Course Outline
This course is normally meant for second year researchers, especially those who have developed causal hypotheses in their prospectus and want to learn about some of the ways to put them to the test. The course touches on a series of designs suitable for identifying causal relations rather than correlations, from the queen technique—experiments—to second best options—natural experiments, discontinuity, panel studies, etc. The readings offer many applications of these techniques aimed at spurring participants’ imagination.

The reference texts for the seminar are:
- Thad Dunning, Natural experiments in the social sciences. A design based approach. CUP 2012 http://biblio.eui.eu/record=b1759366-S5

Classes and topics:
o Week 1: introduction to cause seeking designs & practical arrangements [4 Oct]
o Week 2: problems of causal identification [11 Oct, Fabrizio Bernardi]
o Reading Week [18 Oct]
o Week 3: introduction to experimental methods [25 Oct, Aron Szekely]
o Week 4: experiments [3 Nov]
o Week 5: instrumental variables [8 Nov]
o Week 6: difference in difference [15 Nov]
o Week 7: regression discontinuity [22 Nov]
o Week 8: panel and fixed effects [29 Nov]
o Week 9: twins and siblings [6 Dec]
o Week 10: Caveats, mixed methods and implication analysis [13 Dec, Diego Gambetta]

Requirements
In order to obtain the 20 credits participants, in addition to attending regularly, are required:

1) to give a class presentation EITHER on their research design if this employs one of the techniques discussed in the course, OR on one of these techniques as described in the readings; in
the latter case, the researchers should try to develop ideas on how a particular technique might help them in their own research.

2) from Week 4 onward, to prepare brief comments on at least two of the recommended readings for each session. These comments should contain participants’ suggestions for further applications of the technique presented in each week’s readings to different research questions. These comments should be posted on the course folder by the Sunday preceding the class. A selection of these comments will be discussed in class.

Schedule
The seminar takes place on Tuesdays at 11:00-13:00, in Seminar Room 3 in the Badia, and will run from Tuesday 4 October to Tuesday 13 December. The full list of the seminar sessions is the following:

| Session 1: Tuesday 4 October | 11:00 – 13:00 | Seminar Room 3 |
| Session 2: Tuesday 11 October | 11:00 – 13:00 | Seminar Room 3 |
| **READING WEEK** | | |
| Session 3: Tuesday 25 October | 11:00 – 13:00 | Seminar Room 3 |
| The EUI will be closed on Tuesday 1 November | |
| Session 4: Thursday 3 November | 11:00 – 13:00 | Seminar Room 3 |
| Session 5: Tuesday 8 November | 11:00 – 13:00 | Seminar Room 3 |
| Session 6: Tuesday 15 November | 11:00 – 13:00 | Seminar Room 3 |
| Session 7: Tuesday 22 November | 11:00 – 13:00 | Seminar Room 3 |
| Session 8: Tuesday 29 November | 11:00 – 13:00 | Seminar Room 3 |
| Session 9: Tuesday 6 December | 11:00 – 13:00 | Seminar Room 3 |
| Session 10: Tuesday 13 December | 11:00 – 13:00 | Seminar Room 3 |

SYLLABUS (please note that the reading list may still be subject to change)

**Week 1. Introduction to cause seeking designs & practical arrangements (Tuesday 4 October 2016)**


**Other readings**


Week 2. Problems of causal identification, Fabrizio Bernardi (Tuesday 11 October 2016)


Laitin David, Joachim Moortgatb, and Amanda Lea Robinson, 2012. Geographic axes and the persistence of cultural diversity, PNAS, 109, 26


Reading week (Tuesday 18 October 2016)

Week 3. Introduction to experimental methods – Aron Szekely (Tuesday 25 October 2016)

Morton, R. B., & Williams, K. C. (2010). Experimental Political Science and the Study of Causality: From Nature to the Lab. Cambridge University Press. [Sections 1.3.2 and 1.5; and Chapter 2]


Week 4: Experiments, and field experiments (Thursday 3 November 2016)

Natural
Legewie, J. unpublished, Terrorist events and attitudes toward immigrants: A Natural Experiment


Field


Other readings

Sekhon, J. and Tituinik, R. 2012. When natural experiments are neither natural nor Experiments, American Political Science Review.


Week 5: Instrumental variables (Tuesday 8 November 2016)


Other readings


Not to forget a cartoon:
http://www.manucartoons.com/manucartoons/%22Irrational_agents%22_series/Pages/Genesis_of_War_Part_I_%28HeloMag_.,_February_2010%29.html#26

Week 6. Difference in difference (Tuesday 15 November 2016)


Elisabetta Olivieri, Salvatore Sberna “’Set the night on fire!’ Mafia Violece and Election in Italy” [working paper]


Week 7. Regression discontinuity (Tuesday 22 November 2016)


Meyersson E. "Islamic Rule and the Empowerment of the Poor and pious" (forthcoming, Econometrica)

Other readings


Week 8. Panel and fixed effects (Tuesday 29 November 2016)


Other readings

**Week 9. Twins and siblings (Tuesday 6 December 2016)**

For an overview: Firembaugh, G. 131-145


**Other readings**


**Week 10. Caveats, mixed methods and implication analysis (Diego Gambetta) (Tuesday 13 December 2016)**


[the article is discussed by several authors here: http://onlinelibrary.wiley.com/doi/10.1111/some.2008.38.issue-1/issuetoc]

Durkheim E. 1897. *Suicide*. [The whole book is a great read. It relies on implications which
Durkheim derives from various conjectures on what might be causes of suicide; read especially chapter 4, on Imitation] [In the original French the book can be found here http://www.gutenberg.org/ebooks/40489; in English here http://archive.org/details/suicidestudyinso00durk]

Beware of being driven by data availability! See these two blogs:

http://themonkeycage.org/2013/06/14/is-theory-getting-lost-in-the-identification-revolution