Reading list for the course *Applied Microeconometrics and Causal Inference*

** I will assume you have read these.

* Will be covered extensively during the lectures. It is good if you have a look at these.

Non marked are good references, especially if you will be using these methods on your own.

**Lecture 1: Introduction, potential outcomes, and randomization.**

This lecture will give an introduction to the course. We will cover the nuts and bolts of doing a randomized experiment: Pitfalls, power calculations, clustered designs, ethical discussion, and practical tips. But we will also take the opportunity to discuss some recent advances in regression analysis (yes, there are actually quite interesting things happening here) and we will also cover some discussions on external and internal validity.

**Books:**

The following two books are highly recommended and can be seen as the Bibles for causal inference. The first one is a really good description of the topics during this course and the second is extremely valuable once you want to implement any of the methods using Stata.


Cameron, Colin and Pravin Trivedi (2010), “Microeconometrics Using Stata”, Stata Press

*The following books are also good references:*


Overview articles:
The following cover most of the material in the course:


Articles
Required reading before class:


Good if you have a look at before class:

Advances in regression analysis:
Newer version on her homepage: http://faculty.chicagobooth.edu/emily.oster/papers/selection.pdf

* Altonji, Joseph, Timothy Conley, Todd Elder, and Christopher Taber, 2013. “Methods for Using Selection on Observed Variables to Address Selection on Unobserved Variables.” On Elders homepage: https://www.msu.edu/~telder/


For those with an extra interest in the topic:


* Other good references


**Video**

**Podcast**
EconTalk Episode with Austin Frakt. An interesting discussion about power analysis. http://www.econtalk.org/archives/2013/05/frakt_on_medica.html

**Blog**
A good blog discussing RCT’s but also many other topics that we cover. Mostly development economics but many issues of general interest as well.
Excellent collection of their technical posts here: http://blogs.worldbank.org/impactevaluations/curated-list-our-postings-technical-topics-your-one-stop-shop-methodology

**Lecture 2: Instrumental variables.**
Required reading before class:


Good if you have a look at before class:


For those with an extra interest in the topic:


Murray, Michael (2006a). "The bad, the weak, and the ugly: Avoiding the pitfalls of instrumental variables estimation."

Lecture 3: Regression discontinuity.

Required reading before class:

** Lee, David S., and Thomas Lemieux. Regression discontinuity designs in economics. No. w14723. National Bureau of Economic Research, 2009. (There are many references in this paper for the interested reader)


Critique by Per Pettersson-Lidbom:


Good if you have a look at before class:


* The chapter on RD in Angrist and Pische (2009)


For those with an extra interest in the topic:

*RD can also be used with dates, see these three references for examples:*


*Or in space (these papers will be covered extensively if we have the final lecture on spatial econometrics/GIS):*


Which eventually turned into two top 5 publications:


**Lab 1: Instrumental variables and RD:**

**Part 1 IV:**

*We will replicate:*


*Critique and reply is of course interesting and valuable for learning:*


*We will also replicate some results from Card:*


*Other references for the lab are:*


*If you are interested in rainfall and especially if you will work with climate variables you should read:*


**Part 2 RD:**

*We will replicate:*


*And discuss the critique of:*


**Between lectures 3 and 4: Write mock referee reports on three papers.**

*Write maximum 2 pages per report. Focus on the empirical part and on the identification strategy in particular. Send in reports on December 1st. These are the papers:*


**Dahl, G. B., Kostol, A. R., & Mogstad, M. (2014). Family welfare cultures. Take the version in our dropbox folder so we all have the same.**

Lecture 4: Diff-in-diff(in-diff), synthetic control groups and other panel data strategies

Required reading before class:


Good if you have a look at before class:


The minimum wage debate is interesting and is full with methodological debate about DD. We will go through these papers in class:


For those with an extra interest in the topic:

Critique by Per Pettersson-Lidbom:

However: Shvets replies here: https://www.aeaweb.org/articles.php?doi=10.1257/pol.4.3.1


Donohue, J. J., & Wolfers, J. USES AND ABUSES OF EMPIRICAL EVIDENCE IN THE DEATH PENALTY DEBATE. STANFORD LAW REVIEW, 58, 791.


**Lab 2**

We will replicate an example from this book. See the chapter on panel data if you have time and have the book, you will get all necessary details during the lab.


We will also replicate the results in:


And using fake data we will conduct a similar analysis as:


**Lecture 5. Extra topic part 1: Peer effects.**

Required reading before class:
** Sacerdote, Bruce. "Peer effects in education: How might they work, how big are they and how much do we know thus far?." *Handbook of the Economics of Education* 3 (2011): 249-277.


*Good if you have a look at before class:*


For those with an extra interest in the topic:


**Lecture 6. Extra topic part 2: Using ArcGIS for causal inference.**

Required reading before class:


Good if you have a look at some of these before class:


Night time light papers:


For those with an extra interest in the topic:
Pinkovskiy, M. (2013). “Economic Discontinuities at Borders: Evidence from Satellite Data on Lights at Night”. Newest version at his homepage: [https://www.google.no/search?hl=en&q=pinkowsky+night+time+light&meta=&gws_rd=ssl#hl=en&q=pinkowsky+night+time+light](https://www.google.no/search?hl=en&q=pinkowsky+night+time+light&meta=&gws_rd=ssl#hl=en&q=pinkowsky+night+time+light

Melissa Dell’s Lecture notes. *GIS For Applied Economists (Lecture Notes Only)*

Masayuki Kudamatsu’s fantastic course. All material is available online, I highly recommend this course: [https://sites.google.com/site/mkudamatsu/gis](https://sites.google.com/site/mkudamatsu/gis)