

# SOILS 597A

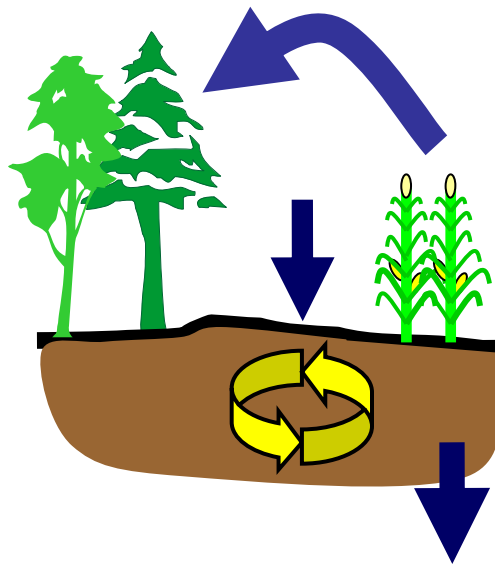
# Ecosystem Nutrient Cycles

## Fall 2005

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For students who want to:  
Understand the biologically important nutrient cycles in  
terrestrial ecosystems and  
Link nutrient cycling to energy (carbon) and water flow

These linked nutrient-  
energy-water fluxes  
provide the basis for  
watershed protection,  
intensive agricultural  
production, and our  
understanding of global  
biogeochemical cycles.



The course will begin with major theoretical advances in ecosystem science and conclude with applications of ecosystem theory to environmental management and problem solving. Class time will include a mixture of lectures, discussions of primary literature and case studies, and group and independent projects. Class projects will give students the opportunity to focus on nutrient cycling in ecosystems where they conduct research. Students will complete the class with an understanding of: 1) classic and contemporary theories of nutrient cycling at the ecosystem scale, 2) variability in nutrient cycling among the major unmanaged and managed ecosystem types, 3) ecosystem responses to natural disturbance and human management, and 4) common and cutting-edge methods of ecosystem analysis.

Instructor: Jason Kaye	Time: TR 9:45–11am	Room: T:025 Deike & Th:116 EES
Credit: 3 hrs	Schedule #: 566278	
Prerequisites: basic chemistry plus ecology or agroecology or biogeochemistry		