

Geographical Information Systems

ENVS363

Geographical Information Systems (GIS) are a body of tools which are central to all disciplines which make use of maps and mappable data. In this module, the key principles of GIS are introduced and students will learn how to map and analyse geographical data using the ArcGIS software. The module aims to develop an understanding of how and why GIS may be useful in geography, planning, and other disciplines. At the end of the module, students will know how to set up a GIS-based project, collect geographical data, and solve geographical problems such as identification of clusters in human populations, or selection of areas which fulfill several criteria such as being within a certain distance of a road, with a particular soil type, and below a specified elevation. The module will help to develop a set of valuable skills which may find application in many fields in both the public and private sectors, and will be invaluable in geographical research. Assessment is entirely coursework-based and comprises two practical reports (15% each), an essay (25%) and a project (45%).

