Learning Days Workshop, July 21-25, 2025. Universidad Católica del Uruguay, Montevideo, Edificio San José, 8 de octubre 2733, piso 3 salón SJ304

Start	End	Monday 21	Tuesday 22	Wednesday 23	Thursday 24	Friday 25
8:00 AM	9:00 AM	Welcome	9AM Day 1 Recap quiz (Kahoot!)	9AM Days 1&2 Recap quiz	9AM Days 1 - 3 Recap quiz	9 AM Simultaneous Presentations
9:00 AM	10:00 AM	Welcome & introductions	Randomization (+ different types of designs, include encouragement design)	Estimation/Statistical Inference	Threats - problems you can anticipate & design for; problems that happen despite your planning and you have to react to	Simultaneous Presentations
10:00 AM	11:00 AM	Design talk 1. Why experiment? - example from real study	R session (randomize!)	Estimation/Statistical Inference, with R exercise	Exercise: presenting and interpreting results	Simultaneous Presentations
11:00 AM	11:15 AM	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:15 AM	12:00 PM	Do an experiment practicum*	Design talk 2. Introduce Research Design form by talking through whole study	Workshop time	Workshop time	Simultaneous Presentations
12:00 PM	1:00 PM	Include - reveal T and Y, start discussion on importance of theory Confirm R is set up	Continuation of introduction of RD form (total 90 min, including morning portion)	Ethics discussion - develop version of exercise related to example or practicum	Final Prep for Presentations	Simultaneous Presentations
1:00 PM	2:00 PM	Lunch time	Lunch time	Lunch time	Lunch time	Lunch time
2:00 PM	3:00 PM	Causal Inference	Hypothesis Testing, followed with R exercise	Power, with R exercise	Transparency; Collaborations and Financing	Feedback and Next Steps: Wrap up
3:00 PM	4:00 PM	Workshop time: fix on randomizable T and how/what level to measure Y	Introduce Template for Slide for Presentations (JB); Workshop time	Workshop time	Design Talk (TBC)	Visit to Museo de Artes Visuales
4:00 PM	5:00 PM	R session	Individual interviews	Individual interviews	Individual interviews	Visit to Museo de Artes Visuales
5:00 PM	5:30 PM	Recap & closing	Recap & closing	Recap & closing	Recap & closing	Visit to Museo de Artes Visuales
5:30 PM	6:30 PM	Office hours	Office hours	(8pm) Group Dinner El Berretín Restaurant	Office hours	NA

Agenda
Learning Days, EGAP LatAm

Workshop Venue:
Universidad Católica del Uruguay, Edificio San José, 8 de octubre 2733, piso 3 salón SJ304
Timing: The workshop starts on Monday July 21 at 9AM and closes on Friday July 25 at 6PM

Intro
This five-day meeting will consist of a combination of design clinics and teach-ins on topics critical for designing impact evaluations and field experiments intended to measure the effects of policies, interventions, and programs on policy outcomes. The focus of the workshop is on experimental methods. Teach-in topics will include randomization, statistical power, and threats to the estimation of treatment effects. Throughout the week participants will work to develop their own research designs together with peers and the teaching team.

Organization: EGAP LatAm Hub's Co-Directors Leopoldo Fergusson (Uniandes) and Santiago Tobón (UEAFIT).

Hosts: Cecilia Rossel, Vicerrectora de Investigación e Innovación, Universidad Católica del Uruguay and Juan A. Bogliaccini, Decano, Escuela de Posgrados, Universidad Católica del Uruguay

EGAP Training & Methods co-directors: Kevin (Vin) Arceneaux (Science Po) & Jake Bowers (Illinois U)

Instructors:
Danilo Freire (Emory U)
Jake Bowers (U of Illinois)
Luis Maldonado (Pontificia Universidad Católica de Chile)
Rosario Aguilar (Newcastle U)

Teaching Assistants:
Martín Vanegas mvanega3@eafit.edu.co & Martías Tarillo matias.tarillo@ucu.edu.uy

Study material

- Please bring a laptop. Make sure you have R and Rstudio[1] installed.
- Lectures will be based on the curriculum in The Theory and Practice of Field Experiments: An Introduction from the EGAP Learning Days by Bowers, Voors, and Ichino, which is available in both English and Spanish.
- During the workshop materials will be shared via Dropbox.

Preparation before the workshop

- Please prepare a brief (1 minute) statement to introduce yourself (who you are, where you work, what your expectations are for the Learning Days) and to present your research question and general idea of your project that you will work on during the workshop. Send a picture/image that represents you and your research interests to matias.tarillo@ucu.edu.uy this picture will be displayed with the group during your presentation. Please also add your profile picture in the workshop's photo roster above your name here.
- Every participant must have a project to work on throughout the week. Ideally this is a project you are implementing, or are hoping to implement, and fits closely with your research interests. During the workshop we will focus mostly on experimental methods, i.e., where an intervention (program, project) is implemented using randomization. The workshop does not focus on non-experimental methods (i.e., regression models, PSM, DD, RD, etc.). If you would like to discuss potential research project options with us in advance of the training, please send matias.tarillo@ucu.edu.uy an email. We are happy to discuss!

- Make sure you have R and Rstudio installed. Appendix B of The Theory and Practice of Field Experiments: An Introduction from the EGAP Learning Days provides information on how to download R and RStudio. Please download both programs prior to the workshop and familiarize yourself with the material provided in the guide. In particular, we provide lines of code that you should execute to download several auxiliary files ("packages") that we will use during Learning Days. If you have difficulty downloading R, RStudio, the packages, or have any questions please e-mail: matias.tarillo@ucu.edu.uy for assistance.

- Make sure you have access to Dropbox. The workshop material will be uploaded here.

Mon Jul. 21: Getting Started, Experiments, Causal Inference & Research Design

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[1] Download from http://www.rstudio.com/products/rstudio/download/ . If you already prefer using R with an editor other than RStudio, you do not need to install RStudio.

09:00-10:00 AM: Welcome & introductions (All)

09:00-09:05 AM: Welcome and Introduction, Objectives of Learning Days. EGAP LatAm Regional Hub Co-Director Santiago Tobón

09:05-09:30 AM: Brief (1-min) introduction by participants - name, home institution, and the research question and motivation behind the research project that was submitted.

09:30-09:40 AM: Brief (1-min) introduction by teaching team- name, home institution, and research interests.

09:40-09:50 AM: Introduction of EGAP, what is + types of projects. EGAP's Methods Co-Director Jake Bowers & Kevin Arceneaux.

09:50-10:00 AM: Expectations for collaboration: Ask questions (when you ask questions you are helping everyone, including the professors!).

10:00-11:00 am: Design talk 1. Why experiment? - example from real study

11:00-11:15 am: Coffee break

11:15-12:00 m: Do an experiment practicum

12:00-01:00 pm: Include - reveal T and Y, start discussion on importance of theory

Confirm R is set up
- Make sure you are set up with R (all)
- Hands-on session on simple statistics in R

01:00-02:00 pm: LUNCH TIME

02:00-03:00 pm: Causal Inference
- Research questions: what are *X* and *Y*? What might it mean to say *X causes Y*?
- The potential outcomes framework and the fundamental problem of causal inference
- How do experiments help us learn about causality?

03:00-04:00 pm: Workshop time: fix on randomizable T and how/what level to measure Y
- Break in small groups
- Work on *research design form*
- Small Group discussions on research ideas: What are causal drivers and what are outcomes? By what "theory of change" or "causal mechanism" should the drivers influence the outcomes?

04:00-05:00 pm: R session

05:00-05:30 pm: Recap & closing
- Recap and closing.
- Quick go around: what did you find useful? What would you like to hear more about?

05:30-06:30 pm: Office hours (optional)
- Each participant can schedule their office hours directly in the office hours tab here by typing their name into an available cell.

Resources
- 10 strategies for figuring out if X causes Y
- 10 things you need to know about causal inference
- R: http://www.r-project.org/
- DeclareDesign: https://declaredesign.org

Tue Jul. 22: Identification and Randomization

09:00-09:15 am: Day 1 Recap, Quiz

09:15-10:00 am: Randomization (+ different types of designs, including encouragement design)
- Strategies for randomization: simple, block, cluster, factorial, encouragement
- Mechanics of replicable randomization

10:00-11:00 am: R session (randomize!)

11:00-11:15 am: Coffee break

11:15-12:00 m: Design talk 2. Introduce Research Design form by talking through whole study

12:00-01:00 pm: Continuation of introduction of RD form (total 90 min, including morning portion)

01:00-02:00 pm: LUNCH TIME

02:00-03:00 pm: Hypothesis Testing, followed with R exercise
- Fisher's test of the sharp null hypothesis of no effects and relationship with large sample tests.

03:00-04:00 pm: Workshop time, Design clinic: assignments and design form
- Hands-on session on statistics and hypothesis testing in R
- Work on research design form
  - Focus on strategy for hypothesis testing for each design
  - Focus on randomization strategies for each design

04:00-05:00 pm: Individual interviews

05:00-05:30 pm: Recap & closing
- Recap
- Quick go around: what did you find useful? What would you like to hear more about?

05:30-06:30 pm: Office hours (optional)
- Each participant can schedule their office hours directly in the office hours tab here by typing their name into an available cell.

Resources
- 10 things you need to know about randomization

Wed Jul. 23: Estimation of Causal Effects and Statistical Power

09:00-09:15 am: Day 1 & 2 Recap, Quiz

09:15-10:00 am: Estimation/Statistical Inference

10:00-11:00 am: Estimation/Statistical Inference, with R exercise
- The Average Treatment Effect: Variance, standard errors, confidence intervals, sampling distributions

11:00-11:15 am: Coffee break

11:15-12:00 m: Workshop time

12:00-01:00 pm: Ethics discussion - develop version of exercise related to example or practicum; one all together with only one version; then small groups on second scenario

01:00-02:00 pm: LUNCH TIME

02:00-03:00 pm: Power, with R exercise

Power: What it is, relation to sample size, dispersion, standard methods, simulations

03:00-04:00 pm: Workshop time, Design clinic
- Hands-on session on power in R
- Feedback and questions
- Figuring out the power for each study
- Work on research design

04:00-05:00 pm: Individual interviews

05:00-05:30 pm: Recap & closing
- Recap
- Quick go around: what did you find useful? What would you like to hear more about?

05:30-06:30 pm: Office hours (optional)
- Each participant can schedule their office hours directly in the office hours tab here by typing their name into an available cell.

08:00 pm Group Dinner El Berretín Restaurant

Resources
- 10 things you should know about the local average treatment effect
- 10 things you need to know about spillovers in experimental analysis
- https://egap.org/resource/10-things-to-know-about-statistical-power/
- https://egap.shinyapps.io/spillover-app/

Thu Jul. 24: Threats to Causal Inference

09:00-09:15 am: Recap Day 1-3, Quiz

09:15-10:00 am: Threats - problems you can anticipate & design for; problems that happen despite your planning and you have to react to

- Reading and presenting results
- Endogenous subgroups
- Partial compliance: LATE and ITT
- Spillovers & Attrition

10:00-11:00 am: Exercise: presenting and interpreting results

11:00-11:15 am: Coffee break

11:15-12:00 m: workshop time

12:00-01:00 pm: Final Prep for Presentations, Design Talk - working with partners; randomize!
- Feedback and questions
- Work on research design

1:00-02:00 pm: LUNCH TIME

02:00-03:00 pm: Transparency

03:00-04:00 pm: Workshop time, Design clinic
- Feedback and questions

- Work on your project with DeclareDesign
- Revise research designs
- Prepare Presentations

04:00-05:00 pm: Individual interviews

05:00-05:30 pm: Recap & closing
- Recap
- Quick go around: what did you find useful? What would you like to hear more about?

05:30-06:30 pm: Office hours (optional)
- Each participant can schedule their office hours directly in the office hours tab here by typing their name into an available cell.

Resources
- 10 things you need to know about statistical power
- 10 things you need to know about covariate adjustment
- 10 things you need to know about multiple comparisons
- https://egap.shinyapps.io/Power_Calculator/
- DeclareDesign Guide

Fri Jul. 25: Ethics, Design presentations and Remaining Topics

09:15-10:00 am: Quiz Individual run-through of presentations

10:00-11:00 am: Final prep. For presentations, Design presentations (two rooms)
- Each participant's does a 10-min presentation with 5-minutes discussion
- Addressing sampling, randomization approach, power, cluster randomized trials, potential threats

11:00-11:15 am: Coffee break

11:15-01:00 pm: Design presentations (cont.)

01:00-02:00 pm: LUNCH TIME

02:00-03:00 pm: Feedback and Next Steps: Wrap up
Based on demand we will discuss one or more of the following themes.
1. Data collection
2. IRB/Ethics and Transparency in research
3. Measurement strategies
4. Partnerships
5. Workflow
6. Workshop's evaluation.

03:00-06:00 pm: Cultural activity Visit to Museo de Artes Visuales