

AGRONOMY 105 CROP PRODUCTION CLASS SCHEDULE Spring 2012		
Date	Topic (Always subject to change)	Homework (Always due by 5 PM on Friday in the CRC Gray Box)
1/10	<b>Introduction</b> <ul style="list-style-type: none"> <li>Introduction to the course- Review syllabus/ assessment</li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Go onto blackboard and introduce yourself to class</li> <li>Read pages 1-16 to prepare for next lecture</li> </ul>
1/12	<b>Crop Production Basics</b> <ul style="list-style-type: none"> <li>What is agronomy?</li> <li>How is agronomy involved in everyday life?</li> <li>Morrill Act</li> <li>10 cropping regions of the US</li> <li>Influences of geography on plants (biomes)</li> <li>Sustainable agriculture</li> </ul>	
1/17	<b>Movie: History Harvest</b>	<ul style="list-style-type: none"> <li><b>Homework:</b> Take home question(s) based on the movie</li> <li>Read pages 7-15 to prepare for next lecture</li> </ul>
1/19	<b>Crop History, Terminology and Classification</b> <ul style="list-style-type: none"> <li>Important crop history of seeds</li> <li>Crop origins</li> <li>Agricultural domestication</li> <li>Differences between annuals, biennials, and perennials</li> <li>Hatch Act</li> <li>Monocots/dicots</li> <li>Plant families</li> </ul>	
1/24	<b>Wheat Movie/Amazing Grains</b> <ul style="list-style-type: none"> <li>Wheat types</li> <li>Classes of wheat</li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Take home question(s) based on the movie( Will provide Wheat handout)</li> <li>Read pages 57-63 to prepare for next lecture</li> </ul>
1/26	<b>Photosynthesis, Respiration and Crop Growth Parameters</b> <ul style="list-style-type: none"> <li>Importance of photosynthesis and carbohydrate production to global ecology</li> <li>Factors affecting photosynthesis/basic steps and processes</li> <li>Respiration and transpiration</li> <li>Understanding the principles of plant growth</li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Take home questions for a movie found on blackboard</li> <li>Look at Plant ID materials found on blackboard, as well as the resources provided in the CRC</li> </ul>
1/31	<b>Seed ID: Forage and Grain Crops, Prohibited Noxious Weeds</b> <ul style="list-style-type: none"> <li>Identifying seed characteristics</li> <li>Identifying distinguishing features among plants</li> <li>Short in class exam I review</li> </ul>	<ul style="list-style-type: none"> <li><b>Study for exam 1 (study session at night will be noted at a later date)</b></li> </ul>
2/2	<b>EXAM 1</b>	<ul style="list-style-type: none"> <li>Read pages 91-100 and pages 101-112 for next lecture</li> </ul>
2/7	<b>Integrated Pest Management Scouting Video</b> <ul style="list-style-type: none"> <li>General types of weed control/pest control and the principles of how to identify pests</li> <li>Key groups of pests <ul style="list-style-type: none"> <li>Beneficial vs. harmful</li> </ul> </li> <li>What makes a weed a weed?</li> </ul>	<ul style="list-style-type: none"> <li>Read pages 25-36 to prepare for next lecture</li> <li><b>Homework:</b> Take home question(s) based on the movie</li> </ul>
2/9	<b>Soil Characteristics, Classification and Use</b> <ul style="list-style-type: none"> <li>Soil texture triangle and its applications in naming soil</li> <li>Soil forming factors</li> <li>Soil development and parent materials <ul style="list-style-type: none"> <li>Loess, alluvial, colluvial</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Isee website Activity</li> </ul>
2/14	<b>Continued Soils Use; Nutrient Crop Management</b> <ul style="list-style-type: none"> <li>Effects of iron and organic material on soil color</li> <li>Differences between land use classes</li> <li>Classification of essential elements</li> <li>Cation Exchange Capacity (CEC)</li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Web Soil Survey</li> <li>Read pages 37-42 to prepare for next lecture</li> </ul>
2/16	<b>Nutrient Crop Management Continued; Crop Residue- Movie</b> <ul style="list-style-type: none"> <li>Symbiotic nitrogen fixation</li> <li>Essential elements in soil</li> <li>Soil tests</li> <li>Soil pH influences on nutrient availability</li> <li>N, P and K deficiency in soil</li> </ul>	<ul style="list-style-type: none"> <li><b>Homework:</b> Take home questions</li> </ul>

2/21	<b>Soils Movie</b>	<ul style="list-style-type: none"> <li>• <b>Homework:</b> Take home question(s) based on the movie</li> </ul>
2/23	<b>Soil Biology movie continued/Review for Exam 2</b> <ul style="list-style-type: none"> <li>• Topsoil</li> <li>• Organic material</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Study for exam 2 (study session at night will be noted at a later date)</b></li> </ul>
2/28	<b>Exam 2</b>	<ul style="list-style-type: none"> <li>• Read pages 47-56 to prepare for next lecture</li> </ul>
3/1	<b>Crop Nutrient Management</b> <ul style="list-style-type: none"> <li>• Plant nutrient behavior in soil</li> <li>• N, P and K deficiency in soil</li> <li>• Symbiotic nitrogen fixation</li> <li>• Cropping systems</li> </ul>	
3/6	<b>Fertilizer Video</b>	<ul style="list-style-type: none"> <li>• Read pages 207-214 to prepare for next lecture</li> </ul>
3/8	<b>Factors Affecting Plant growth Plant Stress!</b> <ul style="list-style-type: none"> <li>• Growing Degree Days</li> <li>• Temperature effects</li> </ul>	
3/13	<b>No Lecture- Spring Break</b>	
3/15	<b>No Lecture- Spring Break</b>	
3/20	<b>Seed Quality</b> <ul style="list-style-type: none"> <li>• Seed vigor tests</li> <li>• Seed bag info</li> <li>• Seed cost analysis</li> </ul>	
3/22	<b>To be announced!</b>	<ul style="list-style-type: none"> <li>• <b>Study for exam 3 (study session at night will be noted at a later date)</b></li> </ul>
3/27	<b>Exam 3</b>	
3/29	<b>Guest Lecture: Tate and Lyle</b>	
4/3	<b>Movie: Harvest</b>	<ul style="list-style-type: none"> <li>• <b>Homework:</b> Take home question(s) based on the movie</li> <li>• Read pages 145-152 to prepare for next lecture</li> </ul>
4/5	<b>Precision Farming: Guest Lecturer</b> <ul style="list-style-type: none"> <li>• Components of precision farming</li> <li>• Modern harvesting techniques</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Summary required from guest lecture</b></li> </ul>
4/10	<b>Plant Reproduction</b> <ul style="list-style-type: none"> <li>• Seed production and pollination</li> <li>• Four requirements for seed to germinate</li> <li>• Basic principles of plant genetics</li> </ul>	
4/12	<b>Guest Lecture: International Farming</b>	<ul style="list-style-type: none"> <li>• <b>Summary required from guest lecture</b></li> <li>• Begin work on International Ag project</li> </ul>
4/17	<b>Movie: Corn</b>	<ul style="list-style-type: none"> <li>• <b>Homework:</b> Take home question(s) based on the movie</li> </ul>
4/19	<b>Movie: Beans</b>	<ul style="list-style-type: none"> <li>• <b>Homework:</b> Take home question(s) based on the movie</li> </ul>
4/24	<b>Organic Farming</b> <ul style="list-style-type: none"> <li>• Advantages/disadvantages of organic farming</li> <li>• Importance of C:N ratio</li> <li>• Importance of crop rotation</li> </ul>	
4/26	<b>Wrap-up/Class Assessment</b>	

Project due during finals week. We will have pre-test and post-test assessments. Also, we will have internationalization pre-assessment and post-assessments, and project reports.

\*Note: All questions on video worksheets are fair game for exams