

**SOIL 4213**  
**Topics in Precision Agriculture**  
**Syllabus-Fall 2018**

**Class Times and Location:** M, W, F Room 169 Ag Hall, from 8:30 to 9:20

**Instructors:**

Brian Arnall, Plant and Soil Sciences

**Required Special Trip:** Class will meet from 8-12 or 1-5 pm, one day during the week of TBA, at SST Software 824 N. Country Club Rd. Students will go to only one of the three days. To make up for extra time No class will be held on campus the week of the TBA. Students will work with advance GIS, Mapping, Scouting and Recommendation technology and take a field through an entire growing season. Soil Sampling to Harvest. There will be a during class field trip on one of the class periods during the week of Apr. TBA.

**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™ spreadsheets.

**Text:** *Precision Ag Basics 1<sup>st</sup> Edition. Coypright 2018* by Shannon, Clay, Kitchen.

Available for download from ASA/CSSA/SSSA Digital Library.

***I will provide copies of chapters but recommend getting Access to DL.***

***Become a Member of ASA, CSSA, or SSSA and get access to Digital Library***

***Undergrad: Membership \$20, Digital Library \$55.***

***Grad: Membership \$40, Digital Library \$55.***

<https://www.agronomy.org/membership/join-renew>

Class notes posted on the course webpage.

**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:

Category	Percentage of Grade
Attendance	20 %
Homework	15 %
Mid Term	20 %
Quizzes	20 %
Final Examination	25 %

The number and content of homework and outside exercises will be determined by 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.

**Final Examination:** Comprehensive 12-10-2018 8:00am