A survey of key concepts and statistical methods for the statistical analysis of spatial data, designed for environmental and life sciences but open to all relevant disciplines. The course is intended to complement existing courses in Geographic Information Systems (GIS) and biostatistics, which do not cover the statistical analysis of spatially dependent data.

Some overlap exists between the present course and GEOG 4710 (Statistics for Geoscientists); however, the purview of the present course extends beyond geostatistics.

The lecture part of the course explores the basic theory and equations underlying the various statistical methods/models, supplemented by examples from the scientific literature and outside readings from a textbook. Mastery of lecture concepts will be assessed via three in-class unit examinations and five problem sets. The laboratory part of the course is intended to extend and reinforce the methods presented in lecture by providing hands on