Public Health | Public Health MPH Core Course Descriptions

Biostatistics

SPH 298 Introduction to SAS (1)

Lecture – 1.5 hours. SPH 298 is intended to be an introductory course to SAS programming for graduate students in the public health sciences or other fields who plan to use SAS software for data analysis. This course will teach students the fundamental SAS programming skills to prepare data for statistical analysis, a critical step of any data analysis. Students will learn how to import data, clean data, categorize and recode data, create new variables, and perform simple statistical procedures for data description. New material will be presented in lecture, which will be followed by a laboratory period. Students will work on tutorials and assignments during class/lab time.

SPH 244 Introduction to Medical Statistics (4)

Lecture – 4 hours. Introduction to statistical methods and software in clinical, laboratory, and population medicine. Graphical and tabular presentation of data, probability, binomial, Poisson, normal, t-, F-, and Chi-square distributions, elementary nonparametric methods, simple linear regression and correlation, life tables. Only one unit of credit for students who have completed Statistics 100 or Preventative Veterinary Medicine 402. (Clinical Research 244)

SPH 245 Biostatistics for Biomedical Science (4)

Lecture – 4 hours. Prerequisite(s): CLH 244 or SPH 244; Consent of Instructor, or an equivalent course. Analysis of data and design of experiments for laboratory data. (Clinical Research 245)

SPH 210 Public Health Informatics (2)

Laboratory – 2 hours; Lecture – 2 hours. Prerequisite(s): Consent of Instructor, graduate standing. Collection, verification, and utilization of data related to populations; infrastructure, functions, and tools to generate public health knowledge supporting public health practices and policy development/dissemination. (S/U grading only)

Epidemiology

EPI 205 Principles of Epidemiology (4)

Lecture – 4 hours. Prerequisite(s): MPM 202, or consent of instructor. An introductory statistics course. Basic epidemiology concepts and approaches to epidemiological research, with examples from veterinary and human medicine, including outbreak investigation, infectious disease epidemiology, properties of tests, and an introduction to epidemiologic study design and surveillance. (MPM 205)

Health Services Administration

SPH 273 Health Services Administration (3)

Lecture – 3 hours. Prerequisite(s): At least one semester of graduate-level statistics or consent of instructor. Cost-effectiveness/cost-benefit analysis (CE/CBA) methods among various

economic evaluation methods. CE/CBA is increasingly used to evaluate alternative choices in public health and clinical practice and to enlighten and inform health policy determinations.

General Public Health

SPH 201 Introduction to Public Health (3)

Discussion/Laboratory – 2 hours; Lecture – 3 hours. Prerequisite(s): Graduate standing or consent of instructor. Provides an overview of public health. Covers the history of public health in the US; defines its major functions and constituencies; and, introduces fundamental principles of epidemiology, biostatistics, behavioral sciences, environmental health, infectious diseases, and reducing health disparities. May be repeated up to 1 time(s).

SPH 290 Topics in Public Health (1)

Seminar – 1 hour. Prerequisite(s): Consent of Instructor. Open to students in Master of Public Health program. Key issues and current topics in public health. Course begins in August SSII. Students must enroll in August, then Fall, and Winter. The course is a series but grades and units are given at the end of each quarter. May be repeated up to 10 times. (S/U grading only)

SPH 297 Public Health Practicum (10)

Variable – 3-32 hours. Prerequisite(s): Consent of instructor, open to Master of Public Health students. Practical fieldwork experience in public health. Placement site will vary based on the interest and experience of each student. May be repeated up to 4 times. (S/U grading only)