## SOIL 4213 Topics in Precision Agriculture Syllabus-Spring 2014

Class Times and Location: M, W, F Room 225 Ag Hall, from 2:30 to 3:20

## **Instructors:**

Brian Arnall, Plant and Soil Sciences

## **Required Special Trips:**

Class will meet at the Student Union Little Theater Jan 22. At 2:45 a special roundtable on Social Media use in Extension will be held. This session last until 3:45, you are encouraged to stay as long as possible.

Class will meet from 1-5 pm, Jan 27 or Jan 31, at SST Software 824 N. Country Club Rd. Students will go to only one of the two days. To make up for extra time No class will be held on campus the week of the 27<sup>th</sup>. Students will work with advance GIS, Mapping, Scouting and Recommendation technology and take a field through an entire growing season. Soil Sampling to Harvest.

**Course Objectives:** This course will examine current and developing technologies in the precision agriculture and site-specific management. The course will introduce students to the theory and practices of a rapidly changing technology, and it will help prepare them research and practice in this area.

**Structure:** This is a lecture course, but there will be in-class and out of class laboratory exercises to introduce the students to some of the equipment and tools used in site-specific management. Laboratory exercises will be arranged to meet students' schedules.

**Requirements:** Students should be seniors or graduate. Students should be experienced in using Excel<sup>TM</sup> spreadsheets.

## Text <u>Not Required</u>: *The Precision-Farming Guide for Agriculturists* $2^{nd}$ *Edition. Coypright* 2006 by Morgan and Ess. Class notes posted on the Internet

**Testing:** Weekly quizzes, homework, a mid-term and final exam.

**Grades:** Grades will be determined on the basis of quizzes, homework and outside exercises, an oral presentation, and final examination using the following distribution of points: This distribution can be changed during the semester.

Category	Percentage of Grade
Homework	20 %
Quizes	30%
Mid Term	20 %

Final Examination	30 %
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The number and content of homework, and outside exercises will be determined by each instructor. Grades will be assigned on the following basis: A 90-100; B 80-89; C 70-79, D 60-69; F< 60, however the instructors reserve the right to adjust the scale as needed

Attendance: Mandatory, No make ups allowed on missed quizzes or exams. Students with excessive absences 4 or more, will receive an F. **Oral Presentation:** Each student will be expected to prepare a presentation on some aspect of site-specific management. The presentation will be oral with supporting PowerPoint slides. You will select your topic. We will work with you on presentation preparation and placing the presentation on our Web site.

Final Examination: Comprehensive