

Western Illinois University – School of Agriculture
AGTM 250: Introduction to Agricultural Technology Management (3)
Course Syllabus – Spring 2016 – Sections #31 and #32
“Subject to Change”

Course Meets: Lecture: MW 2:00 – 2:50 am in KH 152
 Lab: Section #31 – T – 1:00 – 2:50 in KH 152 or KH B1
 Section #32 – T – 3:00 – 4:50 in KH 152 or KH B1

Text: *Mechanical Technology in Agriculture* Johnson, D., 1998, Interstate Publishers Inc.

Instructor: Dr. Daniel Atherton **E-mail:** DL-Atherton@wiu.edu

Office: B 22 Knoblauch Hall **Office Phone:** 309-298-2395

Lab Fee: \$10.00

Office Hours: MTWF 10:00 to 11:00 or by appointment

Dr. Atherton’s Spring 2016 Course Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 – 8:50		AGTM 365 (KH 307/B1)			
9:00 – 9:50	AGTM 365 (KH 307)	AGTM 365 (KH 307/B1)	AGTM 365 (KH 307)		AGTM 365 (KH 307)
10:00 – 10:50	Office Hour	Office Hour	Office Hour	AGTM 350 (KH 307/B1)	Office Hour
11:00 – 11:50	AGTM 350 (KH 307)		AGTM 350 (KH 307)	AGTM 350 (KH 307/B1)	AGTM 350 (KH 307)
12:00 – 12:50					
1:00 – 1:50		AGTM 250 (KH B3)			
2:00 – 2:50	AGTM 250 (KH 152)	AGTM 250 (KH B3)	AGTM 250 (KH 152)		
3:00 – 3:50		AGTM 250 (KH B3)			
4:00 – 4:50		AGTM 250 (KH B3)			

Course Description: 250 Intro. To Ag. Tech. Management - (3) Introduction to electrification, surveying, internal combustion engines, metallurgy, and concrete and wood construction used in agriculture.

Course Objectives:

- Understand basic concepts of small gas power engines and electrical power
- Understand basic concepts of metal and wood construction and land surveying
- Effectively demonstrate small gas power and electrical system concepts in lab setting
- Effectively demonstrate construction and surveying concepts in lab setting

Quality of Work Policy: All assignments should be word processed with title of assignment, name, date, and a summary of the assignment included at the beginning of the assignment. Run spell-checker. If completing multiple-step problems, show all work. Your work should be neat and orderly.

Academic Dishonesty: Any violation of the Academic Dishonesty Policy in Student Handbook will result in an automatic failure of the course. Plagiarism and cheating are unacceptable.

Attendance: Attendance is mandatory. **You are allowed THREE absences. Starting on the FOURTH absence, your grade will drop 5% for each additional absence.** If you anticipate an absence, notify me in advance (in writing) and use the OARS system to report your absence (www.wiu.edu/oars). In cases where advanced notification is not feasible (e.g. accident, or emergency), you must provide notification by the end of the second working day after the absence. Notification for all absences should include a written explanation indicating the reason for the absence, why notice could not be sent prior to the missed class (if applicable), all documentation required, and suggested arrangements for making up what you missed in class (assignments, participation points, etc.) After two working days, notification and documentation for absences may not be accepted. It is the student's responsibility to coordinate with the instructor to make up missed work. Quizzes may be given at any time and no makeup quizzes will be given unless the instructor approves the absence prior to missing class.

Safety: Safety is always **FIRST!** Students must always wear safety glasses while in the ag mech. laboratory. Students must wear the proper safety attire at all times while in the ag mech. laboratory. Students must act in the proper manner to ensure the safety of others as well as themselves.

Assessment and Grading: Your final grade is based on your overall weighted percent on the following components of the course:

<u>Component</u>	<u>Percentage</u>
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	30%
Quizzes	10%
Class Participation	15%

Grading Scale

A	93 – 100%	A-	90 – 92%
B+	87 – 89%	B	83 – 86%
B-	80 – 82%	C+	77 – 79%
C	73 – 76%	C-	70 – 72%
D+	67 – 69%	D	63 – 66%
D-	60 – 62%	F	< 60%

Students Rights and Responsibilities: www.wiu.edu/provost/students/

Final Grades: Unless a computational error was made, grades will not be changed after the end of the semester. Please do not come to the instructor with “extenuating circumstances” for why your grade should be changed – the semester grade represents the level of work you completed over the semester.

Late Assignments: No late assignments will be accepted unless the instructor approves of turning in an assignment late prior to the assignment's due date. Assignments will be due at the beginning of class on their due date. Hand written assignments will not be accepted unless instructed otherwise. Assignments will be written in 12 point font with 1" margins. Points will be deducted for incorrect spelling and grammar.

Attention Education Majors: The changes within the state certification require all education majors to receive a grade of a "C" or better in this course in order to meet these new requirements. With the 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.

Professional Learning Environment: Please be respectful of your fellow students and the instructor and do your part to maintain the professional learning environment of this course. **Please silence your cell phones. Avoid texting during class.** Individual disruptions, such as **entering the classroom late, allowing your cell phone to ring audibly, engaging in unrelated activities (e.g., texting or surfing the web)** during class time, or **packing your belongings before class ends**, distract other students and detract from the quality of the learning environment for the whole class. Infractions will be noted and your class participation grade will suffer. The instructor reserves the right to ask for cell phones to be returned to students after the class period or to remove from group work a student who is demonstrating inadequate levels of participation.

Students with Disabilities: In accordance with University values and disability law, students with disabilities may request academic accommodations where there are aspects of a course that result in barriers to inclusion or accurate assessment of achievement. To file an official request for disability-related accommodations, please contact the Disability Resource Center at 309-298-2512, disability@wiu.edu or in 143 Memorial Hall. Please notify the instructor as soon as possible to ensure that this course is accessible to you in a timely manner.

***** Scheduling and weekly topics are subject to change at instructor's discretion *****

Schedule:

Week 1 - (week of 1/18): Course introduction

Week 2 - (week of 1/25): Engine cycles, two and four cycle engines, rotary engines, engine systems, engine displacement – chap. 8. Precision measuring and testing instruments. Small gas engine disassembly, inspection, and assembly

Week 3 - (week of 2/1): Engine components, valve timing, firing order – chap. 10. Small gas engine disassembly, inspection, and assembly

Week 4 - (week of 2/8): Auxiliary engine systems – chap. 11. Small gas engine disassembly, inspection, and assembly

Week 5 - (week of 2/15): Engine maintenance – chap. 12. Small gas engine disassembly, inspection, and assembly.

Week 6 - (week of 2/22): Construction - concrete and wood – chap. 18. Exam 1 (chap. 8, 10, 11, and 12)

Week 7 - (week of 2/29): Construction - concrete and wood – chap. 18. Welding processes and properties of metals – chap. 17. Welding joints with electric arc, MIG, and Oxy/Ac.

Week 8 - (week of 3/7): Welding processes and properties of metals – chap. 17. Welding joints with electric arc, MIG, and Oxy/Ac. Exam 2 (chap. 17 and 18)

Week of 3/14: Spring Break Week – No Classes

Week 9 - (week of 3/21): Basic principles of electricity – chap. 2.

Week 10 - (week of 3/28): Electrical circuits – chap. 3.

Week 11 - (week of 4/4): Electrical service – chap. 4.

Week 12 - (week of 4/11): Electrical overcurrent protection, grounding, and ground-fault protection – chap. 5

Week 13 - (week of 4/18): Setting up and reading a transit. Exam 3 (chap. 2, 3, 4, and 5)

Week 14 - (week of 4/25): Land descriptions and figuring area.

Week 15 - (week of 5/2): Land descriptions and figuring area.

Final Exam: Wednesday, May 11th from 8:00 – 9:50 am KH 307

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