Online Graduate Certificate Program in Biostatistics

PROGRAM

The online Graduate Certificate Program in Biostatistics offered by the Department of Epidemiology and Biostatistics at the College of Health Sciences, provides integrated training in graduate level biostatistics for students seeking to enhance their quantitative data analysis skills in health sciences. The curriculum covers breakthrough/cutting-edge methods in applied biostatistics and computing using SAS or SPSS software which will be applied to real research world attributed to big and unstructured data.

No GRE required for admission
100 % distance learning
No additional internships or practicum required

OBJECTIVES

Upon completion of this program students will be able to:

- Identify and apply the most appropriate statistical procedures to resolve analytical problems.
- Interpret statistical outputs correctly and create research reports and papers to disseminate the findings to various audiences.
- Ultimately, develop and conduct one's own research projects or contribute to collaborative research teams as a key research statistician.

WHO CAN APPLY

The online Graduate Certificate Program in Biostatistics is designed for the students studying in the field where quantitative skills are required or anyone who is currently working in government, industry or academia and needs to produce statistical output from large clinical and observational databases, but who lack formal training in biostatistical methods.

QUALIFICATIONS FOR ADMISSION

- Bachelor's degree earned from an accredited institution
- Minimum GPA of 2.00

HOW TO APPLY

- Complete Graduate Certificate Form
- Submit official transcripts of all undergraduate and graduate studies from accredited institutions.

REQUIRED COURSES

To achieve the Graduate Certificate Program in Epidemiology, students must successfully complete the following courses:

- PHS 503 Biostatistics and Computer Applications (3 credits):

This course introduces the principles and methods of statistical analysis. Topics include hypothesis testing, confidence limits, sample size, statistical tests of inferences, and simple linear and multivariate analysis. Statistical software packages such as SAS, SPSS and Stata will be used in illustrating the basic principles of data analysis.

- PHS 522 Multivariate and Probabilistic Statistics (3 credits):

This course addresses modeling and practical application of statistical principals in data analysis. Statistical Software packages such as SAS and SPSS will be used. Topics include probability distributions, simple linear regression, multiple linear regression, log linear modeling, logistic recession, Poisson, and Cox-Proportional Hazard modeling.

- PHS 571 Statistical Computer Applications (3 credits):

This course is an introduction to the mathematical foundation of statistics and statistical theory. It provides an in depth coverage that includes probability theory, probability distributions, random variables, theories of statistical testing, interval estimation, and hypothesis testing The course starts with defining a sample space and the random variable then expounds to include distribution and density functions and concludes with applications of hypothesis testing and confidence interval estimation.

- PHS 572 Statistical Computer Applications (3 credits):

The purpose of this course is to teach two statistical computing applications: Statistical Packages for the Social Sciences (SPSS) and Statistical Analysis Software (SAS). This course covers the basic an intermediate applications of these two statistical programming applications.

- PHS 601 Advanced Biostatistics and Computer Science Applications (3 credits):

This course is an advanced, intermediate level course in biostatistics with emphasis on statistical and analytical techniques important to researchers and practitioners within the public health setting. This course provides in depth coverage of bio-statistical methods including statistical inference, sample size calculation, and multivariate regression techniques.

Submit your online application to the Jackson State University Division of Graduate Studies at:
https://mygradschool.jsums.edu/

Call 601-979-2455 or email graduate@jsums.edu for additional information.