



# Full Syllabus

## Course Title

Advanced Quantitative Methods in Geography

## Lecturer

Prof Itzhak Benenson

## Semester

2020/1, Alef

## Course requirements

All exercises must be submitted

## Final grade components

Weighted average of the exercises' scores

## Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1 - 2	Basic notions of statistics – review
3 - 4	Multivariate regression analysis, logistic regression
5 - 6	Principal component analysis
7 - 8	Cluster analysis
9 - 10	Analysis of spatial patterns, spatial autocorrelation
11 - 14	Geostatistics – semivariogram, Kriging

## Required course reading

de Smith, M.J., M.F. Goodchild, P.A. Longley, 2010 Geospatial Analysis , Troubador Publ., UK, see <http://www.spatialanalysisonline.com/> for the on-line version and examples

## Optional course reading

Krivoruchko, K, 2011, Spatial Statistical Data Analysis for GIS Users, ESRI (digital edition), available in the Geography Dept library, includes data layers

## Comments