

“Quantitative Approaches to Data Collection and Analysis”

This course serves as an introduction to quantitative research design and statistics for political science. Starting from the classical linear regression model, we will outline the assumptions underlying the workhorse model for statistical analysis. Therefore we will cover issues such as simultaneity, unit heterogeneity, non-random sample selection, and non-linear functional forms, amongst others. Throughout students will learn how these issues affect our ability to make inferences, can be identified, and ultimately be addressed with research design and statistical analysis. Students will also learn to conduct such statistical analyses in Stata or R with a variety of datasets. There are no formal pre-requisites for the course, although some experience with statistics programs (such as R or Stata) is beneficial, and students are encouraged to bring their own data sets and research projects to the course.

About the lecturer

Dr Liam McGrath is a post-doctoral researcher within the "International Political Economy" group at the Center for Comparative and International Studies (CIS) and the Institute for Environmental Decisions (IED) at ETH Zürich. His research focuses on topics related to Comparative and International Political Economy, Environmental Politics, and Political Methodology.