

Western Illinois University – School of Agriculture
AGTM 250: Introduction to Agricultural Technology Management (3)
Course Syllabus – Spring 2017 – Sections #31 and #32
“Subject to Change”

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

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: M/W 1:00 - 1:50 or T/TH 9:00 - 9:50 or TH 1:00 - 2:50 or by appointment

Dr. Atherton’s Spring 2017 Course Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
Period 1 (8:00-8:50)					
Period 2 (9:00-9:50)		Office Hour		Office Hour	
Period 3 (10:00-10:50)		AGTM 365 KH 307-Lec/1B-Lab		AGTM 365 KH 307-Lec/1B-Lab	
Period 4 (11:00-11:50)		AGTM 365 KH 307-Lec/1B-Lab		AGTM 365 KH 307-Lec/1B-Lab	
Period 5 (12:00-12:50)	AGTM 464 KH 307-Lecture	AGTM 464 KH 307-Lecture	AGTM 464 KH 307-Lecture		
Period 6 (1:00-1:50)	Office Hour	AGTM 250 KH 3B-Lab	Office Hour	Office Hour	
Period 7 (2:00-2:50)	AGTM 250 KH 152-Lecture	AGTM 250 KH 3B-Lab	AGTM 250 KH 152-Lecture	Office Hour	
Period 8 (3:00-3:50)	AGTM 207 KH 152-Lecture	AGTM 250 KH 3B-Lab	AGTM 207 KH 152-Lecture		
Period 9 (4:00-4:50)	AGTM 207 KH 152-Lecture	AGTM 250 KH 3B-Lab	AGTM 207 KH 152-Lecture		

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. Academic Integrity Policy can be found at: www.wiu.edu/policies/acintegrity

Attendance: Attendance is mandatory. If class is missed, please use the OARS system to report your absence (www.wiu.edu/oars). I need the email generated from this system prior to class, not after. 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.

University values, Title IX, and other federal and state laws prohibit sex discrimination, including sexual assault/misconduct, dating/domestic violence, and stalking. If you, or someone you know, has been the victim of any of these offenses, we encourage you to report this to the Title IX Coordinator at 309-298-1977 or anonymously online at: http://www.wiu.edu/equal_opportunity_and_access/request_form/index. If you disclose an incident to a faculty member, the faculty member must notify the Title IX Coordinator. The complete Title IX policy is available at: <http://www.wiu.edu/vpas/policies/titleIX>.

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

Schedule:

Week 1: (MLK Holiday – No Class), Course introduction

Week 2: 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: Engine components, valve timing, firing order – chap. 10. Small gas engine disassembly, inspection, and assembly

Week 4: Auxiliary engine systems – chap. 11. Small gas engine disassembly, inspection, and assembly

Week 5: (Holiday – No Class) Engine maintenance – chap. 12. Small gas engine disassembly, inspection, and assembly.

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

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

Spring Break Week – No Classes

Week 9: Basic principles of electricity – chap. 2.

Week 10: Electrical circuits – chap. 3.

Week 11: Electrical service – chap. 4.

Week 12: DLA – OOT, Electrical overcurrent protection, grounding, and ground-fault protection – chap. 5

Week 13: Electrical overcurrent protection, grounding, and ground-fault protection – chap. 5

Week 14: Setting up and reading a transit. Exam 3 (chap. 2, 3, 4, and 5)

Week 15: Land descriptions and figuring area.

Final Exam: Monday, May 8th from 3:00 – 4:50 pm

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