Understanding socio-environmental qualities for specific demographics in urban areas using spatial analysis

Context

* Studying inequalities across populations is a key uses of spatial analysis and has significance for multiple fields and domains
* For this analysis, you need to analyse a specific aspect of socio-environmental (or even economic) quality of living for populations living in an area of your choice and investigate whether inequalities exist in terms of how different demographics are experiencing or likely to experience and / or whether theses inequalities in this aspects contributes to inequalities in other socio-environmental qualities across different demographics
* You can use the different approaches covered in the practical to study your chosen aspect, which have shown different ways of representing distributions, densities, prevalence, accessibility etc and how to aggregate certain types of spatial phenomena to areal units
* You can use visual and statistical methods to facilitate comparisons, including using choropleth and other thematic maps a well as geostatistical bi / multivariable regression

Marks will be awarded for

* Analysis
  + Selection of appropriate methods for your selected research problem
  + Justification and explanation of the methods used
  + Data used at appropriate spatial resolution and coverage, with consideration of temporal issues
* Report
  + Introduction to the research problem (background and motivation)
  + Succinct and competent interpretation of your results
  + Well-presented maps, complete with expected mapping conventions
  + Clear answer to the research question
  + Overall attention to detail and academic principles

Beware

* You should include a minimum of 3 and a maximum of 7 maps in your analysis
* Recommend including a map of your study area within your report within the introduction or data and methods section of your report
* No more than 3 of either graphs and charts (i.e. no more than 6 graphs and charts in total, including any you may append to a map)