PA 397C – Advanced Methods for Global Policy Analysis
Spring 2014

LBJ School of Public Affairs, University of Texas at Austin
Instructor: Jane Arnold Lincove
Unique #63765

Monday 9-12

Course description & objectives
This course focuses on advanced quantitative methods for policy analysis with international and comparative datasets. Students will learn to:
- Manage large datasets for quantitative analysis
- Use econometric models to estimate relationships and causal effects
- Measure inequality using quantitative data
- Conduct and interpret cost-benefit analysis for development projects

Prerequisites
- A grade of B or above in graduate microeconomics (PA 393G or PA 393K) and introductory methods for policy analysis (PA397G or PA 397)
- Familiarity with STATA statistical software

Requirements

1. Weekly reading assignments and class attendance.
The first half of each class will be a presentation of new methods and discussion of empirical examples. The second half of each class will be workshopping of problem sets with data.

2. Weekly problem sets (8 x 40 points each)
Problem sets are an opportunity to practice statistical concepts using real data. Data sets are provided on the course website. Problem sets are due at the beginning of class. No late problem sets are accepted (ever). If you will not be in class, e-mail your assignment by 9 am on the due date.

3. Exams (100 points)
Two in-class exams will test mastery of theory and execution of statistical models and interpretation of results.

4. Empirical group project (100 points)
Students will conduct an original empirical analysis – either an empirical analysis using a large dataset or cost-benefit analysis of a development project. Projects will be presented in class on April 28, and a final paper (up to 20 pages) is due on May 5.

Credit/no credit grading is not permitted in this course. If you are registered for c/nc when grades are due, you will receive no credit.

Textbooks

Cameron, Colin A. & Trivedi, Pravin K. (2010). *Microeconometrics Using Stata (Revised Edition)*. Stata Press: College Station, Texas.

Brent, Robert J. (2006). *Applied Cost-Benefit Analysis*, 2nd edition. Edward Elgar Publishing: Massachusetts.

Additional required readings on Canvas.

Software

Students are required to use STATA version IC or better (Small STATA will NOT meet your needs for this course). You can access STATA through LBJ's virtual desktop or at UT libraries. It is HIGHLY recommended that you purchase a permanent STATA license for $189 or at least a short-term license. For purchasing information:

http://www.stata.com/order/new/edu/gradplans/student-pricing/

Academic Integrity

Students are encouraged to work together on problems sets and the case assignment. However, you must turn in original work that is your own. You will not receive credit for problem sets that are identical to another student's work. If you use outside sources for the case assignment, you must cite them using LBJ School guidelines.

Students are expected to respect the LBJ School's standards regarding academic dishonesty. A discussion of academic integrity, including definitions of plagiarism and unauthorized collaboration, as well as helpful information on citations, note taking, and paraphrasing, can be found at the Office of the Dean of Students web page. (http://deanofstudents.utexas.edu/sjs/acint_student.php) and the Office of Graduate Studies (http:// www.utexas.edu/ogs/ethics/transcripts/academic.html). The University has also established disciplinary procedures and penalty guidelines for academic dishonesty, especially Sec. 11.304 in Appendix C of the Institutional Rules on Student Services and Activities section in UT's General Information Catalog.

For further information, please visit the Student Judicial Services website at:

www.utexas.edu/depts/dos/sjs/

Student Disability Services

The University of Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-6441 TTY.

Part I: Econometrics for Policy Analysis

Week 1 (January 13) Overview of regression analysis

Readings:
Klass, Gary M. (2012). *Just Plain Data Analysis*. Rowman & Littlefield Publishers, Inc.: Lanham, Maryland. Chapter 3, 5, & 6

Hair, Joseph F. et al. (1998). *Multivariate Data Analysis Fifth Edition*. Prentice Hall: Upper Saddle Ridge, New Jersey.

Ainsworth, Martha & Filmer, Deon (2006). Inequalities in children's schooling: AIDS, orphanhood, poverty, and gender. *World Development*, 34(6), 1099-1128.

Week 2 (January 27) OLS Regression

Readings:
Cameron & Trivedi Chapter 3

Hair et al., Chapters 4-4a

Week 3 (February 3) Model specification for strange outcomes

Readings:
Cameron & Trivedi Chapters 14-15 (skim after p. 503)

Glewwe, Paul & Patrinos, Harry Anthony (1999). The role of the private sector in education in Vietnam: Evidence from the Vietnam Living Standards Survey. *World Development*, 27(5), 887-902.

Week 4 (February 10) Causal inference and selection problems in multivariate regression

Readings:
Cameron & Trivedi Chapters 6 & 8

Lincove, Jane Arnold (2008). Growth, girls' education, and female labor: A longitudinal analysis. *Journal of Developing Areas*, 41(2), 45-68.

Miguel, Edward, Satyanath, Shanker, & Sergenti, Ernest (2004). Economic shocks and civil conflict: an instrumental variables approach. *Journal of Political Economy*, 112(4), 725-753.

Week 5 (February 17) Measuring Treatments Effects

Readings:
Barrera-Osorio, Felipe & Raju, Dhushyanth (2011). Evaluation Public Per-Student Subsidies to Low-Cost Private Schools: Regression Discontinuity Evidence from Pakistan. World Bank Working Paper #5638. The World Bank: Washington, DC.

Heinrich, Carolyn (2007). Demand and supply-side determinants of conditional cash transfer program effectiveness. *World Development*, 35(1), 121-143.

Maluccio, John A. & Flores, Rafael (2004). Impact Evaluation of a Conditional Cash Transfer Program: The Nicaraguan *Red de Protección Social*. FCND Discussion Paper # 184. International Food Policy Research Institute: Washington, DC.

Week 6 (February 24) Review Econometrics

TAKE HOME EXAM DISTRIBUTED (DUE MARCH 3 @ 9 AM)

Part II: Measuring Costs, Benefits, and Distributions

Week 7 (March 3) Measuring inequality

Read - http://utip.gov.utexas.edu/tutorials.html

Galbraith, James K. (2007). Global inequality and global macroeconomics. *Journal of Policy Modeling*, 29, 148-175.

Week 8 (March 17) Building an index with multiple components

Read - http://hdr.undp.org/en/media/HDR%202013%20technical%20notes%20EN.pdf

http://georgemdallas.wordpress.com/2013/10/30/principal-component-analysis-4-dummies-eigenvectors-eigenvalues-and-dimension-reduction/

http://www.utdallas.edu/~herve/abdi-awPCA2010.pdf

To build-your own development index at http://hdr.undp.org/en/data/build/

Filmer, Deon & Pritchett, Lant (1998). Estimating Wealth Effects without Expenditure Data – or Tears. World Bank Working Paper #1994. The World Bank: Washington, DC.

Week 9 (March 24) Theories of CBA

Readings:
Brent Part I-II

Week 10 (March 31) CBA with uncertainty

Readings:
Brent Part III

Week 11 (April 7) Intermediate valuation

Readings: Boardman, Anthony E. et al. (2011). *Cost-Benefit Analysis: Concepts and Practices*. Pearson Education, Inc.: Upper Saddle Ridge, New Jersey. Part III

Week 12 (April 14) Practical CBA

Readings:
CBA samples in Canvas

TAKE HOME EXAM DISTRIBUTED (DUE APRIL 21 @ 9 AM)

Week 13 (April 21) Workshop day for projects

Week 14 (April 28) Group Project Presentations