

First Term, Academic Year 2026-2027

Methods Seminar: Introduction to Quantitative Methods

Time and Place: Lecture — Tuesday 11:00–13:00; Lab — Friday 09:00–11:00. Seminar room 2, Badia Fiesolana

Dates: 6 October – 8 December 2026 (provisional, to be confirmed against the EUI academic calendar).

Given by: Zeth Isaksson, Max Weber Fellow (Zeth.Isaksson@eui.eu)

Administrative Contact: Olena Shcherbatiuk (Olena.Shcherbatiuk@eui.eu)

Seminar Description and Objectives

This seminar offers an accessible introduction to quantitative methods for the political and social sciences, aimed at researchers with little or no prior background. Through weekly lectures paired with hands-on lab sessions, participants build the core statistical ideas and basic coding skills needed to conduct and critically assess empirical research. The course covers descriptive analysis, linear regression, probability and statistical inference, and the foundations of causal inference. By the end, participants should grasp the core principles and be able to carry out and interpret the results of basic quantitative analyses.

Learning Outcomes

By the end of the seminar, participants will be able to:

- describe and visualise data using appropriate descriptive statistics;
- specify, estimate and interpret bivariate and multiple linear regression models in statistical software (e.g. R);
- distinguish correlation from causation, and good from bad controls, when interpreting a regression;
- reason about probability, sampling, standard errors and confidence intervals;
- carry out and report a basic hypothesis test, distinguishing statistical from substantive significance.

Indicative Topics

Conceptual foundations (correlation vs causation); descriptive statistics and data visualisation; linear regression I–III (OLS, multiple regression, good and bad controls); probability and inference I–III (distributions, standard errors and confidence intervals, hypothesis testing); and a closing review. Lectures are paired with weekly lab sessions that put each topic into practice.