Course Description

Lecture: 1:30-2:50 Mondays and Wednesdays, room 167 McNeil

Office Hours:
10am-noon Tuesdays or by appointment. To arrange an appointment see me after class or contact me at petratodd@gmail.com or 898-4084. Class materials (notes etc.) will be made available on my webpage http://athena.sas.upenn.edu/~petra.

This course (which meets the first half of the semester) will examine econometric methods for evaluating effects of program interventions. Typical interventions that might be of interest include job training or other active labor market programs, education programs (such as school subsidy programs), or health programs.

The first part of the course will examine ex post evaluation methods that are applicable after the program has been implemented and data are available on persons who participated in the program and possibly also on a group of people who did not participate. We consider both the case where the program was randomly assigned and when assignment was not random. We will consider questions related to implementation and design of randomized experiments and methods for nonexperimental data, including regression estimators, matching estimators, control function estimators, regression discontinuity methods, IV and LATE estimators, and MTE estimators.

The second part of the course will consider methods for ex ante evaluation, that is, methods for evaluating programs that do not yet exist or for evaluating modified versions of existing programs. These methods typically make more extensive use of structural models. We will consider mainly static and dynamic discrete choice finite horizon models as frameworks for social policy evaluation.

It is recommended that students who take this course also take concurrently or have taken already the ECON 721 course, as this course will make use of microeconometric methods.

Ex post evaluation
   Week 1: The evaluation problem, random assignment
   Week 2: Regression estimators
   Week 3: Review of kernel density and regression estimators, Matching Methods
   Week 4: Control function, IV, LATE
   Week 5: MTE, RD

Ex ante evaluation
   Week 6: Use of static and dynamic discrete choice models for ex ante evaluation
   Week 7: Estimating DCDP models and examples
Course Requirements

There will be two problem sets and a final exam. Problem sets will include empirical assignments that require some programming. You can do the programming in a language of your choice. Matlab, Gauss, Splus, FORTRAN or C are probably the most useful languages for the assignments. A free version of Splus (called R), which has features similar to Matlab, can be downloaded. The problem sets will count for 40% of the final grade and the final exam for 60%.
HIGHLY RECOMMENDED READINGS

The main references are class notes and the following book chapters:


Todd, Petra E. (2005): “Evaluating Social Programs with Endogenous Program Placement and Selection of the Treated,” in Handbook of Development Economics, ed. T. Paul Schultz and John Strauss, Ch. 60, Volume 4,


OTHER RECOMMENDED READINGS

(1) **Ex Post Evaluation Methods**

Matching estimators


(2) Ex Ante Evaluation Methods


_Some references on nonparametric methods_


