

# Test: Econometrics of Policy Evaluation

Cristian Huse

January 2023

## Instructions

- Write legibly and concisely, starting each answer in a new sheet;
- Each question should be answered in at most 500 words (approximately 1 page), unless mentioned otherwise. Make sure you respect this limit, which also gives you guidance on how detailed you should be.
- Each question is worth the same number of points.

## Questions

1. Randomization
  - (a) Describe a two-stage randomization procedure. Discuss how it will imply internal and external validity of the results.
  - (b) Back to the Randomization lab, how would you test for balance in a baseline covariate?
2. Compare the sharp and fuzzy discontinuity RD designs.
3. State and explain the **unconfoundedness** assumption. What does it imply for the propensity score?
4. Assume no full compliance in a programme. What are the desired properties of an instrument?
5. Focusing on Matching, state the variables used and compared. Alternatively, the variation used to identify the treatment effect.

**Note.** I am not asking you the generic properties of an instrument, but its properties in this very specific setting.