

# Syllabus: Auto Three/Four



## Course Overview:

Description from Course Plan and Curriculum Guide

<b>Department</b> Technology and Engineering	<b>Instructor:</b> Sherwood
<b>Course Number:</b> TEC2050/TEC2060	<b>Office Hours:</b> As arranged
<b>Credits Earned/Length of Course:</b> 1 credit 1 semester	<b>Instructor Contact Info:</b> Phone: 608-204-3675 Email: jeshewood@madison.k12.wi.us
<b>Prerequisites:</b> Automotive Technology 1&2(3)	<b>Required Materials:</b> Shoes that cover the complete foot and a writing instrument – every day

## Course Standards:

- Common Core State Standards for Literacy in All Subjects
- National Automotive Technician Education Foundation (NATEF) Automotive Service Technician (AST) Level Standards

## Course Assessment(s):

- Summative assessments for each unit, both written and practical quizzes.
- NATEF Tasks List completion in each unit built into each lab activity.
- Students may take the Automotive Service Excellence (ASE) Tests at the conclusion of all Automotive courses, to earn National Certification in one or more automotive area.
- Completion of *sp2 Mechanical Safety* program.

## Course Outline (including Unit(s) of Time and Essential Questions):

Unit 1 Safety Training and Shop equipment and tool Review (5 days)

- What does a student need to know to work safely in the shop?
- What does a student need to review to continue to use shop equipment and tools?

Unit 2 Engine and Transmission general service and maintenance (15 days)

- What does a student need to know to inspect engines and transmissions for leaks?

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- What does a student need to know to make minor repairs on engine and transmissions?
- What does a student need to know to perform cooling system test and service?
- What does a student need to know to write a repair order, verify customer's concerns, write an estimate and order parts for repair?

## Unit 3 Suspension and Steering, Tire and Wheel service (15 days)

- What does a student need to know to inspect and test all suspension components?
- What does a student need to know to evaluate the vehicle steering system?
- What does a student need to know to provide complete tire and wheel service?

## Unit 4 Engine Performance: (15 days)

- What does a student need to know to perform on board computer based diagnostics?
- What does a student need to know to perform mechanical repairs on the ignition and fuel delivery system?
- What does a student need to know to diagnose electronic fuel delivery and computer controlled engine operation?

END OF FIRST TERM

## Unit 5 Brakes mechanical, hydraulic and electronic diagnosis and repair (20 days)

## Unit 6 Electrical wiring and component diagnosis and repair (18 Days)

## Unit 7 HVAC (5 days)

## Unit 8 Careers in the Automotive Industry and Scholarship applications (2 days)

**Units 5 through 8 will be covered during second term.**

### **Texts, Technology, and Resources:**

*Modern Automotive Technology* textbook, OnDemand.com service manual, IdentiFix online service information and lab activities, Lab Activity Lab Sheets  
*Auto Upkeep Basic Car Care, Maintenance & Repair 3<sup>rd</sup> Edition*  
*Hybrid and Alternative Fuel Vehicles 2<sup>nd</sup> Edition*



## CLASSROOM EXPECTATIONS:

- **ALL CELL PHONES WILL BE STORED IN SAFETY GLASSES BOX DURING CLASS. NO CELL PHONE USE DURING CLASS TIME IS PERMITTED. IF THIS IS AN ISSUE FOR YOU, DROP THIS CLASS NOW.**
- **Grading** is based on earning points for written work, lab work, final exam daily participation, and exhibiting good employability skills
- **Written work** must be made up on student's time
- **Lab work** may be made up within one week
- **Missed tests** must be made up within one week
- **ONLY hand written notes taken in student's automotive notebook may be used during testing.**
- **Safety Glasses** are required in the shop **AT ALL TIMES** and for all lab activities
- Wear or bring **clothes that allow you to work in the shop** every day. **Shoes that cover and protect your feet** are required in the shop. Sandals, shower shoes, slippers, crocs and similar footwear are not permitted in the shop. Students who are not dressed properly will not be permitted to work in the shop, will lose all lab points for the day and will be sent to their principal's office.
- **Shop Tools** and Equipment care and maintenance are everyone's responsibility. **Shop clean-up** is also everyone's job. Tool Inventory is everyone's responsibility and will be done daily.

### Grading Percentages:

40% Lab Grade -- Based on performance in the shop, employability skills and daily participation in the classroom and shop.

30% Class work – Visual assessments of participation in the class and shop and completion of unit lab packets

20% Tests and Quizzes – SP2 scores, safety quiz, parental signature sheet return and unit tests

10% Final Exam

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Grading scale percentages:

- 100-90 A
- 89-80 B
- 79-70 C
- 69-60 D
- < 59 F

## **IMPORTANT INFORMATION TO KNOW:**

1. **Safety** is everyone's responsibility. Learn and follow all lab safety rules
2. If you are **injured**, tell the teacher immediately. If anyone is seriously injured, you may be asked to call 911. From any school phone dial 9 and then 911
3. **ALL Vehicles** must be approved and have proof of insurance coverage before they are brought into the shop
  - a. **Class members'** vehicles have first priority
  - b. **Current automotive students** must schedule time for specific repairs
  - c. La Follette **faculty and staff** vehicles are allowed in the shop
  - d. **Repairs MUST fit** into the curriculum of the class
  - e. **Parts must be purchased by the owner of the vehicle and be brought in for use on the car. NO PARTS = NO SERVICE**
  - f. **MMSD Shop Agreement** and **Liability Waiver** will be signed by **the legal owner** of the vehicle before a vehicle may enter the shop
  - g. **Only ONE** student is allowed in a car being driven in or out of the shop – MMSD safety rule
  - h. **Work** on vehicles will be **finished 15 minutes** before the block ends
  - i. **All vehicles will be out of the shop by 3:45 PM.**
  - j. Students will **drive only their own cars** in/out of the shop
4. **Reading and writing assignments** are part of all classes. You will be **graded on the correct use and spelling** of automotive vocabulary words and appropriate grammar.
5. **Class time** will be **available for reading** and writing assignments. Textbooks are kept in the cabinet at the back of the room. Books are available for overnight check out with teacher permission.
6. You will **not leave** the shop **without permission** for any reason
7. You **will not leave school property during class** for any reason

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8. We **will all be together** in one location; either in the lab or the classroom.
9. The last 15 minutes of the block is for clean-up and assessment. **Attendance will be taken again** at the end of class
10. **School Policies** are in effect in this area:
  - a. No food in lab or classroom
  - b. **No Cell Phones without permission!!!**
  - c. No Hats.
  - d. No headphones or other listening devices without permission
  - e. No passes will be written during the first and last 15 minutes of the block

## Security

Madison Metropolitan School District and all of its students and employees have the right to be safe in their school building. All school entrances are secured during the school day. As an auto class member you are responsible for maintaining building security by keeping all exterior doors closed and locked during the school day.

Having continued access to the auto shop is dependent upon maintaining building security. If the auto shop is seen as a security risk, the district will have to weigh the value of the auto program against the security of everyone in the building.

**NO ONE may be admitted** to the building through entrances in the M wing **without direct observation by and permission** from a faculty or staff member.

M-14 cannot be secured. Cell phones, wallets, computers, backpacks or any other personal property is your responsibility. You may keep notes and handouts in the file cabinet in the back of the room.

## Respect & Responsibility

As the teacher I have the responsibility to deliver well designed learning opportunities for you. These opportunities will have a purpose, specific learning objectives, and some form of assessment that will allow both of us to know whether or not you “got it” I respect your right to spend your time here learning skills that will help you keep and maintain your personal vehicle.

As the student you have the responsibility to participate in the learning opportunities. You have a responsibility to your classmates to respect their opportunity to participate.

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You have an obligation to participate in the learning process AND the assessment process. I will be asking you to assess your own understanding of the material that I have covered. You have a responsibility to ask questions, and I have a responsibility to answer your questions.

Together, we have material to cover and we need to respect the value of our time together and not waste it.

## BEHAVIOR MATRIX – TECHNOLOGY AND ENGINEERING

<p style="text-align: center;"><b>P</b> <b>PERSONAL RESPONSIBILITY</b></p>	<ol style="list-style-type: none"> <li>1. On time</li> <li>2. Completes work on time</li> <li>3. Active learner</li> <li>4. Off and away</li> <li>5. Team player</li> <li>6. Cleans up after self and lab</li> <li>7. Brings pencil and paper</li> <li>8. Attends all classes</li> <li>9. Be safe towards self and others</li> </ol>
<p style="text-align: center;"><b>R</b> <b>RESPECT</b></p>	<ol style="list-style-type: none"> <li>1. Active listener</li> <li>2. Focused</li> <li>3. Eliminating derogatory language</li> <li>4. Respect for facility: clean it, respect for machines capabilities</li> <li>5. Help everyone to be safe</li> <li>6. Quiet when teacher is talking</li> <li>7. Allow the teacher to pace the learning</li> </ol>
<p style="text-align: center;"><b>I</b> <b>INTEGRITY</b></p>	<ol style="list-style-type: none"> <li>1. Do your own work</li> <li>2. Be patient – wait your turn</li> <li>3. Share equipment</li> <li>4. Clean up</li> </ol>
<p style="text-align: center;"><b>D</b> <b>DETERMINATION</b></p>	<ol style="list-style-type: none"> <li>1. Earn the grade you want (your best possible)</li> <li>2. Set goals, be a learner</li> <li>3. Ask for help</li> <li>4. Learn from mistakes and from other’s mistakes</li> </ol>
<p style="text-align: center;"><b>E</b> <b>EXCELLENCE</b></p>	<ol style="list-style-type: none"> <li>1. Challenge yourself to be better</li> <li>2. Aim high</li> <li>3. Strive for quality work</li> <li>4. Do more than what is asked</li> </ol>



## CAREER READINESS

### Employability Skills & Professional Characteristics That Are Expected:

- Works Productively
- Listens & Learns Effectively
- Can Work as a Team Member
- Communicates Clearly
- Works Cooperatively
- Thinks Critically & Creatively
- Acts Responsibly
- **Shows up ON TIME DAILY**
- Works Safely at all times
- Displays Craftsmanship
- Arrives Prepared
- Plans Ahead
- Can Work Alone
- Respects Others & the Instructor
- Uses Appropriate Language
- Willingness to Accept Direction
- NO cell phone during work time
- Remains Alert & Involved

### **Employability Skills Conduct Grade**

- You will be graded on Employability Conduct in this class. These skills will ultimately have a great effect on your employment success. Employability Conduct counts for 40% of your final grade. You have the potential to earn 20 points per day.
- **Inappropriate Behavior**
- -20 pts. Unexcused Absences
- -5 to 10 pts. Not wearing Safety Glasses when reminded
- -5 to 10 pts. Play fighting or physically inappropriate behavior
- -10 to 15 pts. Leaving Class/Lab without permission
- -5 to 15 pts. Sitting around doing nothing in the Lab
- -5 to 15 pts. Wearing a hat in class
- -5 to 5 pts. Personal electronic devices seen/used in class
- -10 pts. Disrupting the learning process
- -5 to 15 pts. Treating others in a disrespectful manner
- -5 to 15 pts. Unacceptable behavior in class or the shop
- -5 to 15 pts. Treating tools or facility in a disrespectful/inappropriate manner
- -10 pts. Not participating in clean-up duties.



## Syllabus: Automotive Technology 2



# SkillsUSA®

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SkillsUSA is a partnership of students, teachers and industry representatives; working together to ensure America has a skilled work force. SkillsUSA helps each student excel.

SkillsUSA is a national nonprofit organization serving teachers and high school and college students who are preparing for careers in trade, technical and skilled service occupations, including health occupations.

SkillsUSA is a club activity here at LaFollette. It meets once a week for the entire school year and prepares students for skill competition and professionalism in a future career. It allows participants to demonstrate their desire for higher level achievement in technical professions.

**Auto 2, 3 & 4 students will be participating in SkillsUSA as part of their class assignments**