Introduction to Agricultural Technology Management  
AgTM 250  
Spring 2013 - Section #31 & #32  
“Subject to Change”

**Instructor:** Dr. Andy Baker  
Office: KH B21  
Phone #: 298-1246  
AJ-Baker@wiu.edu  
Office hours: M & W=8-8:50 am & Th= 10:00 am -12:50 pm  
If instructor is unavailable please e-mail or leave voice mail!

**Class Time:** Mondays & Wednesdays 2:00 to 2:50 p.m.  
KH 152  
Labs in B 3  
Labs Times:  
**Section #31:** Thursday 1:00 to 2:50,  
**Section #32:** Thursday 3:00 to 4:50

**Encouraged Text:**  

**Course Objectives:** At the completion of this course, the student will be able to;  
1. understand basic concepts of small gas power components;  
2. understand basic concepts of the metal and wood construction;  
3. understand basic concepts of electrical power;  
4. understand basic concepts of land surveying;  
5. understand basic concepts of chainsaw safety;  
6. effectively demonstrate small gas power concepts in a laboratory setting;  
7. effectively demonstrate construction concepts in a laboratory setting;  
8. effectively demonstrate electrical concepts in a laboratory setting;  
9. effectively demonstrate survey concepts in a laboratory setting;  
10. effectively demonstrate chainsaw safety concepts in a laboratory setting.

**Attendance:**  
ATTENDANCE IS A MUST!!!!!!!! We are professionals! Students must be prepared to interact, analyze, and discuss topics relating to course assignments. Absenteeism will impede your success on assessments and course assignments. The course is centered around classroom assessments, laboratory activities, and classroom lecture.

Late assignments will be deducted 5 points a day up to 25 points starting at the end of the class period for which it was due.  
Laboratory assignments MUST BE HANDED IN THE DAY OF THE EXERCISE! No Excuses! No Exceptions! Attendance is a Must!

**Student Rights & Responsibilities:** http://www.wiu.edu/policies/sturesp.php
**ADA Compliance:**
In accordance with University policy and the Americans with Disabilities Act (ADA), accommodations in the area of test and note-taking may be made for any student who notifies the instructor of the need for accommodation. It is imperative that you take the initiative to bring such needs to my attention, as I am legally not permitted to inquire about the particular needs of students. Furthermore, I would like also to request that students who may require special assistance in emergency evacuations (i.e., fire tornado, etc.) contact me as to the most appropriate procedures to follow in such an emergency.

**Academic Dishonesty:**
Any violation of the Academic Dishonesty Policy in Student Handbook will result in an automatic failure in the course. Plagiarism and cheating are areas of concern for this course. This course is designed to assess your skills and abilities, not the ability to copy other’s thoughts and ideas.

**Grading Scale:** Please review the plus/minus grading scale on western on-line. It is also important to note that any unexcused missed assessment, the student will be able to retake the assessment, but only 85% of the score will count.

**Attention Education Majors:**
The changes within the state certification requirements, which go into effect immediately for all of those students who graduate in the spring 2012 and after, you are required to receive a grade of a "C" or better in this course in order to meet these new requirements. With the new university +/- grading system, receiving a "C-" or below will require you to retake this course or find a substitute course to meet School of Agriculture graduation requirements.

**Assignments:**
Tests (120 pts approx. each / 480 pts total): There will be a test covering each mechanical unit covered in this course (engines, construction, electricity, surveying).

Laboratory Activities (approx. 200 points total): There will be approximately 10 laboratory activities assigned throughout the scheduled laboratory times.

Lab Tests (20 pts each / 80 points total): After each section there will be a lab test conducted during lab hours.

Quizzes (approx. 200 points): Most of the quizzes will be announced generally a class period before, so attendance is a must.

Final (100 pts): It will be a comprehensive final over all four mechanical concepts.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Tests</td>
<td>480</td>
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<tr>
<td>Lab Tests</td>
<td>80</td>
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<tr>
<td>Lab activities</td>
<td>200</td>
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<tr>
<td>Quizzes</td>
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Laboratory Activities Include:
Dissembling Small Gas Engines  Assembling Small Gas Engines
Small Gas Engines Parts Lighting the Oxy-Acetylene Torch
Several Welding Demonstrations Demonstrating Chainsaw Safety
Safe Operation of Power Tools Safe Operation of Hand Tools
Wiring Exercises Performing Surveying Exercises

Course Outline

January 14: Course overview
Assign: Print off syllabus & print of chainsaw folder
January 16: Primary components of a small gas engine
Assign:
January 21: MLK Day (no class)
Assign:
January 23: Calculating Valve Timing
Assign:
January 28: Differences between 2 cycle & 4 cycle engines
Assign:
January 30: Principles of Engine Operation
Assign:
February 4: Calculating Horsepower & Engine displacement
Assign:
February 6: Engine Maintenance
Assign:
February 11: Small Gas Engine Test
Assign:
February 13: Concrete
Assign:
February 18: Concrete
Assign:
February 20: History of Welding
Assign:
February 25: Welding processes & Properties of Metals
Assign:
February 27: Electrode identification & Welding joints
Assign:
March 4: Welding joints
Assign:
March 6: Welding Test
Assign:
March 11: Spring Break (no class)
March 13: Spring Break (no class)
March 18: Basic Principles of Electricity
Assign:
March 20: Voltage, Amperage, & Resistance - Ohms Law
Assign:
March 25: How to figure kilowatts
Assign:
March 27: Electrical circuits
Assign:
April 1: Power supplies
Assign:
April 3: Wiring
Assign:
April 8: Electricity Test
Assign:
April 10: Setting up and reading a transit
Assign:
April 15: Land descriptions
Assign:
April 17: Land descriptions
Assign:
April 22: Figuring area
Assign:
April 24: Figuring area
Assign:
April 29: Figuring area
Assign:
May 1: Surveying Test
Assign:
May 8: Final (100 pts) Monday May 8th @ 3:00 pm