

GEOG 594

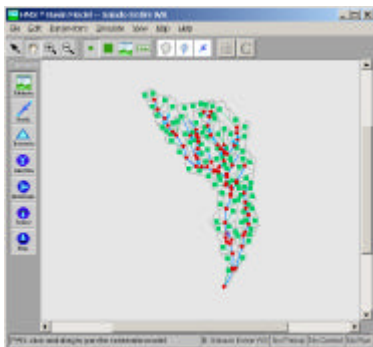
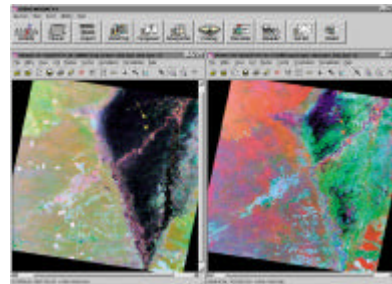
GIS for Water Resources

Course Description

This course will examine the applications of Geographic Information Systems (GIS) in hydrology and water resource management. We will discuss hydrologic networks, watershed characterization by GIS, river channel modeling with GIS, GIS modeling and visualization of hydrographic data, time-series water resource data representation and analysis in GIS, and issues in the applications of GIS for watershed management. The emphasis will be on developing analytical skills with practical GIS applications. Course participants are expected to engage in weekly readings and discussion and to write and present a research project.

Instructor

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Grading

Term project (40%)
Assignments (30%)
Article reviews (20%)
Participation (10%)

Textbooks

1. Maidment, D. ed. (2002) *ArchHydro: GIS for Water Resources*, ESRI Press: Redlands
2. Lyon, J. G. ed. (2003) *GIS for Water Resources and Watershed Management*, Taylor & Francis: New York.