Discover the theory and techniques that have allowed many disciplines to digitally represent patterns and processes in space. Geographic Information Systems (GIS) are not just used by geographers – they are powerful tools for everyone from activists to zoologists. This course will introduce you to the tools and methods needed to obtain, manage, interpret and display spatial data.

This class will cover fundamental concepts including spatial data structures, data sources and transfer methods, projections and coordinate systems, georeferencing, metadata, supporting software, global positioning systems, and spatial analysis techniques such as overlay, extraction, and interpolation. At the end of this class you will not only know how to create digital maps, but also how to look critically at maps and remotely sensed imagery and to evaluate the sources of data and the assumptions that were used to make them.