

WALLA WALLA VALLEY ACADEMY

300 SW Academy Way · College Place, WA 99324 · 509-525-1050 · wwva.org



Automotive 1 Shop Class

2021 - 2022

Instructor	Location	Phone, Email
Eric Anderson	Auto Shop	509-885-5599 Andeer@wwva.org

Description

This course is designed for the students who would like to own and maintain a personal vehicle. This course covers basic car care, under hood inspection (fluids, belts, hoses), removing & replacing items (wiper blades, bulbs, fuses), cooling system maintenance, battery/charging system diagnosis, lubrication system maintenance, tire information, brake inspection, minor ignition system maintenance (spark plug, wires, firing order), car buying, car insurance, and service information.

Requirements and Grading

Participation

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

Grading System

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 - safety quiz, parental signature sheet return and unit tests

10% Final Exam

Grading scale percentages:

100-90 A

89-80 B

79-70 C

69-60 D

< 59 F

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 to10 pts.

Not wearing Safety Glasses when reminded-5 to10 pts.

Play fighting or physically inappropriate behavior-10 to15 pts.

Leaving Class/Lab without permission-5 to15 pts.

Sitting around doing nothing in the Lab-5 to 15 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. 5-15 pts.

Course Schedule

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

Unit 1 Safety, Tools, and Basic Skills Review

- What basic safety information does a student need to know when participating in class and working in and around a car?
- What basic tools should a student be able to recognize and use after completing this class?

Unit 2 Basic Internal Combustion Engine Operation

- What does a student need to know about an internal combustion engine?•What does a student need to know to start an air cooled gas engine
- What does a student need to know to identify the 4 strokes of an engine?•What does a student need to know to check proper valve and spark timing?
- What does a student need to know to change oil and spark plug and start an air cooled engine?•What does a student need to know to perform cylinder compression test?

Unit 3 Engine Mechanical, Cooling and Lubrication

- What does a student need to know to find service information ?
- What does a student need to know to change the oil and filter, the drive/serpentine belt and the radiator hose and thermostat and perform a vehicle safety inspection?
- What does a student need to know to make common fastener and thread repairs?•What does a student need to know to identify hybrid vehicle internal combustion engine service precautions?

Unit 4 Understanding Automotive Electrical Systems

- What does a student need to know about the electrical lighting in the car?
- What does a student need to know about the proper way to use jumper cables to start a car?
- What does a student need to know to maintain the car battery?
- What does a student need to know to read wiring diagrams, wire a car radio and speakers, and test the wiring

Class Policies

CLASSROOM EXPECTATIONS:

ALL CELL PHONES WILL NEED TO BE PUT AWAY DURING CLASS. NO CELL PHONE USE DURING CLASS TIME IS PERMITTED.

Grading is based on earning points for written work, lab work, final exam daily participation, and exhibiting good employability skill so 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, and will lose all lab points for the day.

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 during class time 10 to 15 minutes before the bell rings.

IMPORTANT INFORMATION TO KNOW:

Safety is everyone's responsibility. Learn and follow all lab safety rules

If you are injured, tell the teacher immediately. If anyone is seriously injured, you may be asked to call 911. (yes, the only appropriate time to use your cell phone)

ALL Vehicles must be approved and have proof of insurance coverage before they are brought into the shop. Class members' vehicles have first priority. Current automotive students must schedule time for specific repairs. WWVA faculty and staff vehicles are allowed in the shop. Repairs **MUST** fit into the curriculum of the class. Parts must be purchased by the owner of the vehicle and be brought in for use on the car. **NO PARTS = NO SERVICE.** WWVA Shop Agreement and Liability Waiver will be signed by the legal owner of the vehicle before a vehicle may enter the shop. Only **ONE** student is allowed in a car being driven in or out of the shop. Work on vehicles will be finished 1 minutes before the class ends. All vehicles will be out of the shop by 4:45 PM. Students will drive only their own cars in/out of the shop.

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. 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. You will not leave the shop without permission for any reason. You will not leave school property during class for any reason. The last 15 minutes of the block is for clean-up and assessment.

Academic Honesty

Cheating or dishonesty in any form is not tolerated and will result in a zero.

Technology

A computer will be available to look up various specs and procedures during class. I-pads can be used but could incur damage in the shop area.