

# ECON 215: TOPICS IN DEVELOPMENT ECONOMICS

## WINTER 2010-11

LECTURE: T,Th 2:45PM-4:35PM

LOCATION: 120-314 (T) and 120-414 (Th)

INSTRUCTOR: Aprajit Mahajan

OFFICE: Landau Economics Building, Room 233

OFFICE HOURS: T,Th 1:30 - 2:30pm, and by appointment

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COURSE WEB: [coursework.stanford.edu](http://coursework.stanford.edu)

COURSE DESCRIPTION: This course is part of a two-part graduate sequence in microeconomic issues in development. The second course will be taught by Katja Kaufmann in the spring quarter. The main aim of this course is to develop student skills in reading and writing papers in empirical micro-economic development. In particular, I will spend time working through a few papers in detail rather than attempting a synthesis of the literature. In addition, I will also provide an introduction to the relevant econometric methods.

RECOMMENDED TEXTBOOKS: [Deaton \(1997\)](#) is a great reference for empirical work and if you are considering writing an applied thesis, I strongly encourage you to purchase a copy. [Bardhan and Udry \(1999\)](#) is a textbook type treatment and while not comprehensive, is a good introduction to some of the material we will cover. [Ray \(1998\)](#) is an undergraduate text and often a useful place to start.

PREREQUISITES: I will assume familiarity with the microeconomics and econometrics covered in the first year Ph.D. sequence.

### COURSE REQUIREMENTS:

I expect you to do the required reading and to participate in class discussion. Papers marked with two asterisks will be discussed in some detail during lecture while the others are recommended reading. The figures in parentheses below are the relative weights used in computing the grade for the course.

**Presentation (25%) and Class Participation (5%):** Each student will present a paper on the reading list (or a closely related one that is not on the list<sup>1</sup>) and lead class discussion on it. I expect that all presentations will be scheduled by the third week of class.

**Referee Reports (15%):** Each student will write a referee report either on [Kinnan \(2009\)](#) or on [Cole, Giné, Tobacman, Topalova, Townsend, and Vickery \(2009\)](#). Alain de Janvry has a useful [guide](#)<sup>2</sup> on how to write a referee report that is also available on the course web-site. **Due: 2/24**

**Research Proposal (20%):** Each student will write a proposal on a development topic that could serve as the basis for a second-year paper. **Due: 3/4**

<sup>1</sup>Please discuss your choice of paper with me beforehand.

<sup>2</sup><http://are.berkeley.edu/courses/ARE251/2004/assignments/RRGuidelines.pdf>

**Problem Set (35%):** Finally, there will be one problem set. The exercise that will involve a substantial amount of work with data (and using STATA is recommended). **Due: 3/15**

### OTHER DETAILS

- For course credit in Econ. 215, students need only complete the coursework. Economics Ph.D students who wish to have development as a field of specialization must receive a letter grade of B or better.
- A good way to learn STATA is to use it to carry out the empirical exercise. STATA available on the Stanford Linux system as well as on the Economics Department's Keynes Linux system. Details on how to get started with STATA on the Stanford Linux system can be found [here](#)<sup>3</sup> and [here](#).<sup>4</sup> In addition Roy Mill, a Ph.D student in the department, has a very useful [web-site](#)<sup>5</sup> for getting started with STATA and MATLAB.
- Students are also encouraged to attend the [Applied Microeconomics and Econometrics Workshop](#) (Econ 305/Econ 315/Econ 345/Econ 370) as well as the Labor and Development Reading Group.
- The Economics Department has a common set of course management [policies](#).<sup>6</sup> These policies govern such matters as late work, missed examinations, and re-grading. If you are not familiar with these policies, make sure you read them carefully and familiarize yourself with them.
- Students with Documented Disabilities: Students who have a physical, psychological or learning disability that may necessitate an academic accommodation or the use of auxiliary aids and services in a class must initiate the request with the Student Disability Resource Center (SDRC). The SDRC will evaluate the request along with the required documentation, recommend appropriate accommodations, and prepare a verification letter dated in the current academic term in which the request is being made. Please contact the SDRC as soon as possible; timely notice is needed to arrange for appropriate accommodations. The SDRC is located at 563 Salvatierra Walk (Phone 723-1066).

### COURSE OUTLINE

#### 1. Tools

- (a) *Econometrics of Household Surveys*: [Deaton \(1997\)](#) (Chapter 1.4, 2.1 and 2.2). Useful references for survey sampling include [Groves, Floyd, Cooper, Lepkowski, Singer, and Tourangeau \(2004\)](#), [Lohr \(1998\)](#) and for a modern GMM based treatment of the issues see [Bhattacharyya \(2003\)](#) and Chapter 20 of [Wooldridge \(2010\)](#).
- (b) *Non-Parametric and Semi-parametric Methods*: [Deaton \(1997\)](#) (Chapter 3.2 and 3.3). From an applied perspective, [Silverman \(1986\)](#), [Jones and Wand \(1995\)](#) are both quite good and [Yatchew \(2003\)](#) is also useful.

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<sup>3</sup>[http://library.stanford.edu/services/social\\_sci\\_data\\_soft/docs/software\\_docs\\_stata\\_unix.pdf](http://library.stanford.edu/services/social_sci_data_soft/docs/software_docs_stata_unix.pdf)

<sup>4</sup>[http://library.stanford.edu/services/social\\_sci\\_data\\_soft/software\\_docs.html](http://library.stanford.edu/services/social_sci_data_soft/software_docs.html)

<sup>5</sup><http://www.stanford.edu/~roymill/cgi-bin/methods2010/material.php>

<sup>6</sup><http://www-econ.stanford.edu/academics/courses.html>

(c) *Resampling Methods*: [Deaton \(1997\)](#) (Chapter 1.4). [Efron and Tibshirani \(1994\)](#) is a good introduction to applying the bootstrap as is [Horowitz \(2001\)](#). For a good introduction to the bootstrap as well as to subsampling, see [Politis, Romano, and Wolf \(1999\)](#).

## 2. The Agricultural Household Model and Economies of Scale

[Bardhan and Udry \(1999\)](#) (Chapters 1 and 2)

[Singh, Squire, and Strauss \(1986\)](#)

★★[Benjamin \(1992\)](#)

[Benjamin \(1995\)](#)

[Jacoby \(1993\)](#)

★★[Foster and Rosenzweig \(2002\)](#)

★★[Deaton and Paxson \(1998\)](#)

[Gan and Vernon \(2003\)](#)

[Deaton and Paxson \(2003\)](#)

[Attanasio and Frayne \(2006\)](#)

**Tools:** Kernel Density Estimation, Non-parametric Regressions, Semi-Parametric Methods (the partially linear model, Fourier flexible forms)

## 3. Credit

Ch. 7 of [Bardhan and Udry \(1999\)](#)

★★[Stiglitz and Weiss \(1981\)](#)

[Hoff and Stiglitz \(1997\)](#)

★★[Karlan and Zinman \(2005\)](#)

[Banerjee \(2004\)](#)

[Banerjee and Munshi \(2004\)](#)

★★[Banerjee and Duflo \(2004\)](#)

[de Mel, McKenzie, and Woodruff \(2008\)](#)

★★ [Rosenzweig and Wolpin \(1993\)](#) – [Link to ICRISAT Data Site](#)<sup>7</sup>

[Fafchamps, Udry, and Czukas \(1998\)](#)

[Aghion and Morduch \(2005\)](#)

[Banerjee, Duflo, Glennerster, and Kinnan \(2010\)](#) (Christine 2/8)

**Tools:** Dynamic Discrete Choice Models, Neyman-Rubin Notation, Experimental Designs, Local Average Treatment Effects (LATE).

[Aguirregabiria and Mira \(2010\)](#) (Survey of Dynamic Discrete Choice)

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<sup>7</sup><http://www.icrisat.org/gt-mpi/KnowledgeBase/Databases/>

Todd and Wolpin (2010)

Imbens and Angrist (1994)

Cox and Reid (2000)

#### 4. Risk and Insurance

Ch. 15 of Ray (1998)

Ch. 19–20 of Ljungqvist and Sargent (2000) (2<sup>nd</sup> edition)

Ch. 8 of Bardhan and Udry (1999)

Ch. 6 of Deaton (1997)

Udry (1995) (Dan)

★★Townsend (1994)

Samphantharak and Townsend (2009)

Ravallion and Chaudhuri (1997)

★★Dercon and Krishnan (2000)

★★Udry (1994)

Ligon (1998)

Kinnan (2009)

Cole, Giné, Tobacman, Topalova, Townsend, and Vickery (2009)

**Tools:** Switching Regression Models.

#### 5. Psychology and Development

★★Mullainathan (2004)

★★Banerjee and Mullainathan (2010)

Banerjee, Duflo, Glennerster, and Kothari (2010)

DellaVigna (2009) (Nicola)

Mahajan and Tarozzi (2010)

#### 6. Learning and Technology Adoption

Ch. 12 of Bardhan and Udry (1999)

★★ Foster and Rosenzweig (1995)

★★ Conley and Udry (2001)

Duflo, Kremer, and Robinson (2010)

Jensen (2007)

Bandiera and Rasul (2006)

7. Randomized Experiments and Structural Models: See [here](#)<sup>8</sup> For a general overview.

[Duflo, Kremer, and Glennerster \(2006\)](#)

[Attanasio, Meghir, and Szekely \(2003\)](#)

[Attanasio, Meghir, and Santiago \(2005\)](#)

[Duflo, Hanna, and Ryan \(2009\)](#)

[\\*\\*Todd and Wolpin \(2006\)](#)

[McIntosh, Baird, and Ozler \(2011\)](#)

[Moffitt \(1992\)](#)

[Deaton \(2009\)](#)

[Imbens \(2010\)](#)

[Heckman and Urzua \(2010\)](#)

[Banerjee and Duflo \(2009\)](#)

## References

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ATTANASIO, O., C. MEGHIR, AND A. SANTIAGO (2005): “Education Choice in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate ProgresA,” Available at [http://www.homepages.ucl.ac.uk/~uctpjrt/progresA\\_ll.pdf](http://www.homepages.ucl.ac.uk/~uctpjrt/progresA_ll.pdf).

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<sup>8</sup><http://www.arts.cornell.edu/poverty/kanbur/NewDirectionsDevEcon.pdf>

- BANERJEE, A., AND E. DUFLO (2004): “Do Firms Want to Borrow More: Testing Credit Constraints Using a Directed Lending Program,” Available at [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=434](http://econ-www.mit.edu/faculty/download_pdf.php?id=434).
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