Graduate Module

Title: Soil Organic Matter Dynamics and Management

Instructor: Dr. Derek H. Lynch  
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Timing: Winter (Feb-Mar) 2014

Description:
A review of our current understanding of organic matter distribution, storage and dynamics in soil, and the tools (physical and biological fractionation techniques, C isotopes and conceptual ‘pools’ or models) used to help characterize it. Particular emphasis will be placed on discussion of the mechanisms and potential of soil C sequestration, and the impact of management practices (cropping systems, tillage, amendments) and edaphic factors on soil organic matter dynamics.

Format: Lecture, 2.5 hours/week for 4 weeks. Each student will be expected to participate with questions and comments related to lectures and distributed readings. The presentation will include material from the major essay written by each student.

Method of Evaluation:

1) Essay 40%  
2) Presentation of paper 20%  
3) Participation in discussions 40%