ECON7710/NS6850
Empirical Methods for the Analysis of Household Survey Data: Applications to Health, Nutrition and Education

Fall 2013

Professor David E. Sahn

Course description: This seminar will explore recent empirical research and focus on microeconomics of development. The topics covered are health, nutrition and education, and fertility with an emphasis on models of behavior of individuals and households, as well as the evaluation of programs. While we will briefly review underlying theory and econometric techniques, the course will attempt to bridge the gap between theory and practice, addressing issues such as model identification, functional form, and estimation techniques to control for endogeneity and heterogeneity. A key objective of the class will be to focus on the merits and limitations of randomized control trials (experiments) and non-experimental and econometric methods used to evaluate social interventions as well as understand behavior. We will also discuss the various types of household surveys that are employed for these purposes.

The course will be run like a seminar, rather than a lecture course, in order to encourage active participation of all students. Students are expected to do, and be ready to discuss, all the assigned readings. For each meeting, students will be (randomly) assigned to lead a discussion, in which all the other students are expected to actively participate. Those leading the session will be expected to prepare a short and critical evaluation of the papers, usually of 3–5 pages, in outline or annotated form, on which they are leading the discussion. These will cover central issues related to the strengths and weaknesses of the paper, and their effectiveness in addressing underlying concerns of causation, identification, external validity, and so forth.

Students will also prepare an original empirical research paper in which the students will define a problem and use household survey data to analyze it. The paper should be around 20 double-spaced pages, 12-point font with standard margins, not including tables, figures, and references.

The empirical paper will comprise 50 percent of the final grade. Thirty percent of the final grade will be based on how well the student leads the discussion and their related critical evaluations of the topical papers they are assigned. Class participation, including presentation and discussion of the topical papers, will count for 20 percent of the grade.

Key dates include that a prospectus on the research topic is due on September 13. This should include a discussion of the research questions, the data to be used, and a short bibliography. A 5-page single spaced literature review is due on October 4, which can be incorporated into the final paper. Summary statistics, including means, standard deviations, and basic cross tabulations on the variables to be used in the model will be due on November 1.
A preliminary reading list is found below. More details on how to organize the in-class presentations will be posted on the class website, including the questions and issues to be addressed for each paper reviewed. Furthermore, for our discussion on experimental versus non-experimental techniques, we will organize a debate-style discussion, again where I will provide prompts in advance on the website that will be debated by students in the class.

Students who have limited or no experience with STATA, SAS, or similar software will be expected to find appropriate assistance from CISER or other resources on campus, including other students.

**Meeting Time and Location:** Tuesday, 3:35 p.m. - 6:05 p.m., Savage 200.

**Office Hours:** Professor Sahn will hold office hours by appointment in B16 MVR Hall.

**Course Website:** [http://blackboard.cornell.edu](http://blackboard.cornell.edu)

### I. EVALUATING SOCIAL PROGRAMS -- EXPERIMENTAL VS. STRUCTURAL MODELS


### II. HEALTH AND NUTRITION
Background Reading:


Case Studies:

**A. HEALTH AND NUTRITION**


Federov and Sahn


**B. REPRODUCTIVE HEALTH**

Joshi, Shareen and Schultz, T. Paul. 2007. “Family planning as an investment in development and female human capital: Evaluating the long-run consequences in Matlab, Bangladesh”, mimeo, Yale University


**C. HIV/AIDS**


**D. IMPACT OF HEALTH ON PRODUCTIVITY**

*Background Reading:*


*Case Studies:*


Thomas, Duncan, Elizabeth Frankenberg, Jed Friedman, Jean-Pierre Habicht, Mohammed Hakimi, Nicholas Ingwersen, Jaswadi, Nathan Jones, Christopher


E. IMPACT OF HEALTH AND NUTRITION ON EDUCATION AND SCHOOLING

Background Reading:


Case Studies:


III. EDUCATION OUTCOMES

Background Reading:

Glewwe, Paul, and Michael Kremer (2008). “Schools, Teachers, and Education Outcomes in Developing Countries.” In Hanushek, Eric and Finis Welch, eds.,

Case Studies:


