

# London Interdisciplinary Social Science Doctoral Training Partnership Advanced Research Methods in Social Sciences

| Course<br>Code &<br>Title  | LISS380 Experimental Design and Analysis   |                            |   |
|--|--|----------------------------|---|
| Convenor(s)  | <u>Dr Matteo Montecchi</u> , Lecturer (Assistant Professor) in Marketing, King's Business School |                            |   |
| Institution  | King's College London  | Department                 | LISS DTP                                  |
| Academic<br>Year   | 2023-24  | Term                       | Spring                                    |
| Number of<br>Sessions  | 2  | Length of Session(s)       | 7 hours                                   |
| Day, Date  |  | Start : End                | Room Location                             |
| Wednesday 06 March 2024<br>Tuesday 19 <sup>th</sup> March 2024   |  | 09:00-16:00<br>09:00-16:00 | Bush House (S)3.01<br>MACADAM BLDG MB-2.1 |
| Available to book on Skills Forge, click to log in and register: |  |                            |   |

Enrolment Link: Available to book on SkillsForge, click to log in and register:

 $\underline{\text{https://training.kcl.ac.uk/kcl/\#he/dev/eventDetails,;em,providerCode=LISS,providerOrgAlias=kcl,numbercode=LISS,provi$ 

## **Course Overview:**

Experiments are an essential method of scientific inquiry that involves creating controlled conditions to observe participants' behavioural or attitudinal changes empirically. Experimental evidence is fundamentally different from evidence obtained through other correlation methods, such as surveys, as it allows researchers to more effectively substantiate cause-and-effect relationships between independent and dependent variables. Through an examination of leading scholarly work that adopts the experimental paradigm, this course will guide doctoral candidates through the process of designing experiments, deploying appropriate data collection procedures and analysing experimental data.

### **Learning Outcomes:**

After this course, students will be able to:

- Understand the key principles of manipulation, control and random assignment that characterize experiments
- Develop plans to design and implement experiments
- Apply appropriate statistical methods to analyse experimental data
- Interpret and present experimental research findings
- Recognise and evaluate ethical issues specifically relevant to research projects involving experiments

#### **Indicative Topic List:**

- The principles of experimental design: manipulation, control and random assignment
- Deciding on the type of experiments and type of manipulations to be implemented
- Choosing an appropriate sequence of experimental studies
- Statistical analysis of experimental data: between-subjects, within-subjects and mixed approaches, interaction between variables, planned contrasts and post hoc tests
- Ethical issues in experimental research

#### **Assessment:**

- Attendance and participation
- Research proposal

Prerequisites: Quantitative Methods

LISS249 Econometric Methods for Causal Inference.docx



Number of students: 15