

November 11, 2008

**AGRO / MSYM / AGEN 431**  
**Site-Specific Crop Management**  
*Fall 2008*

**Project 2 (80 pts)**

Due: December 9, 2008

**Site-Specific Crop Management**

The purpose of this project is to develop skills in creating fertilizer recommendations and interpreting the results of site-specific management of grain crops. This is a group assignment. Each group will present one written report and a 10-minute oral presentation on Tuesday, December 9. Any decisions and reasons behind them should be stated clearly. Use the questions below as guidance while working on the project. Include necessary field maps to illustrate your approach (do NOT print out all available data).

1. Locate your data set according to the table below.
2. Find and download corresponding web-based data layers (DOQQ, DEM, SSURGO).
3. Analyze available yield data to determine the degree of spatial and temporal yield variability.
4. Review results of laboratory analysis performed on collected soil samples, and identify potential soil related problems.
5. Compare a summary yield map against soil types, remote sensing imagery, topography map and electrical conductivity maps; identify potential management zones.
6. Suggest variable-rate fertilization (N-P-K) and liming program (if appropriate), develop prescription maps.
7. Justify your recommendations through a simplified economic analysis.
8. Recommend any alternative site-specific management that may increase profitability and sustainability of crop production for a given site.

Group	Data Set
1	SITE_2
2	SITE_3
3	SITE_4