS or STAT course		
Dissertation		
BIOS 899	Dissertation Preparation	12
Total Credit Hours		53

Advanced Standing Coursework (44 credit hours)

Students who have completed a master's degree prior to matriculation into the Biostatistics Ph.D. and have completed at least 15 hours at the B level or higher of biostatistics at the master's level may be admitted as advanced standing students. The following courses or their equivalent must be completed prior to matriculation of their Ph.D.:

BIOS 701 & BIOS 757. Additionally, the student should show 9 or more other hours of completed Biostatistics Graduate work at the B level or higher prior to matriculation to enroll as advanced standing.

Course	Title	Credits
Public Health Core		
PUBH 700	Perspectives in Public Health	3
Statistics Core		
STAT 712	Mathematical Statistics I	3
STAT 713	Mathematical Statistics II	3
STAT 714	Linear Statistical Models	3
Department Core		
BIOS 825	Multivariate Biostatistics	3
or BIOS 820	Bayesian Biostatistics and Computation	
Select three 800 level 3 credit hour statistics courses		9
Seminar and Practica		
BIOS 845	Doctoral Seminar	2
BIOS 890	Independent Study	3
Cognate		3
Dissertation		
BIOS 899	Dissertation Preparation	12
Total Credit Hours		44

Note: The requirement to take PUBH 700 may be waived with Graduate Director approval if a student has taken a similar course during his/her master's degree program. If this requirement is waived, the student will be required to take 3 additional Biostatistics/Statistics credit hours to replace this course.