

Medical Genetics Residency Program Course Descriptions

REQUIRED COURSES

Introduction to Epidemiology: Principles - Course Number: 173:140

Course Description

The focus of the course is on epidemiologic concepts and methods including design of descriptive and analytic studies, such as aggregate, case series, cross-sectional, case-control, and cohort studies; application of epidemiology to public health practice; communication; and dissemination of epidemiologic findings. A prior understanding of human biology or clinical medicine is not required, but is helpful. The course is presented in a lecture format that generally follows chapters in the required textbook. Detailed outlines of lecture topics are presented as handouts on the internet via Blackboard and comprise a syllabus for the course. Problem sets and answers are also included on the internet via Blackboard. Questions about problems are discussed prior to applicable exams.

Introduction to Biostatistics - Course Number: 171:161

Course Description

171:161 is an introductory course that covers basic statistical concepts and methods used in the biological and health sciences. In addition to lectures, you will be enrolled in one of three discussion sections for the course. Each section meets for 50 minutes once per week. The main objective of the discussions are 1) to address questions related to the lectures, assignments, and exams; 2) to present examples; 3) to organize, summarize and review material in preparation for the exams. The discussions will be lead by teaching assistants, who will hold weekly office hours for individual assistance.

Human Molecular Genetics - Course Number: 127:191

Course Description

The course is a lecture driven format that will include class discussion, three take home exams, ten homework assignments and a final presentation. Students will be given one week to complete the take home exams and homework assignments. The exams will be given at approximately 4-week intervals throughout the course. The class assignments will be given at weekly intervals and will consist of a one-half descriptive summary and construction of a PowerPoint slide program based on an individual genetic disease that the student will follow throughout the semester. During the final exam week, you will be expected to prepare a 15 minute classroom presentation summarizing genetic aspects of the chosen disease. There will be supplemental readings from the primary literature as well. At the first meeting, we will discuss the selection of your individual genetic disorder.