

# ADVANCED RESEARCH DESIGN & DATA COLLECTION

## ALLIEVI HONORS PROGRAMME

ACADEMIC YEAR 2023/24

**Coordinated by Krzysztof Krakowski**

### Instructors

Daniel Auer, Camilla Borgna, Diego Gambetta, Krzysztof Krakowski, Moreno Mancosu, Aron Szekely; and a guest lecturer: Andris Saulitis

### Course Outline

This course is meant for **second year Allievi students**. The course has two principal aims. The first aim of the course is to teach a series of *designs suitable for identifying causal relations* rather than correlations. The second aim of the course is to teach a series of techniques of *data collection*. The readings offer many applications of these techniques aimed at spurring students' imagination.

The reference texts for the course are:

- Firebaugh, G. (2007), *Seven Rules for Social Research*, Princeton: Princeton University Press.
- Dunning, T. (2012), *Natural experiments in the social sciences. A design-based approach*. Cambridge: Cambridge University Press.
- Schlotter, M., Schwerdt, G., & Woessmann, L. (2011). Econometric methods for causal evaluation of education policies and practices: a non-technical guide. *Education Economics*, 19(2), 109-137.

### Schedule

The course takes place on Thursdays from 16:00 to 19:00, in Classroom 1 in the Collegio Carlo Alberto, and will run from Thursday 25 September to Wednesday 7 December.

### Classes and topics:

- Week 0: Practical arrangements [19 Sept, 17:00-17:30, Krzysztof Krakowski]
- Week 1: Brief history of cause-seeking designs & problems of causal identification [week of 28 Sept, Aron Szekely]
- Week 2: Survey experiments [week of 5 Oct, Daniel Auer]
- Week 3: Natural and quasi experiments [week of 12 Oct, Krzysztof Krakowski]
- Week 4: Laboratory experiments [week of 19 Oct, Aron Szekely]
- Week 5: Field experiments I [week of 26 Oct, Camilla Borgna]
- Week 6: Field experiments II: Hands-on experience [week of 9 Nov, Andris Saulitis]
- Week 7: Unconventional data collection I: Social media, text analysis, web scraping [week of 16 Nov, Moreno Mancosu]
- Week 8: Unconventional data collection II: GIS and archival data [week of 23 Nov, Krzysztof Krakowski]
- Week 9: Designing surveys [week of 30 Nov, Daniel Auer]
- Week 10: Mixed methods and implication analysis [week of 7 Dec, Diego Gambetta]

## Assessment

Participants must complete the following requirements: In addition to attending regularly, students are required:

- 1) from Week 2 onward, to prepare **response papers** (1-2 pages long) on at least one of the mandatory readings for each session (except for Week 6 - Field experiments II: Hands-on experience). These comments should contain participants' suggestions for further applications of the technique presented in each week's readings to different research questions. The students are encouraged to try to develop ideas on how a particular technique might help them in their own research. These comments should be submitted electronically to the teacher of a given class by the Tuesday evening preceding the class. The comments will be discussed in class.
- 2) to give two **class presentations** of empirical studies that apply the technique presented in each week's readings. The syllabus includes a list of applied studies the participants can choose from for each week's presentations. During Week 0, the students will be assigned presentations according to their preferences (within constraints).
- 3) to write a **final essay** of 2,500 words (references excluded), elaborating on one of the research ideas described in the response papers. The exact guidelines for this essay will be provided during the course.

Important: Students who present in the class in a given week need *not* submit a response paper commenting on the readings in this week. Only the final essay will be graded; the response papers and class presentations will be marked as pass or fail.