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| Course Code & Title | LISS249 Econometric Methods for Causal Inference | | |
| Convenor(s) | Dr Filipa Sa , Senior Lecturer in Economics, King's Business School | | |
| Institution | King's College London | Department | LISS DTP |
| Academic Year | 2023-24 | Term | Summer |
| Number of Sessions | 2 | Length of Session(s) | 7 hours |
| Day, Date | | Start : End | Room Location |
| Monday 22 nd April 2024 | | 09:30-17:30 | BH(S)4.02 |
| Tuesday 23 rd April 2024 | | 09:30-17:30 | BH(S)4.02 |
| Enrolment Link: | Available to book on SkillsForge from Tuesday 2 April 2024 . Click to log in and register: https://training.kcl.ac.uk/kcl/#he/dev/eventDetails;;em.providerCode=LISS,providerOrgAlias=kcl,number=249; Questions? Visit our Training FAQ here: Frequently Asked Questions - LISS DTP (liss-dtp.ac.uk) | | |

Course Overview:

This is a two-day applied econometrics workshop that covers methods for assessing causal effects. The course starts by studying the ideal experimental design – randomised trials. We will discuss how randomisation eliminates selection bias. We will then look at methods for causal inference that can be used when randomisation is not possible. We will first consider selection on observables and discuss regression. We will then consider selection on unobservables, including difference-in-differences, instrumental variables, and regression discontinuity design. The morning sessions cover models, and the afternoon sessions cover applications using STATA. By the end of the course students should be able to design and implement identification strategies for the assessment of causal effects and critically evaluate and interpret the output of such analyses.

Learning Outcomes:

After this course, students will be able to:

- Understand the key methods that economists use to estimate causal effects
- Apply these methods to data and estimate the models in Stata
- Interpret the estimation results
- Understand and critically evaluate the identification assumptions required for each of the methods studied in the course
- Apply these methods to their own research questions

Indicative Topic List:

- Randomised trials
- Regression
- Instrumental variables
- Regression discontinuity designs
- Matching and synthetic controls

Assessment:

- Attendance and participation
- Timed exercise



London Interdisciplinary Social Science Doctoral Training Partnership

Advanced Research Methods in Social Sciences

Prerequisites: Econometric methods (at undergraduate or postgraduate level)

Students that register should have some prior experience of using STATA.

Number of students: 15