DATA ANALYTICS (DATA)

The courses listed on this page are exclusive to the LPS BAAS degree (https://lpsonline.sas.upenn.edu/features/what-bachelor-applied-arts-and-sciences-degree) and LPS Online certificates (https://lpsonline.sas.upenn.edu/academics/certificates).

DATA 101 Introduction to Data Analytics
In our digital world, data-driven decision-making is becoming more common and more expected. Effective leadership and communication, therefore, often hinges on the ability to acquire, manage, analyze, and display large, quantitative data sets. Even many entry-level jobs assume or require basic knowledge of data analytics. This course introduces students to important concepts in data analytics across a wide range of applications using the programming language R. Students complete the course with a clear understanding of how to utilize quantitative data in real-time problem identification, decision-making, and problem-solving. No prerequisites in statistics or math are required. This course will have required synchronous sessions and the instructor will offer a choice of times. Only open to Data Analytics certificate students in LPS Online Program.
Also Offered As: LEAD 305
Activity: Online Course
1.0 Course Unit

DATA 201 Introduction to Statistical Methods
Introduction to Statistical Methods exposes students to the process by which quantitative social science and data science research is conducted. The class revolves around three separate, but related tracks. Track one teaches some basic tools necessary to conduct quantitative social science research. Topics covered include descriptive statistics, sampling, probability, and statistical theory. Track two teaches students how to implement these basic tools using R. The third track teaches students the fundamentals of research design. Topics will include independent and dependent variables, generating testable hypotheses, and issues in causality. This course will have required synchronous sessions and the instructor will offer a choice of times. Only open to Data Analytics certificate students in LPS Online Program.
Prerequisites: DATA 101 is the pre-requisite for DATA 201.
Activity: Online Course
1.0 Course Unit

DATA 301 Int Data Analytics
Activity: Online Course
1.0 Course Unit

DATA 401 Adv Data Analytics
Activity: Online Course
1.0 Course Unit