SOILS 5232-Vadoze Zone Hydrology: The course covers the basic principle of water, solute, heat and gas transport in soils. A majority of the time is spent on principles dealing with subsurface hydrology and associated contaminant transport. The course also emphasizes the application of above principles to water quality problems. The course includes lectures; take home problem sets; and laboratory demonstrations for measuring soil physical properties and processes. Background requirements for the course are a semester of college level calculus and physics. This is a 3-credit course with 2 lectures and 1 laboratory session per week.