INSTRUCTOR: Bruce L. Vasilas, Professor
Department of Plant and Soil Sciences
University of Delaware
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Office hours: by appointment

LECTURES: TR 11:00-12:15, FGL 103

COURSE DESCRIPTION: Management and ecology of the major U.S. agronomic crops are discussed. Emphasis is placed on management decisions and the conceptual basis for these decisions. Crop growth and development are discussed as they pertain to decision making and troubleshooting.

PREREQUISITE: PLSC 151, Introduction to Crop Science

TEXTBOOK & READING ASSIGNMENTS: No text is required. However, students may be given reading assignments for class discussion.

TOPICS

A. Crop Yields
   1. Physiological basis of yield
   2. Yield trends
   3. Yield goals

B. Field Preparation
   1. Crop rotations
   2. Cover crops
   3. Tillage
   4. Soil compaction
   5. Soil fertility

C. Grain Crop Production
   1. Seed selection and treatment
      a. Cultivar selection
      b. Growth types
      c. Maturity rating systems
      d. Seed sources
      e. Seed treatments
2. Stand establishment
   a. Planting date
   b. Plant populations
   c. Row spacing
   d. Replant decisions

3. Crop growth
   a. Staging systems
   b. Environmental effects
   c. Troubleshooting

D. Forage Crop Production
   1. Species selection
   2. Forage production utilization/diversity
   3. Pastures
   4. Silage
   5. Hay

**PLSC 401/601, SYLLABUS**

**GRADING:** Grades for PLSC 401 will be based on two exams (100 pts. ea.), a final exam (100 pts.) and a class project (20 pts.). Exams are not cumulative. Class attendance and participation is expected. The instructor reserves the right to consider classroom participation in borderline grades. Grades for PLSC 601 will be based on two exams (100 pts. ea.), a final exam (100 pts.), and a paper (25 pts.) (see below). Exams are not cumulative. Class attendance and participation is expected. The instructor reserves the right to consider classroom participation in borderline grades.

**EXAM DATES:**

Exam 1
Exam 2
Final

**601 TERM PAPER:** Each 601 student is required to submit a term paper and present a summary of that paper to the class.

**TERM PAPER DUE DATE:** May 8
EXPECTATIONS BY THE INSTRUCTOR AND RESPONSIBILITIES OF THE STUDENTS:

1. Classroom attendance and participation by the students is expected.
2. Tardiness for lectures is not acceptable.
3. Assignments will not be accepted late.
4. Exams will not be presented to a student after 15 minutes into the exam period. A student arriving after the 15 minute interval forfeits the opportunity to take the exam and will receive an exam grade equal to zero points.
5. Academic dishonesty will not be tolerated and will result in an automatic grade equal to zero points.
6. Each handout will be presented only once.
7. Poor handwriting on exams which causes ambiguity will result in a forfeiture of points.
8. E-mail is not a substitute for classroom attendance. The instructor is not compelled to respond to e-mails.