

Introduction to Agricultural Mechanics

Course Syllabus

2010-2011

Instructor: Miss Quigg

Location: EHS Room 316

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Course Description: This introductory mechanics course provides students with a basic overview of safety, repair, maintenance, and construction involving woodworking, plumbing, electricity, and small gas engines. The course will balance classroom instruction with hands-on application of theories and concepts. Students will use hand tools and power machinery to complete both required and individual projects. Emphasis will be on developing a broad base of skills for the industry. An introduction to the FFA and related Career Development Events will also be included.

Course Goals: Students will:

- Use proper safety equipment and techniques in a shop environment.
- Be able to identify and properly use common shop tools for woodworking, plumbing, electricity, and engine repair.
- Select the proper fasteners for a job.
- Construct a wood project using hand tools.
- Be able to wire 2 and 3 way switches, outlets in a series, and lighting junction boxes.
- Connect PVC, copper, and hose fittings in a plumbing system.
- List and describe the 4 strokes of an internal combustion engine.
- Be able to determine when engine parts need to be replaced.
- Practice troubleshooting strategies to fix engines.
- Be able to look up replacement part numbers and prices using print and electronic media.

Primary Texts:

- **Agricultural Mechanics: Fundamentals & Applications** by R.V. Herren and E.L. Cooper. Delmar, Third Edition, 1997.
- **Repair Manual for Single Cylinder 4-Cycle Engines.** Briggs & Stratton, 1997.
- **Outdoor Power Equipment** by Jay Webster. Delmar, 2001.

Attendance: Your attendance is expected at each class. Work missed for unexcused absences **cannot** be made up. Excusal policies are outlined in the EHS Student Handbook.

Grading:

Marking period grades:

$$\frac{\text{Points earned}}{\text{Possible points}} \times 100 = \text{Marking Period \%}$$

Final course grade:

The final exam grade includes a written test, tool and parts identification, and troubleshooting and will be calculated in the same manner as marking period grades (points earned out of possible points). The final exam grade counts as an additional marking period grade, making it worth 20% of the course grade.

$$\frac{\text{MP1 \%} + \text{MP2 \%} + \text{MP3 \%} + \text{MP4 \%} + \text{Final \%}}{500 \text{ points}} = \text{Course \%} = \text{Letter grade}$$

The grading scale aligns with the district's grading policy:

A 93-100	A- 90-92	
B+ 88-89	B 83-87	B- 80-82
C+ 78-79	C 73-77	C- 70-72
D+ 68-69	D 63-67	D- 60-62
F 0-59		

Example:

A student earns an 88% for MP1, a 92% for MP2, a 95% for MP3, an 84% for MP4, and a 65% on the final. His/her grade would be calculated as follows:

$$\frac{88 + 92 + 95 + 84 + 65}{500} = 85 = B$$

Assessments:

Class work: Students will complete book exercises, worksheets, or other activities during class and turn them in for a grade.

Work logs: Students must log the time they spend completing specific activities in the shop. Logs will be completed on a daily basis and will be submitted on a weekly basis for a grade. Students who are not prepared for class or who are being disciplined for safety violations will automatically receive a ZERO for the day. Students who consistently fail to submit a log will not be allowed to work in the shop. Alternate assignments will not be given.

Quizzes/Tests: Quizzes and tests will be based on in-class materials, activities, and discussions. Questions may include but are not limited to multiple choice, true/false, short answer, and essay questions. Students will also be assessed on skills and projects throughout the course.

NOTES:

- Working in the shop is a privilege, not a right; therefore it can be denied. If a student endangers him/herself, other students, or the instructor, immediate action will be taken to remove the individual from the shop environment. If the class does not abide by safety rules and procedures, the instructor will utilize alternate instructional methods in the classroom.

- All late work will receive a deduction based on the following scale:
 - One day late: 10% deduction
 - Two days late: 30% deduction
 - Three days late: automatic zero, no opportunity to submit for grade
- Deductions are taken from the grade the student earns on the assignment.
 - Ex: If a student earns a 35/40 but turns the assignment in
ONE day late, he/she will earn 31.5/40
TWO days late, he/she will earn 24.5/40
THREE or MORE days late, he/she will earn 0/40
- Students who are absent the day an assignment is due are expected to submit the assignment the day they return to school. Students will receive the corresponding deduction if the assignment is submitted after their initial return.
 - Ex: If a student is absent Friday, and there is an assignment due (that was assigned that week or earlier in the marking period), and the student returns to school on Tuesday, the assignment is expected on Tuesday. Submitting it on Wednesday would result in a 10% deduction.
 - Students will be given extensions for assignments given the day of their absence(s) as outlined in the student handbook.

- Academic dishonesty will NOT be tolerated. See student handbook for consequences.

CLASS RULES

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| <ul style="list-style-type: none">• Respect yourself. |
| <ul style="list-style-type: none">• Respect others. |
| <ul style="list-style-type: none">• Respect your environment. |
| <ul style="list-style-type: none">• I have a right to teach; you have a right to learn; others have a right to learn – neither you nor I will deprive another person of his or her rights. |

STEPS TO DISCIPLINE PLAN

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| <ul style="list-style-type: none">• 1st Incident – Warning/Conference<ul style="list-style-type: none">○ Teacher writes student's name on board○ Student stays and after class to discuss inappropriate behavior with teacher |
| <ul style="list-style-type: none">• 2nd Incident (cumulative) – Detention<ul style="list-style-type: none">○ Teacher writes student's name on board○ Student signs detention assignment form○ Student serves a 15 minute detention with teacher after school and writes a corrective action plan<p>NOTE: Failure to sign a detention assignment form or to report to the assigned teacher detention results in an automatic administrative referral</p> |
| <ul style="list-style-type: none">• 3rd Incident (cumulative) – Contact Parent<ul style="list-style-type: none">○ Teacher writes student's name on board○ Student signs detention assignment form○ Student serves a 30 minute detention with teacher after school○ Teacher contacts parent and informs of inappropriate behavior(s) |
| <ul style="list-style-type: none">• 4th and Subsequent Incidents – Administrative Referral<ul style="list-style-type: none">○ Consequences are assigned by the administration |
| <ul style="list-style-type: none">• Here is a list of the kinds of things that will get your name written on the board (this is not an exhaustive list):<ul style="list-style-type: none">○ Disrespect○ Disruptive noises○ Inappropriate/vulgar language○ Extraneous, disruptive, off-task talking○ Intentional destruction of property○ Entering off limits areas without permission○ Violating safety rules and policies○ Improper attire for lab or shop environment |
| <ul style="list-style-type: none">• All electronic devices in sight (cell phones, iPods, PSPs, etc.) will be confiscated and taken to the office. (See student handbook for retrieval policies) Additional disruptions resulting from confiscation will result in disciplinary action as outlined above. |
| <ul style="list-style-type: none">• NOTE: The teacher reserves the right to adjust disciplinary consequences based on the severity of the student's violation of rules and policies. Specifically in situations relating to safety, one or more of the preliminary consequences may be bypassed. |

CLASS POLICIES AND ROUTINES

<ul style="list-style-type: none">• Behavior appropriate to high school students is expected.
<ul style="list-style-type: none">• Enter the room quietly, go to your assigned seat, and get out your class notes/materials. If there is an activity on the board, please begin working.
<ul style="list-style-type: none">• You should have something to write with (pen/pencil) and your notebook with you every day. You do not need a textbook for this class – there are sets of textbooks in the classroom available for use. Non-graphing calculators are recommended and will be needed for specific activities.
<ul style="list-style-type: none">• All purses and bags must be placed on the floor and out of the aisles. Do not keep them on the desks.
<ul style="list-style-type: none">• I do not expect a silent room, but I do expect an orderly room. When someone is talking, you are to respect the speaker by being quiet and by listening.
<ul style="list-style-type: none">• If you have a question, please raise your hand and ask. The only stupid questions are the ones you never ask!
<ul style="list-style-type: none">• Leaving class for bathroom, nurse, etc.<ul style="list-style-type: none">○ You MUST use your agenda or ask for a hall pass. Once I have signed your pass, you must sign out on the clipboard before leaving.○ You will be permitted to leave the room during the first five (5) minutes of class only (unless there is a bona fide emergency).○ Only one student may leave class at a time.
<ul style="list-style-type: none">• Absences<ul style="list-style-type: none">○ You are responsible for obtaining work and making up assignments you missed while you were absent○ Ask a classmate what you missed and check the absentee bin BEFORE coming to me
<ul style="list-style-type: none">• The following areas are considered off limits and are to be used on an “invitation ONLY” basis (students must be asked or told to enter):<ul style="list-style-type: none">○ Miss Quigg’s office○ FFA Office○ Shop tool room○ Loft○ Storage room
<ul style="list-style-type: none">• FOOD AND DRINK (excluding water) ARE NOT PERMITTED IN THE CLASSROOM AT ANY TIME. If these items are in plain sight, they will be confiscated and placed in the trash can or poured down the drain. You may NOT pick them up after class or after school. Gum will be permitted unless it becomes a problem.
<ul style="list-style-type: none">• Housekeeping items – location of essential questions, water fountains, fire exits, 3-hole punch, art supplies, etc
<ul style="list-style-type: none">• Please keep the classroom neat. Before leaving, make sure you have all your belongings. Your desk and work areas should be as clean as when you entered the room. Please push your chair in or place it on top of the desk (at the end of the day).

**INTRODUCTION TO AG MECHANICS
2010-2011**

Student Name: _____

I have read, reviewed, and understand the course outline, class rules, and policies and procedures for this course. If I have any concerns throughout the school year, I will contact the teacher to resolve them.

Student's Signature

Date

Parent's Signature

Date