Universidad de los Andes
Facultad de Economía

**ECONOMIA URBANA**

**2022-1**

Econ 4683

Ignacio Sarmiento-Barbieri

# Final Project Guidelines

## 1 Objectives

The final project has two objectives. The first objective is to learn how to write a publishable paper by replicating a published article. You may ask, "why are we replicating someone else's work and not doing my own original research?". To answer that question, I'm going to cite Gary King: *"A paper that is publishable is one that by definition advances knowledge. If you start by replicating an existing work, then you are right at the cutting edge of the field. If you can then improve any one aspect of the research that makes a substantive difference and is defensible, you have a publishable paper. If instead you begin a project from scratch without replication, you need to defend every coding decision, every hypothesis, every data source, every method—everything. In contrast, if you start with replication, you only need to defend the one area you are improving, and you can stipulate to the rest. If a critic doesn't like something else in the original article other than that which you are improving, you need not defend that point since it is already part of the published record and is the recognized state of the art"*(King, 1995)

The second objective is to introduce you to standards for computational reproducibility and guide you through the process of assessing and improving the reproducibility of a published article. An article is computationally reproducible when it is possible to reproduce its results, tables, and figures using the data, code, and materials made available by its authors. To achieve this objective, we will lean on the materials and platform created by a new initiative called Accelerating Computational Reproducibility in Social Science (ACRe), which is organized by the Berkeley Initiative for Transparency in the Social Sciences (BITSS).

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## 2 General Guidelines

The final output is a reproduction package that contains a report and the associated code. The report should be a document with an abstract and a bibliography that cites the original article and the data/code location. It will show the tables and figures from the original article, with some brief comments. You will generally be adding comments in the code itself, comments which won't appear in the report. If you cannot replicate some results, please discuss them with me or the TA, and point them out in your document.

- **Group Work.** You can work in groups of up to **three** members. However, students in the PEG or Ph.D. program are **strongly** encouraged to do it by themselves. **Take this opportunity to lay the groundwork for your dissertation.**

- **Deliverables.** There are for deliverables for the final project:

    1. *Derivable 1: Selecting and Scoping* is due on **February 4th at 6 pm on Bloque Neón**. This is worth 7% of your final grade.
    2. *Derivable 2: Assessment* is due on **March 18th at 6 pm on Bloque Neón**. This is worth 8% of your final grade.
    3. *Derivable 3: Code Improvements* is due on **April 29th at 6 pm on Bloque Neón**. This is worth 10% of your final grade.
    4. *Final derivable: Reproduction Package* is due on **May 27th at 6 pm**. This is worth 15% of your grade.

    **Please beware**: Even if you have access to the data and codes reproducing an article is always a risky and complicated procedure. Analyses that appear neat and tidy in published papers are frequently far from that in practice. For example, in economics very few papers

are fully computationally reproducible (Gertler et al., 2018). **As a result, finishing the replication will almost certainly be more difficult and time-consuming than you expect.**

Before starting with the deliverables, please read the ACRe Guidelines carefully.

## References

Gertler, P., Galiani, S., and Romero, M. (2018). How to make replication the norm.

King, G. (1995). Replication, replication. *PS: Political Science & Politics*, 28(3):444–452.