Biostatistics (BSTT)

Courses

BSTT 400. Biostatistics I. 4 hours.
Descriptive statistics, basic probability concepts, one- and two-sample statistical inference, analysis of variance, and simple linear regression. Introduction to statistical data analysis software. Course Information: Enrollment restricted to public health students and healthcare administration students; other graduate, professional and advanced undergraduate students admitted by consent as space permits. To obtain consent, see the SPH registrar.

BSTT 401. Biostatistics II. 4 hours.
Simple and multiple linear regression, stepwise regression, multifactor analysis of variance and covariance, non-parametric methods, logistic regression, analysis of categorical data; extensive use of computer software. Course Information: Prerequisite(s): BSTT 400.

BSTT 402. Health Policy for Epidemiologists and Biostatisticians. 1 hour.
Epidemiological data and biostatistics provide the evidence to support the development and justification of policies. Public health policy interventions, factors influencing political and social environments and the evaluation of policy-making. Course Information: Same as EPID 402.

BSTT 413. Introduction to Data Analysis w/ R. 2 hours.
An introductory overview of statistical programming using R in the context of describing and analyzing public health data. Course Information: Extensive computer use required. Recommended background: BSTT 400; or IPHS 402.

BSTT 426. Python for Data Science and Large Language Models. 3 hours.
Provides a comprehensive introduction to Python programming in the context of data science and natural language processing (NLP). Students will learn essential data manipulation, visualization, and machine learning techniques. Course Information: Extensive computer use required. Prerequisite(s): No prerequisites except that some very basic understanding of programming in SAS or R or some other programming language is needed along with basic analytical knowledge. Motivation to learn programming concepts is key. Recommended background: IPHS 402 or EPID 406 or BSTT 413.

BSTT 494. Introductory Special Topics in Biostatistics. 1-4 hours.
Special topics in biostatistics. Content varies. Course Information: May be repeated. Students may register in more than one section per term. Prerequisite(s): Consent of the instructor.