# GIS-RS Final Hydrogeology Project for Applied GIS

In lieu of a final examination, you will propose, develop and analyze a hydrogeologic problem using a geospatial database and appropriate imagery. You may define your own individual project, or choose one from a list provided by your professor. You will first write a short proposal (2 pages) defining the nature and extent of the problem, availability of data for analysis, and strategy for analysis or remediation. This project will take between 3 to 5 weeks to complete, and you will meet regularly with you professor to alleviate or minimize any difficulties, and show progress towards completion. You will write a detailed report with supporting documentation (i.e. geospatial database, cross-sections, hydrogeologic maps, RS images, references and web resources, timetable and budget). You will also give a PP presentation to the rest of the class during the last class meetings, so others can learn about your project. Completion of this project, (although far more work than studying and taking a final exam), will give you practical experience which is useful for graduate study and for future employment.

Write short (2 page) proposal defining the project

Meet with Professor to get approval to begin the project

Gather appropriate resources relevant to the project area

Develop geospatial database appropriate to the project

Develop analysis/remediation strategy and plan for implementation, with timetable and budget

Write report and produce detailed documentation with maps, sections and imagery

Make a presentation to others in the class before end of term

Turn in final report with all accompanying documentation

## Evaluation and Project Grade

You will be evaluated using the following:

Students should be able to define the scope and extent of a specific project

Students should be able to construct a working, query-able database appropriate to the project

Students should be able to produce a clear, detailed written summary of the project

Students should be able to construct clear, detailed cross-sections and maps appropriate to the project

Students should be able to present a clear and logical summary of the project to others

Students should be able to analyze the relationships of the geospatial data to recognize changes in time and space

Students should be able to develop strategies for problem solving (i.e. remediation)

Students should be able to use geospatial data to make future predictions in time and space

Students should be able to work well individually and make steady progress toward completion

Students should be able to develop better writing and presentation skills thru this experience