Description
This 6 week course is a series of lectures and workshops designed to explore the pharmacoeconomics of medical therapies. Sessions will generally be held from 1:00pm to 4:30 pm. Topics will include introduction to economic evaluation; principals of cost-effectiveness analysis; measuring costs, inflation, and time preference; measuring quality-adjusted life years (QALYs); analysis of costs, QALYs, and cost-effectiveness; design of economic evaluations in clinical trials. All sessions will be approximately 3.5 hours divided between didactic material, discussion, and workshops. There is one required text for the class -- Glick HA, Doshi JA, Sonnad SS, Polsky D. Economic Evaluation in Clinical Trials, Second Edition. Oxford, Oxford University Press, 2015 -- as well as additional readings. Reading assignments are listed below.

Course requirements
Students will be evaluated based on class participation, exercises, and a final project. For the final project students will be asked to perform a group-based critical appraisal of a cost-effectiveness analysis of a medical therapy.

Meeting time, office hours
Office hours will be held from noon to 12:30 prior to class in the room in which the class is being held on that day.

Course director
Henry Glick, PhD
1211 Blockley Hall
423 Guardian Drive
Philadelphia, PA  19104
215 898 6868
glickh@mail.upenn.edu

Course Website
www.uphs.upenn.edu/dgimhsr/fda2015.htm

Course Schedule
Session 1, Introduction to Economic Analysis
Thursday, March 19, 2015: Henry Glick

Part 1. Overview: Cost-minimization, cost-effectiveness, and cost-benefit analysis; direct cost, productivity cost, intangible cost; perspective

Part 2. Cost-Effectiveness Analysis: Average and incremental ratios; choice criteria; strategies for identifying the cost-effective therapy

Glick, Doshi, Sonnad, and Polsky. Economic Evaluation in Clinical Trials, Chapter 7

Session 2. Costing, Theory and Practice
Thursday, March 26, 2013: Henry Glick

Average versus incremental costs; fixed and variable costs; readily available sources of inpatient and outpatient cost data; inflation; time preference

Glick, Doshi, Sonnad, and Polsky. Economic Evaluation in Clinical Trials, Chapter 3.

Session 3. Preferences, Theory and Practice
Thursday, April 2, 2015: Henry Glick

Direct elicitation methods; prescored health classification instruments; comparison of methods

Gold, Siegel, Russell, Weinstein, Cost-Effectiveness in Health and Medicine, Chapter 4.
Glick, Doshi, Sonnad, and Polsky. Economic Evaluation in Clinical Trials, Chapter 4.

Session 4. Economic Evaluation in Clinical Trials
Thursday, April 9, 2015: Henry Glick

Design issues for economic assessments in trials (including sample size)

Glick, Doshi, Sonnad, and Polsky. Economic Evaluation in Clinical Trials, Chapters 2 and 11
Glick, "Sample Size and Power for Cost-Effectiveness Analysis"

Session 5. Analysis of Patient Level Outcomes
Thursday, April 16, 2015: Henry Glick

Part 1. Cost and Effect: The cost outcome of interest; parametric and nonparametric tests; introduction to multivariable analysis

Glick, Doshi, Sonnad, and Polsky. Economic Evaluation in Clinical Trials, Chapter 5.

Part 2. Cost-Effectiveness: Confidence intervals for cost-effectiveness ratios; confidence intervals for NMB; acceptability curves
Session 6. Wrap-up and Final Group Project
Thursday, April 23, 2015: Henry Glick

Final (Group) Project:Critically appraise a cost-effectiveness article

Other Recommended Texts
