

# GEOS5384 - Near-Surface Geophysical Imaging

[GEOS 5384](#) Near-Surface Geophysical Imaging (3 semester credit hours) This course covers theoretical and practical aspects of Ground Penetrating Radar (GPR) data applications. It is a "hands-on" course that covers the physical basis, rock properties, equipment, planning and execution of small scale surveys, data processing and interpretation. Examples of applications include reservoir analogs, and engineering, groundwater and environmental site evaluations. Techniques include low and high frequency, single and multi-channel ground-penetrating radar. A one-day field trip for collection of GPR data from the Woodbine formation at Grapevine Lake is the basis of the laboratory report. A background in calculus and general physics is required. Instructor consent required. (2-3) T