Reading list for SOS9019 - Research Designs for Causal Inference

** We 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.

AK: Andreas Kotsadam

HF: Henning Finseraas.

Lecture 1: Introduction, potential outcomes, and randomization. (AK)
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:


* 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/](https://www.msu.edu/~telder/)

* Conley, T. G., Hansen, C. B., & Rossi, P. E. (2012). Plausibly exogenous. *Review of Economics and Statistics, 94*(1), 260-272. (Will also be covered on the IV lecture). We will also discuss the application of AET stats in:


For those with an extra interest in the topic:
Interesting discussions in *The Journal of Economic Perspectives*, Volume 24, Number 2, Spring 2010. Starting with:

Overview in Norwegian:

*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.


**Lecture 2: Regression, and matching. (HF)**

Relevant literature for this lecture includes the chapters on regression and matching in Angrist and Pische (2015**, 2009), Morgan and Winship (1999), and Cameron and Trivedi (2010) as well as Angrist and Krueger (1999). For non-technical discussions of causal inference assumptions of regression models on observational data, see Chapter 9 in Gelman and Hill (2007) Data Analysis Using Regression and Multilevel/Hierarchical Modeling, chapters 4-5 in King et al. (1994) Designing Social Inquiry, as well as Finseraas and Kotsadam (2014). In addition to these references, the lecture builds on the following articles:


**Lecture 3: Diff-in-diff and panel strategies. (HF)**
The relevant chapters in Angrist and Pische (2015**, 2009), Morgan and Winship (1999), and Cameron and Trivedi (2010) are key texts. Finseraas and Kotsadam (2015) is a non-technical introduction, see also Schlotter et al. (2009) Econometric Methods for Causal Evaluation of Education Policies and Practices: A Non-Technical Guide IZA DP No. 4725. In addition, the following articles will be discussed:


**Lecture 4: Instrumental variables. (AK)**
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 5: Regression discontinuity. (HF)**
The key text is Lee, David S., and Thomas Lemieux. Regression discontinuity designs in economics. No. w14723. National Bureau of Economic Research, 2009 (**). This text will covered in detail. The paper includes a long list of references to applied work. The chapters on RD in Angrist and Pische (2015, 2009) are also useful.

**Lecture 6: Using ArcGIS for causal inference. (AK)**
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:


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

** Lecture 7. Peer effects. (AK)**

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 8. Synthetic control groups. (HF)**

