ESP 4216-Contaminant Hydrology: The course covers the principles of contaminant transport both in percolate solution and in overland flow. Topic discussion is mostly descriptive (minimal use of equations) but does include problems that involve computations. Specific topics include Hydrologic cycle; Darcy’s flux; pore water velocity; piston flow, diffusion-dispersion and chemical degradation processes; contaminant travel time and distance to travel; methods of characterizing contaminant leaching; Henry’s law and vapor phase transport; methods to calculate and measure runoff; and management practices to control runoff and associated contaminants losses.