

# BIostatISTICS CERTIFICATE (GRADUATE)

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The Certificate in Biostatistics provides students with skills in applied data analysis in the areas of public health and medicine. The coursework concentrates on developing statistical skills through the use of actual data sets and computerized statistical software packages. The certificate program will benefit students who want to strengthen their public health study with strong applied data analysis skills.

**Offered by:** Department of Biostatistics and Data Science

**Faculty Lead:** Samuel Kakraba, PhD

## Purpose

This certificate program provides students with skills in applied data analysis in the areas of public health and medicine.

## Eligible Students

This certificate is designed for students not enrolled in a degree-seeking program in the School of Public Health and Tropical Medicine. Tulane students enrolled in degree programs in other schools and persons not enrolled in a degree program but have a prior bachelor's degree are eligible to apply. Current SPHTM students can apply for the certificate, however, only 3 credit hours of the certificate can be shared with their degree.

## Certificate Competencies

Students who earn then the Certificate in Biostatistics will be able to:

- Formulate appropriate linear regression models and conduct simple and multiple linear regression analysis.
- Differentiate between various analysis of variance procedures and analyze data using these procedures.
- Distinguish between procedures for analyzing discrete data and conduct logistic regression and other categorical procedures.

**Number of Credits Required for Completion:** 15

## Requirements

### Prerequisite Courses

Course ID	Title	Credits
SPHL 6050	Biostatistics for Public Health	3

## Required Courses

Course ID	Title	Credits
BIOS 6040	Intermediate Biostatistics (fall and spring)	3
BIOS 7060	Regression Analysis (fall and spring)	3
BIOS 7080	Design of Experiments (spring)	3
BIOS 7150	Categorical Data Analysis (fall)	3
Select one of the following 7000-level Biostatistics Electives:		3
BIOS 7220	Nonparametric Statistics (spring)	
BIOS 7250	Principles of Sampling (spring)	
BIOS 7300	Survival Data Analysis (fall)	
BIOS 7400	Clinical Trials (every other fall)	

**Total Credit Hours** **15**

**Program String and Field of Study:** PHCER\_GR, BS

## Contact

To learn more about the department, visit <https://sph.tulane.edu/bios/home> (<https://sph.tulane.edu/bios/home/>).