COURSE DESCRIPTIONS -CLINICAL RESEARCH

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CLRS 5003 Advanced Epidemiology (4 Credits)

In this problem-based course, each student is expected to build a clinical research proposal in his/her field of interest. Each week, students are asked to present the appropriate parts of their protocols to facilitate the discussion of successive stages in study design. This course is run in small group sessions (6-14 students per group) to facilitate active participation and interaction. Prerequisite: Consent of instructor (1.5 credit hours) Letter Graded

CLRS 5010 Advanced Biostatistics for Clin Investig (4 Credits) This course will focus on the mechanics of applying biostatistical techniques in a research setting. Emphasis will be placed on assumption testing and techniques of model fitting. Students will be expected to critically evaluate, develop, and execute analysis plans using descriptive analysis and regression techniques. Prerequisite: Biostatistics for Clinical Investigators or consent of instructor (4 credit hours) Letter Graded

CLRS 5015 Using Rsrch to Infrm HIth Cre Polcy&Prac (4 Credits) In this course, the students apply rules of evidence and health services research to clinical practice, practice guidelines, and health care policy. Decision analysis and methods for quantifying benefit, risk, and cost will be used to evaluate health care interventions at the individual patient and population levels. This critical appraisal will be used to launch discussions of mechanisms to bridge the gap between clinical research evidence and health services delivery and health policy. Prerequisite: Literature Appraisal or consent of instructor (4 credit hours) Letter Graded

CLRS 5017 Advanced Clinical Research Design (4 Credits)

This course will build on design concepts for observational and interventional studies that were introduced in the prerequisite courses. Topics will include the use of matching and restriction to minimize bias in observational studies, consideration of analytic strategies (e.g., correlated samples, use of propensity scores) in study design, survey research methods, the relationship between quality improvement and clinical research, adaptive randomization, alternatives for consent for research, factorial designs, cluster randomization, using patient values to select important study outcomes, weighing benefits and harms, approaches to stopping rules, and enhancing the feasibility of clinical trials. Prerequisite: Introduction to Epidemiology Research, Clinical Trial Design, or consent of instructor. (4 credit hours) Letter Graded CLRS 5020 Economic Evaluations in Clinical Research (4 Credits)

The first part of the course provides an in-depth exploration of various economic evaluation methods used to assess the value of healthcare interventions and programs. Participants will learn how to critically analyze and interpret economic evaluation studies and apply these skills to their own individual clinical research proposals. The second part of the course focuses on research involving administrative data, with a hands-on component using publicly available datasets. Students will have the opportunity to work with these datasets in groups as they prepare for their required research project. A basic understanding of epidemiology, literature appraisal, and study design is required. Prerequisite: Biostatistics for Clinical Investigators or consent of instructor (4 credit hours) Letter Graded

CLRS 5099 Individual Study (1-6 Credits) Individual Study Letter Graded

CLRS 9994 Institutional Review Board Practicum (1 Credit) Institutional Review Board Practicum Letter Graded

CLRS 9996 Scientific Writing Practicum (1 Credit) Scientific Writing Practicum Letter Graded

CLRS 9997 Scientific Presentation Practicum (1 Credit) Scientific Presentation Practicum Letter Graded

CLRS 9998 Clinical Research Thesis (1-6 Credits) Clinical Research Thesis Letter Graded