



EVERETT PUBLIC SCHOOLS AUTOMOTIVE MAINTENANCE

Course: Automotive Maintenance	Total Framework Hours: 90
CIP Code: 470600 <input type="checkbox"/> Exploratory <input type="checkbox"/> Preparatory	Date Last Modified: 12.2013
Career Cluster: Transportation Distribution and Logistics	Cluster Pathway: Transportation Distribution and Logistics

Industry-Recognized Certificates:

Work-Based Learning:

Course Information:

Resources and Standards used in Framework Development are from the OSPI Model Framework for 470600 Automotive Foundations

COMPONENTS AND ASSESSMENTS	
Performance Assessments: <ul style="list-style-type: none"> Summative assessment provided by International Committee for Automotive Repair (ICAR) safety program Safety and Pollution Prevention program (SP2) online industry test in both Automotive Safety and Automotive pollution prevention. Certification documents provided with 80% pass rate. 	
Leadership Alignment: Students complete Skills USA Professional Development Program which teaches employability skills including workplace safety.	
Standards and Competencies	
Unit: Automotive safety and pollution prevention	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 8
<ul style="list-style-type: none"> Standard: Safety Utilize proper protective equipment (PPP) Demonstrate understanding of proper ventilation equipment and procedures Demonstrate awareness of danger when working with electricity, flammables, and toxic materials Demonstrate leadership skills by overseeing peers with work safety and clean work environment Demonstrate shop Safety Understand hazardous materials and wastes and how to safely handle them. Standard WR 5: Health and Safety WR-5.1 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. WR-5.2 Explain emergency procedures to follow in response to workplace accidents. WR-5.3 Create a disaster and/or emergency response plan. WR-5.4 Identify and apply OSHA and other health and safety regulations that apply to specific tasks and jobs in the occupational area WR-5.5 Identify and apply EPA and other environmental protection regulations that apply to specific tasks and jobs in the occupational area WR-5.6 Identify and apply Right-To-Know (Hazard Communication Policy) and other communicative regulations that apply to specific tasks and jobs in the occupational area 	

- WR-5.7 Explain procedures for documenting and reporting hazards to appropriate authorities
- WR-5.8 List penalties for non-compliance with appropriate health and safety regulations
- WR-5.9 Identify contact information for appropriate health and safety agencies and resources
- WR-5.10 Create a systematic safety program which would achieve OSHA compliance and promote a safe working environment
- WR-5.11 Illustrate a safe environment for students in printing
- WR-5.12 Identify, describe and demonstrate the effective use of Material Safety Data Sheets (MSDS)
- WR-5.13 Read chemical, product, and equipment labels to determine appropriate health and safety considerations
- WR-5.14 Identify, describe and demonstrate personal, shop and job site safety practices and procedures
- WR-5.15 Demonstrate safe dress and use of relevant safety gear and personal protective equipment (PPE), including wrist rests, adjustable workspaces and equipment, gloves, boots, earplugs, eye protection, and breathing apparatus
- WR-5.16 Illustrate appropriate safe body mechanics, including proper lifting techniques and ergonomics
- WR-5.17 Locate emergency equipment in your lab, shop, and classroom, including (where appropriate) eyewash stations, shower facilities, sinks, fire extinguishers, fire blankets, telephone, master power switches, and emergency exits
- WR-5.18 Demonstrate the safe use, storage, and maintenance of every piece of equipment in the lab, shop, and classroom
- WR-5.19 Describe safety practices and procedures to be followed when working with and around electricity
- WR-5.20 Illustrate proper handling and storage practices, including working with hazardous materials, disposal, and recycling
- WR-5.21 Demonstrate proper workspace cleaning procedures
- WR-5.22 Illustrate First Aid procedures for potential injuries and other health concerns in the occupational area
- WR-5.23 Describe the importance of emergency preparedness and an emergency action plan
- WR-5.24 Illustrate procedures used to handle emergency situations and accidents, including identification, reporting, response, evacuation plans, and follow-up procedures
- WR-5.25 Identify practices used to avoid accidents
- WR-5.26 Identify and describe fire protection, precautions and response procedures
- WR-5.27 Discuss the role of the individual and the company/organization in ensuring workplace safety
- WR-5.28 Discuss ways to identify and prevent workplace/school violence

Aligned Washington State Learning Standards

English Language Arts	<p>CC: College and Career Readiness Anchor Standards for Language 3 - Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> <p>CC: College and Career Readiness Anchor Standards for Reading 1 - Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. 2 - Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. 4 - Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone. 10 - Read and comprehend complex literary and informational texts independently and proficiently.</p>
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COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Broader understanding of potential careers in the transportation industry. Industry partners provide guest speakers.

Leadership Alignment:

Skills USA component career exploration

Standards and Competencies

Unit: Careers transportation	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 2
<ul style="list-style-type: none"> Standard WR 1: Career Planning WR-1.1 Complete, discuss, and analyze the results of personality, career interest, and aptitude assessments. WR-1.2 Explore the career clusters as defined by the U.S. Department of Education and summarize the career opportunities in a cluster of personal interest. WR-1.6 Develop an awareness of financial aid, scholarships, and other sources of income to support postsecondary education/training and discuss the impact of effective college and career planning. WR-1.13 Identify industry certification opportunities 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 1 - Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

COMPONENTS AND ASSESSMENTS	
Performance Assessments:	
<ul style="list-style-type: none"> Formative evaluation of information in presentation. Instructor led power point including quiz. 	
Leadership Alignment:	
Skills USA PDP investigation of careers in Automotive Technology	
Standards and Competencies	
Unit: The automotive industry	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 1
<ul style="list-style-type: none"> Standard WR 1: Career Planning WR-1.2 Explore the career clusters as defined by the U.S. Department of Education and summarize the career opportunities in a cluster of personal interest. WR-1.4 Determine academic/training or certification requirements for transition from one learning level to the next and explore opportunities for earning credit/certifications in high school such as advanced placement, tech prep, International Baccalaureate, college in the high school, military and apprenticeship opportunities. 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Writing 7 - Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. 8 - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. 9 - Draw evidence from literary or informational texts to support analysis, reflection, and research.

COMPONENTS AND ASSESSMENTS	
Performance Assessments:	
<ul style="list-style-type: none"> Formative quiz using Student Response System during instructor led power point presentation. Students demonstrate proficiency in shop activities 	
Leadership Alignment:	
Standards and Competencies	
Unit: Basic Tools	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 2

- Standard: Demonstrate the use of hand tools.
- Common hand tools (pliers, combination wrenches, open-end wrenches, box end wrenches, punches, chisel, hammers, adjustable wrenches, sockets, extensions, torque wrenches, Allen wrenches, files, hacksaws, thread cutting taps, thread cutting dies, etc.
- Use Lifting tools safely.

Aligned Washington State Learning Standards

English Language Arts	CC: College and Career Readiness Anchor Standards for Writing
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COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Formative evaluation Student Response System quiz based on instructor led power point presentation. Instructor summative evaluation based on students' ability to understand engine operation and demonstrate basic vehicle service.

Leadership Alignment:

Students are encouraged to compete in regional, state and national Skills USA competitions.

Standards and Competencies

Unit: Engine Operations

Industry Standards and/or Competencies

Total Learning Hours for Unit: 6

- Standard: Basic Engine Fundamentals
- Understand ignition system components
- Understand cooling system purpose
- Understand fuel system purpose
- Demonstrate preventative maintenance tasks include belts, hoses, fluid levels, and lights.

Aligned Washington State Learning Standards

English Language Arts	CC: College and Career Readiness Anchor Standards for Language 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Mathematics	CC: Mathematical Practices (MP) 1 - Make sense of problems and persevere in solving them. 2 - Reason abstractly and quantitatively. 4 - Model with mathematics. 5 - Use appropriate tools strategically. 6 - Attend to precision. 8 - Look for and express regularity in repeated reasoning.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Demonstrate ability to safely lift a vehicle on different types of lifts in the automotive shop

Leadership Alignment:

Standards and Competencies

Unit: Vehicle lifts

Industry Standards and/or Competencies		Total Learning Hours for Unit: 4
<ul style="list-style-type: none"> Standard: Demonstrate procedures used to lift equipment Identify the various types of lifting and hoisting equipment. Properly and safely lift materials with lifting and hoisting equipment used in the shop or field location. Demonstrate the proper and safe use of a hydraulic press and pullers. 		
Aligned Washington State Learning Standards		
English Language Arts	CC: College and Career Readiness Anchor Standards for Speaking and Listening 2 - Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	

COMPONENTS AND ASSESSMENTS		
Performance Assessments: <ul style="list-style-type: none"> Formative quiz on Student Response System instructor led power point lesson. Students demonstrate proficiency with various measuring tools. 		
Leadership Alignment:		
Standards and Competencies		
Unit: Measuring and measurement tools		
Industry Standards and/or Competencies		Total Learning Hours for Unit: 4
<ul style="list-style-type: none"> Standard: Demonstrate proper measuring procedures. Describe commonly used low precision measuring tools (steel rule, tape measure, ruler, and combination square) Identify an outside caliper and explain what it is used. Identify and inside caliper and explain what it is used. Identify a feeler gauge and explain what it is used. Identify a hole gauge and explain what it is used. Identify a telescoping/snap gauge and explain what it is used. Identify a vernier caliper and explain what it is used. Identify an outside micrometer and explain what it is used. Identify an inside micrometer and explain what it is used. Identify a depth indicator gauge and explain what it is used. Identify a dial indicator and explain what it is used. Identify a go/no go gauge and explain what it is used. Identify plastic gauge and what it is used. 		
Aligned Washington State Learning Standards		
Mathematics	CC: Mathematical Practices (MP) 1 - Make sense of problems and persevere in solving them. 4 - Model with mathematics. 5 - Use appropriate tools strategically. 6 - Attend to precision. 8 - Look for and express regularity in repeated reasoning.	

COMPONENTS AND ASSESSMENTS		
Performance Assessments: <ul style="list-style-type: none"> Formative quiz in Student Response System during instructor led power point presentation. Students demonstrate proficiency in shop activities. 		
Leadership Alignment:		
Standards and Competencies		

Unit: Power/pneumatic tools	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 2
<ul style="list-style-type: none"> Standard: Demonstrate the use of power tools. Drill holes to given specifications using an electric drill Identify types of drill bits Identify and explain the purpose of an air impact wrench Identify and explain the purpose of impact sockets Identify and explain the purpose of an electric soldering iron Identify and explain the purpose of a bench grinder 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression

COMPONENTS AND ASSESSMENTS	
Performance Assessments: <ul style="list-style-type: none"> Students access, research and produce an estimate including repair procedure using digital information system (All Data). 	
Leadership Alignment:	
Standards and Competencies	
Unit: Information systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 1
<ul style="list-style-type: none"> Standard: Identify and use technical publications (service manuals, IPL's, Microfiche, CD). Describe types of service and parts manual formats and their applications. Reference information in manuals and materials correctly. Define industry specific terminology and nomenclature. Calculate time using labor time guides and flat rate time. Solve problems following a diagnostic and troubleshooting manual. Identify manufacturer, model, serial number, and type of a part. 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

COMPONENTS AND ASSESSMENTS	
Performance Assessments: <ul style="list-style-type: none"> Formative evaluation based on students' ability to demonstrate correct lubrication checks, maintenance and safety checks on shop vehicles. 	
Leadership Alignment: Students discuss ethics of safety evaluation of vehicles as per the PDP.	

Standards and Competencies	
Unit: Fluid level checks	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 8
<ul style="list-style-type: none"> Standard: Lubrication and Safety Checks Understand types of fluids and how to service fluids on a vehicle Change and service engine oil. Demonstrate preventative maintenance tasks include belts, hoses, and fluid levels 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 1 - Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

COMPONENTS AND ASSESSMENTS	
Performance Assessments:	
<ul style="list-style-type: none"> Formative evaluation based on students' ability to correctly perform a vehicle service 	
Leadership Alignment:	
Standards and Competencies	
Unit: Lubrication systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 6
<ul style="list-style-type: none"> Standard: Lubrication and Safety Checks Understand types of fluids and how to service fluids on a vehicle Change and service engine oil. Demonstrate preventative maintenance tasks include belts, hoses, and fluid levels 	
Aligned Washington State Learning Standards	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Mathematics	CC: Mathematical Practices (MP) 1 - Make sense of problems and persevere in solving them. 4 - Model with mathematics. 5 - Use appropriate tools strategically. 6 - Attend to precision. 8 - Look for and express regularity in repeated reasoning.

COMPONENTS AND ASSESSMENTS

Performance Assessments: <ul style="list-style-type: none"> Formative evaluation. Student Response System quiz during instructor led power point presentation. Students demonstrate ability to analyze and evaluate an automotive cooling system. 	
Leadership Alignment:	
<i>Standards and Competencies</i>	
Unit: Cooling systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 6
<ul style="list-style-type: none"> Standard: Cooling System Service Check coolant Understand cooling system purpose Check antifreeze protection Demonstrate preventative maintenance tasks include belts, hoses, and fluid levels 	
<i>Aligned Washington State Learning Standards</i>	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Mathematics	CC: Mathematical Practices (MP) 1 - Make sense of problems and persevere in solving them. 4 - Model with mathematics. 5 - Use appropriate tools strategically. 6 - Attend to precision.

COMPONENTS AND ASSESSMENTS	
Performance Assessments: <ul style="list-style-type: none"> Formative evaluation. Student Response System quiz during instructor led power point presentation. Students demonstrate ability to evaluate braking system on shop vehicle. 	
Leadership Alignment:	
<i>Standards and Competencies</i>	
Unit: Braking systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 8
<ul style="list-style-type: none"> Standard: Brake Service Understand braking system operation Recognize types of brakes Recognize components of the braking system Demonstrate preventative maintenance tasks include belts, hoses, fluid levels, and brakes. 	
<i>Aligned Washington State Learning Standards</i>	
English Language Arts	CC: College and Career Readiness Anchor Standards for Language

	<p>4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p> <p>5 - Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
Mathematics	<p>CC: Mathematical Practices (MP)</p> <p>4 - Model with mathematics.</p> <p>5 - Use appropriate tools strategically.</p> <p>6 - Attend to precision.</p>

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Formative evaluation. Student response system quiz during instructor led power point presentation. Students demonstrate understanding of ignition system in shop activity.

Leadership Alignment:

Standards and Competencies

Unit: Ignitions systems

Industry Standards and/or Competencies

Total Learning Hours for Unit: 6

- Standard: Basic Engine Fundamentals
- Understand ignition system components
- Demonstrate preventative maintenance tasks include belts, hoses, fluid levels, and lights.

Aligned Washington State Learning Standards

English Language Arts	<p>CC: College and Career Readiness Anchor Standards for Language</p> <p>4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p> <p>5 - Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
Mathematics	<p>CC: Mathematical Practices (MP)</p> <p>5 - Use appropriate tools strategically.</p> <p>6 - Attend to precision.</p>

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Formative evaluation based on Student Response Systems quiz during instructor led power point presentation. Students demonstrate ability to understand fuel system checks on shop vehicle.

Leadership Alignment:

Standards and Competencies

Unit: Fuels and Fuel Systems

Industry Standards and/or Competencies

Total Learning Hours for Unit: 8

- Standard: Basic Engine Fundamentals

- Understand fuel system purpose
- Demonstrate preventative maintenance tasks include belts, hoses, fluid levels, and lights.

Aligned Washington State Learning Standards

English Language Arts	CC: College and Career Readiness Anchor Standards for Language 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Mathematics	CC: Mathematical Practices (MP) 6 - Attend to precision. 7 - Look for and make use of structure. 8 - Look for and express regularity in repeated reasoning.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Formative evaluation Student Response System quiz during instructor led power point presentation. Formative evaluation based on students' ability to change, repair, mount and balance a tire using shop equipment and vehicle.

Leadership Alignment:

Standards and Competencies

Unit: Tires and wheels

Industry Standards and/or Competencies

Total Learning Hours for Unit: 8

- Standard: Tire Service and Suspension
- Understand tire maintenance and care
- Demonstrate preventative maintenance tasks include, tire pressures, and tire wear

Aligned Washington State Learning Standards

English Language Arts	CC: College and Career Readiness Anchor Standards for Language Vocabulary Acquisition and Use 4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. 5 - Demonstrate understanding of word relationships and nuances in word meanings. 6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Mathematics	CC: Mathematical Practices (MP) 1 - Make sense of problems and persevere in solving them. 5 - Use appropriate tools strategically. 6 - Attend to precision.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Formative evaluation based on Student Response System quiz during instructor led power point presentation.

Leadership Alignment:

Standards and Competencies	
Unit: Exhaust systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 2
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Aligned Washington State Learning Standards	
English Language Arts	<p>CC: College and Career Readiness Anchor Standards for Language Vocabulary Acquisition and Use</p> <p>4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p> <p>5 - Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>

COMPONENTS AND ASSESSMENTS	
Performance Assessments:	
<ul style="list-style-type: none"> Formative evaluation Student Response System quiz during instructor led power point presentation. 	
Leadership Alignment:	
Standards and Competencies	
Unit: Steering and suspension systems	
Industry Standards and/or Competencies	Total Learning Hours for Unit: 8
<ul style="list-style-type: none"> Standard: Tire Service and Suspension Identify parts of the suspension system Understand tire maintenance and care Demonstrate preventative maintenance tasks include, tire pressures, and tire wear 	
Aligned Washington State Learning Standards	
English Language Arts	<p>CC: College and Career Readiness Anchor Standards for Language Vocabulary Acquisition and Use</p> <p>4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p> <p>5 - Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>6 - Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
Mathematics	<p>CC: Geometry (G)</p> <p>4 - Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</p> <p>6 - Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</p> <p>8 - Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</p> <p>6 - Find the point on a directed line segment between two given points that partitions the segment in a given ratio.</p> <p>7 - Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.*</p> <p>CC: Mathematical Practices (MP)</p>

- 4 - Model with mathematics.
- 5 - Use appropriate tools strategically.
- 6 - Attend to precision.
- 7 - Look for and make use of structure.
- 8 - Look for and express regularity in repeated reasoning.

21st Century Skills

Check those that students will demonstrate in this course:

LEARNING & INNOVATION

Creativity and Innovation

- ☐ Think Creatively
- ☒ Work Creatively with Others
- ☐ Implement Innovations

Critical Thinking and Problem Solving

- ☒ Reason Effectively
- ☒ Use Systems Thinking
- ☒ Make Judgments and Decisions
- ☐ Solve Problems

Communication and Collaboration

- ☐ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA & TECHNOLOGY SKILLS

Information Literacy

- ☒ Access and /evaluate Information
- ☒ Use and Manage Information

Media Literacy

- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications and Technology (ICT Literacy)

- ☒ Apply Technology Effectively

LIFE & CAREER SKILLS

Flexibility and Adaptability

- ☒ Adapt to Change
- ☒ Be Flexible

Initiative and Self-Direction

- ☒ Manage Goals and Time
- ☒ Work Independently
- ☒ Be Self-Directed Learners

Social and Cross-Cultural

- ☒ Interact Effectively with Others
- ☒ Work Effectively in Diverse Teams

Productivity and Accountability

- ☐ Manage Projects
- ☒ Produce Results

Leadership and Responsibility

- ☐ Guide and Lead Others
- ☒ Be Responsible to Others