

**AGRI 1407**  
**Agronomy**

**Western Texas College**

- I. Basic Course Information
  - A. Course Description: Principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.
  - B. Lab: The required laboratory activities will reinforce the lecture material.
- II. Student Learning Outcomes - Upon successful completion of this course, students will:
  - A. Apply scientific reasoning to investigate questions and utilize scientific and agronomic tools to collect and analyze data and demonstrate methods.
  - B. Use critical thinking and scientific problem-solving to make informed decisions.
  - C. Communicate effectively the results of scientific investigations.
  - D. Summarize the role of climate and geography in present and past crop production.
  - E. Explain the growth and development of crops.
  - F. Analyze the impact of climate on crops.
  - G. Assess the interactions of soils, water and fertility on crop production.
  - H. Contrast methods of pest management in crop production. Differentiate production methods based on geography and crop selection.
- III. Course Requirements
  - A. Six Major Exams – 600 points
  - B. Crop Portfolio – 100 points
  - C. Laboratory Attendance/Activity – 300 points
  - D. Comprehensive Final Exam – 200 points
- IV. Information On Books
  - A. Principles of Field Crop Production, Fourth Edition, Prentice Hall  
ISBN-13: 978-0-1302-5967-7  
ISBN-10: 0130259675
- V. Other Policies, Procedures and important dates. Please refer to the WTC [Catalog](#) for the following:
  - A. Campus Calendar
  - B. Final exam schedule
  - C. How to drop a class
  - D. Withdrawal information
  - E. Student Conduct/Academic Integrity
  - F. Class Attendance
  - G. Students with disabilities
- VI. Course Content and Tentative Schedule\*

Week 1	Introduction
Week 2	Chapter 1 – The Art and Science of Crop Production
Week 3	Chapter 2 – Crop Plants in Relation to the Environment Chapter 3 – Botany of Crop Plants Exam #1 LAB: Crop Seed Identification
Week 4	Exam #1 Chapter 4 – Crop Improvement LAB: Crop Seed ID Quiz, Cropping Regions of the US
Week 5	Chapter 5 – Tillage Practices LAB: Green Tissue Testing
Week 6	Chapter 6 – Fertilizer, Green Manuring, Rotation and Multiple Cropping Practices Exam #2 LAB: Fertilizer Analysis of Soils
Week 7	Chapter 7 – Seeds and Seeding Chapter 9 – Handling and Marketing Grain, Seeds and Hay LAB: Indirect Seeding
Week 8	Chapter 11 – Weeds and Their Control Exam #3 LAB: Weed Identification
Week 9	Chapter 12 – Corn or Maize LAB: pH Testing of Soils
Week 10	Chapter 15 - Wheat Exam #4 LAB: Garden Plan Design
Week 11	Chapter 16 – Rye and Triticale Chapter 17 – Barley Chapter 18 – Oat Chapter 19 – Rice LAB: Garden Preparation
Week 12	Exam #5 Chapter 22 – Alfalfa Chapter 23 – Sweetclover Chapter 24 – The True Clovers Chapter 25 – Lespedeza Chapter 26 – Soybean LAB: Plant Garden and Crop Plants
Week 13	Chapter 27 – Cowpea Chapter 28 – Field Beans Chapter 29 – Peanut

	Chapter 30 – Miscellaneous Legumes Chapter 31 – Buckwheat Chapter 32 – Flax Chapter 33 – Cotton Chapter 34 - Tobacco LAB: Field Trip
Week 14	Chapter 35 - Sugarbeet Chapter 36 - Potato Chapter 37 – Sweet Potato Chapter 38 - Canola Chapter 39 – Miscellaneous Industrial Crops Exam #6 LAB: Cotton Farming in Scurry County
Week 15	Crop Portfolio Due, Review for Final Exam
Week 16	Final Exam

\*The above schedule, policies, procedures and assignments in this course are subject to change.

Last Modified: October 5, 2017