**Course Description:** This course is designed for graduate students looking to expand their GIS skill set and build proficiency in solving spatial problems with GIS analyses. Students should have a strong working knowledge of Esri’s ArcGIS software package (ArcGIS 10 will be used for all course exercises and will be provided by the instructor upon registration). The first few labs are designed to reacquaint students with the software’s functionality. The rest of the course is comprised of lab work that will build proficiency in GIS problem solving, advanced tools and plugins, and increase GIS professionalism. Topics covered include troubleshooting coordinate system issues, morphometric analyses, lidar DEM construction, model building, cluster and hotspot analyses, complex raster/vector analyses, and error analysis to demonstrate data quality limitations and constrain accuracy of results.

*Earn three graduate credit hours*  
*Semester based online course*

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