

# London Interdisciplinary Social Science Doctoral Training Partnership

# **Advanced Research Methods in Social Sciences**

| Course<br>Code &<br>Title | LISS237B Geographic Information Systems (GIS) and Spatial Analysis 2                                     |                   |                             |                      |             |
|---------------------------|--|-------------------|-----------------------------|----------------------|-------------|
| Convenor(s)               | Giulia Tozzi   |                   |                             |                      |             |
| Institution               | QMUL   |                   | Department                  | LISS DTP             |             |
| Academic<br>Year          | 2022-23  |                   | Term                        | Summer               |             |
| Number of<br>sessions     | 2  | Research Platform | Quantitative Research (QuT) | Length of Session(s) | 3 hi<br>day |
| Day, Date                 |  |                   | Start : End                 | Room Locati          |             |
| Friday 28 April 2023      |  |                   | 9:00-12:00 / 14:00-17:00    | Via Zoom             |             |
| Enrolment<br>Links:       | Available to book on SkillsForge from Tuesday 11 <sup>th</sup> April 2023. Click to log in and register: |                   |                             |                      |             |
|                           | https://training.kcl.ac.uk/kcl/#he/dev/eventDetails,;em,providerCode=LISS,providerOrgAlias=kcl           |                   |                             |                      |             |
|                           | Questions? Visit our Training FAQ here: Frequently Asked Questions - LISS DTP (liss-dtp.ac.uk)           |                   |                             |                      |             |

#### Course Description:

This course will be the natural extension of LISS237A *Geographic Information Systems (GIS)* and Spatial *Analysis 1.* In particular, it will build upon the latter and will provide the students with the tools to perform geoprocessing, spatial and quantitative analyses of spatial data.

The course will use the following software: ArcGIS, ArcPY, Python and STATA.

## Reading List:

A bibliography with full references will be distributed in class, while for the use of ArcGIS the reference handbook will be provided by the instructor. Additional material (data/codes/etc.) will be distributed.

## Eligibility:

The course LISS237B *Geographic Information Systems (GIS) and Spatial Analysis 2,* building on *pt1 (LISS237A),* requires basic knowledge of GIS systems and spatial data, as well as basic knowledge of ArcGIS. The course, furthermore, requires intermediate skills in data management and analysis and the knowledge of STATA. The course is more suitable for research students with some quantitative background.

#### Pre-course preparation:

Prior to starting the course, students will need to download the software used throughout the course (ArcGIS). This will require an academic license. Contact IT Services at your home institution to obtain a license key. If you have any further questions on the license, please contact LISS team (<u>liss-dtp@kcl.ac.uk</u>).

Training prerequisite(s):

Completion of LISS237A Geographic Information Systems (GIS) and Spatial Analysis 1 -or- equivalent.

## Number of students:

Minimum number required to run: 2 / Maximum number of places available: 100