NES Master of Arts in Economics

Applied Microeconometrics

Syllabus for the Academic Year 2012-2013

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Office: NES 2004
Teaching Assistant: TBA

Class Session Dates: TBA
Final: TBA

1 Course Description

The goal of this course is to familiarize you with a range of techniques used in applied microeconometrics and to practice on conducting your own empirical research. The emphasis in the course will be on issues that arise in working with data and practical considerations in using various econometric techniques rather than their theoretical underpinnings. It is assumed that you already have a sufficient knowledge of the basic econometric theory.

2 Policies

Attitude is everything. Bring a mature, professional attitude to class. Attendance on-time is proper business etiquette and being regularly late is unprofessional. Coming in late interrupts the class – respect your colleagues.

In this class I do not check attendance at all. However, in the very borderline cases, you may benefit if I can remember you came regularly and participated in the discussions.

The grade for the course will be based on three or four home assignments (50% in total), and a closed-book final exam (50%). The exam will contain questions on an empirical paper handed out in advance.

The assignments are due by the beginning of the class (uploaded electronically to my.nes.ru). The grades for the problem sets submitted after the deadline are discounted 5% per day (I strongly discourage submitting late since there will be a lot of work during the module and it will be hard to pick up). Students with unsatisfactory grade for assignments receive unsatisfactory grade for the course regardless of the results of the final exam or make-up. To receive a satisfactory grade for assignments you have to receive at least 20% on each.

All assignments carry equal weight, though some will be individual and some group ones. The individual assignments are to be done independently without help of any form from others. However, you are free to discuss the group assignments both within and across groups. To do the group assignments you should form a group of 4 people by the beginning of the second week of class and send me an email listing members of your group. Choose your team members carefully – you do not want to get freeriders.

I do not have regular office hours. However, I will generally be able to answer questions after the class. In addition, you are always welcome to drop me an email with your question and we may set up an appointment if necessary.

Read the NES Honor Code. You must not cheat on the assignments and the final exam and must report any violations to me.

Finally, I will post all the important information (including lectures and assignments) to my.nes.ru. You should be able to check it on a regular basis.

3 Main Course Readings

Angrist, J. and Pischke, J-S. "Mostly Harmless Econometrics: An Empiricist's Companion" (AP)
Wooldridge, J. "Econometric Analysis of Cross Section and Panel Data" (JW)
Cameron, C. and Trivedi, P. "Microeconometrics Using Stata" (CT1)
Cameron, C. and Trivedi, P. "Microeconometrics: Methods and Applications" (CT2)

4 Course Outline

I will be using a separate file for the reading list, as it will be continuously updated during the course. Reading papers is not required, unless specifically mentioned in class (usually 1 per session), but it is highly recommended, as they often provide a good discussion of relevant topics with applications.

The tentative (both in content and in order) list of topics for the course is the following:

1. Research design. Causality. Potential outcomes approach. Randomized Experiments.
   AP Ch 1, 2, CT Ch 2, 25, JW Ch18.

2. Selection on observables. Matching vs regression. Propensity score methods.
   AP Ch 3, CT Ch 25, JW Ch18

3. Measurement error in cross-section and in panel. Panel data. Fixed-effects and First-differences estimators. Fixed effects vs Random effects. Incidental parameters problem. Difference-in-differences estimator. Standard errors in panel data.
   AP Ch 5, 8, CT Ch 16, 21, 22, 23, JW Ch10, 15.8

4. Regression discontinuity design. Sharp vs Fuzzy. Interpretation as IV.
   AP Ch 6, CT Ch 25.

5. Instrumental Variables. Heterogeneity and Local Average Treatment Effect. Weak Instruments.
   AP Ch 4, CT Ch 4, 25, JW Ch 5, 18

(if time permits)

6. Quantile regression. QTE estimator.
   AP Ch 7, JW Ch 12