Randomized Control Trial and Policy Evaluation

Course title - Intitulé du cours	Randomized Control Trial and Policy Evaluation
Level / Semester - Niveau /semestre	M2 / S1
School - Composante	Ecole d'Economie de Toulouse
Teacher - Enseignant responsable	Bobba Matteo
Other teacher(s) - Autre(s) enseignant(s)	
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Other teacher(s) - Autre(s) enseignant(s)	
Lecture Hours - Volume Horaire CM	30
TA Hours - Volume horaire TD	
TP Hours - Volume horaire TP	
Course Language - Langue du cours	Anglais
TA and/or TP Language - Langue des TD et/ou TP	

Teaching staff contacts - Coordonnées de l'équipe pédagogique :

Email: matteo.bobba@tse-fr.eu. Office number: T.352. Office hours:TBA. Preferred means of interaction: By email or with prior appointment

Course's Objectives - Objectifs du cours :

This course features a broad overview of randomized experiments as a key tool in empirical research. The first part of the course discusses the rationale behind the experimental approach through the lens of prominent empirical methods. The second part covers econometric aspects as well as a variety of implementation issues that arise when running RCTs in practice. The third part is aimed at illustrating the diverse use of randomized experiments in the most recent research practice through the exposition and discussion of leading academic articles. The learning objective of the course is twofold. First, students should be able to critically assess existing empirical research that employs the experimental approach. Second, students should be able to originally think about an experimental design of a research question of their choice.

Prerequisites - Pré requis :

The course is meant to be self-containing. However, basic knowledge of statistics and econometrics at the level of, say, the M1 Program Evaluation course offered at TSE will be assumed during the exposition. Two (somehow complementary) introductory econometrics textbooks that you may want to consult to either refresh or enhance your knowledge and empirical skills are: • "Introductory Econometrics. A Modern Approach", Wooldridge, Jeffrey M. Cencage Learning. • "Mostly Harmless Econometrics. An Empiricist's Companion", Angrist, Joshua D. and Jorn-Stephen Pischke. Princeton University Press.

Practical information about the sessions - Modalités pratiques de gestion du cours :

Laptops and tablets are allowed provided they are used for the course. Student participation is required and will be graded.

Grading system - Modalités d'évaluation :

1. Detailed pre-analysis plan of a mock RCT [35%]. A pre-analysis plan outlines the hypotheses to be tested and specications to be used in the analysis of a randomized experiment before collecting the data generated by the random treatment assignment. In your case, you should use an existing dataset of your choice (survey or administrative data) as the baseline of your hypothetical experiment. You should write it in the form of a draft of a paper of maximum 20 pages (including bibliography, tables, etc).

2. Oral presentation of one of the papers listed in the reading list [35%]: Each group will select one paper and students are required to critically assess the motivation, findings and contribution of the paper, with special emphasis on how the experimental design is used and the relative pros and cons of the empirical approach.

3. Takehome [20%]: students will be required to manipulate some STATA codes with related datasets and hand in the associated output/log files.

4. Active participation in class and during others' paper presentation [10%]. All students are expected to read before each class the papers to be presented by their classmates in order to actively participate in the discussion at the end of each paper presentation. They are also required to be active during the normal sessions.

Bibliography/references - Bibliographie/références :

Textbook for the course: IMBENS, GUIDO, RUBIN, DONALD, Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction. New York: Cambridge University Press.

Plus additional detailed references that will be given in class.

Session planning - Planification des séances :

1. Why randomize? (week 1 to week 2) • Endogeneity and causality in economics: The credibility revolution in empirical economics • The causal inference approach • The structural econometrics approach

2. Designing and implementing RCTs (week 3 to week 7) • Econometrics of RCTs • Practical design and implementation issues • Sample size and the power of experiments • Additional topics (externalities, attrition, etc..)

3. RCTs applications (week 8 to week 10) • RCTs for policy evaluation • RCTs and lab-in-the-field experiments • RCTs and Structural models

Distance learning – *Enseignement à distance :*

In case of necessity the class will move online using the zoom platform. All the associated pedagogical resources will be made available so that high-quality teaching and high-level interactions will be maintaned.